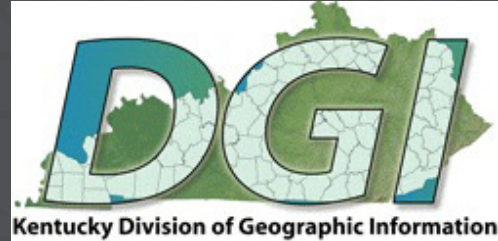


Kentucky Statewide 2019 LiDAR Project Report



Master Purchase Agreement #758 1800000325

Submitted: December 20, 2019

Prepared by:



Quantum Spatial, Inc
523 Wellington Way, Suite 375
Lexington, KY 40503
859-277-8700



Contents

1. Summary / Scope	1
1.1. Summary.....	1
1.2. Scope.....	1
1.3. Coverage.....	1
1.4. Duration.....	1
1.5. Issues	1
1.6. Deliverables	2
2. Planning / Equipment	4
2.1. Flight Planning	4
2.2. LiDAR Sensor	4
2.3. Aircraft.....	7
2.4. Time Period.....	8
3. Processing Summary	9
3.1. Flight Logs.....	9
3.2. LiDAR Processing.....	10
3.3. LAS Classification Scheme	11
3.4. Classified LAS Processing	11
3.5. Hydro-Flattened Breakline Processing	12
3.6. Hydro-Flattened Raster DEM Processing.....	12
4. Project Coverage Verification	14
5. Ground Control and Check Point Collection	16
5.1. Calibration Control Point Testing.....	16
5.2. Point Cloud Testing	16
5.3. Digital Elevation Model (DEM) Testing.....	17

List of Figures

Figure 1. Project Boundary	3
Figure 2. Planned Flight Lines	5
Figure 3. Leica ALS80 and Riegl VQ1560i LiDAR Sensors	6
Figure 4. Some of Quantum Spatial's Planes.....	7
Figure 5. LiDAR Tile Layout.....	13
Figure 6. LiDAR Flightline Coverage.....	15
Figure 7. Calibration Control Point Locations.....	18
Figure 8. QC Checkpoint Locations - NVA	19
Figure 9. QC Checkpoint Locations - VVA	20

List of Tables

Table 1. Originally Planned LiDAR Specifications	1
Table 2. LiDAR System Specifications	6

List of Appendices

- Appendix A: Flight Logs
- Appendix B: Survey Report

1. Summary / Scope

1.1. Summary

This report contains a summary of the Kentucky Statewide 2019 LiDAR acquisition task order, issued by the State of Kentucky's Commonwealth Office of Technology Division of Geographic Information. The task order yielded a project area covering approximately 6,330 square miles over Kentucky. The intent of this document is only to provide specific validation information for the data acquisition/collection, processing, and production of deliverables completed as specified in the task order.

1.2. Scope

Aerial topographic LiDAR was acquired using state of the art technology along with the necessary surveyed ground control points (GCPs) and airborne GPS and inertial navigation systems. The aerial data collection was designed with the following specifications listed in Table 1 below.

Table 1. Originally Planned LiDAR Specifications

Average Point Density	Flight Altitude (AGL)	Field of View	Minimum Side Overlap	RMSEz
2 pts / m ²	2300 m	40°	30%	≤ 10 cm

1.3. Coverage

The project boundary covers approximately 6,330 square miles over Kentucky. Project extents are shown in Figure 1.

1.4. Duration

LiDAR data was acquired from 19 February 2019 to 23 March 2019 in 36 total lifts. See "Section: 2.4. Time Period" for more details.

1.5. Issues

There were no major issues to report for this project.

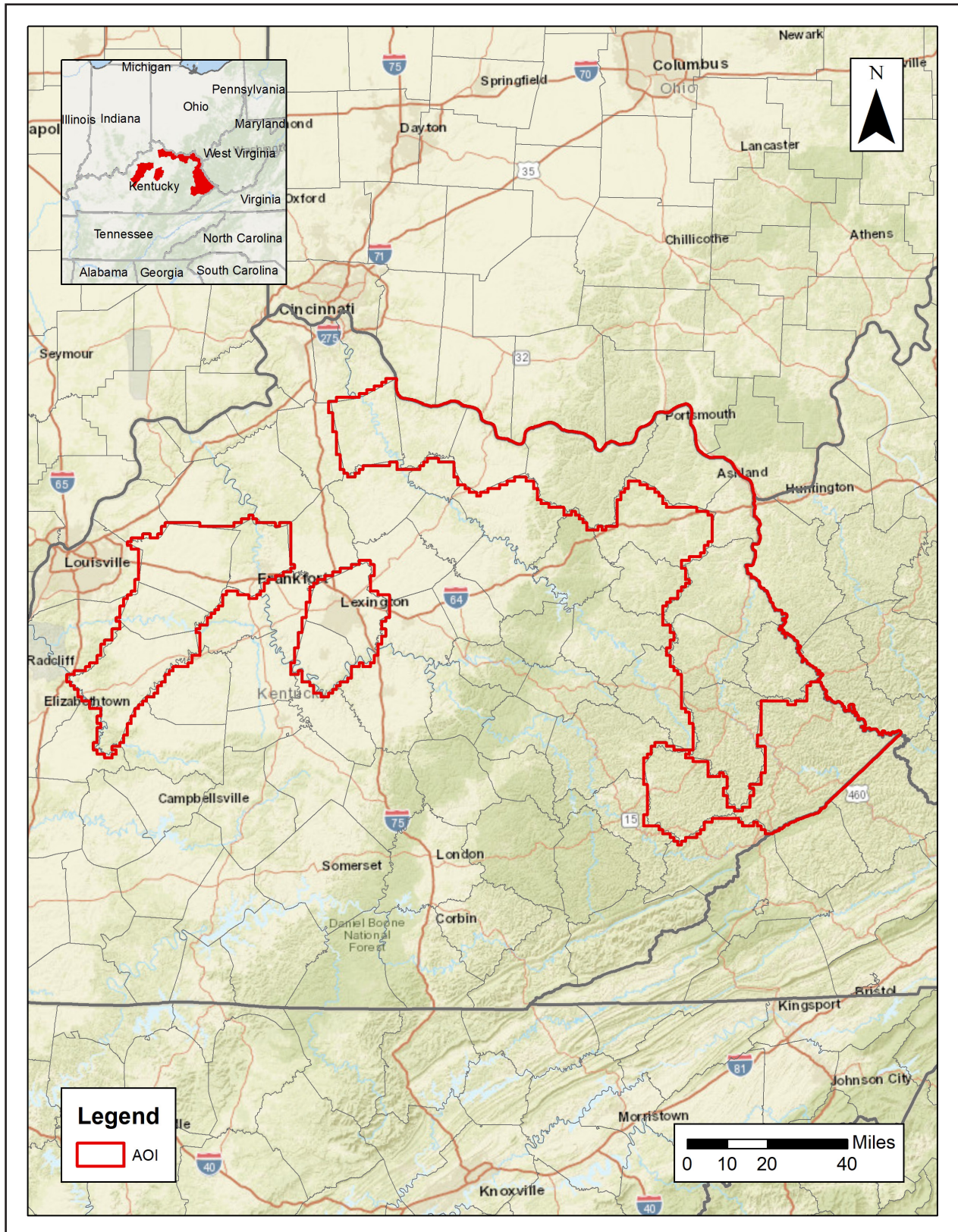
1.6. Deliverables

The following products were produced and delivered:

- Classified LiDAR point cloud data tiles in .LAS 1.4 format
- Model key point data tiles in .LAS 1.4 format
- Continuous hydro-flattened breaklines in Esri shapefile format
- 1-meter hydro-flattened bare earth digital elevation model (DEM) tiles in ERDAS .IMG format
- 1-meter intensity imagery tiles in GeoTIFF format
- Processing boundary in Esri shapefile format
- Tile index in Esri shapefile format
- FOCUS, FOCUS on Accuracy, and FOCUS on Deliverables reports in .PDF format
- Flight logs in .PDF format
- Survey report in .PDF format
- Project-, deliverable-, and tile-level metadata in .XML format

All geospatial deliverables were produced with a horizontal datum/projection of NAD83 State Plane Kentucky Single Zone, US survey feet and a vertical datum/projection of NAVD88 (GEOID12B), US survey feet. All tiled deliverables were provided as 17,335 individual 5,000 ft x 5,000 ft tiles (Figure 5).

Figure 1. Project Boundary



2. Planning / Equipment

2.1. Flight Planning

Flight planning was based on the unique project requirements and characteristics of the project site. The basis of planning included: required accuracies, type of development, amount / type of vegetation within project area, required data posting, and potential altitude restrictions for flights in project vicinity.

Detailed project flight planning calculations were performed for the project using Leica MissionPro and RiPARAMETER planning software. The entire target area was comprised of 327 planned flight lines (Figure 2).

2.2. LiDAR Sensor

Quantum Spatial utilized a Leica ALS80 LiDAR sensor (Figure 3), serial numbers 8227 and 8146, and a Riegl VQ1560i LiDAR sensor (Figure 3), serial numbers 043 and 546, during the project.

The Leica ALS 80 system is capable of collecting data at a maximum frequency of 1,000 kHz. The system utilizes a Multi-Pulse in the Air option (MPIA). The sensor also has the capacity for unlimited range returns from each outbound pulse. The intensity of the returns is also captured during aerial acquisition.

The Riegl 1560i system has a laser pulse repetition rate of up to 2 MHz resulting in more than 1.3 million measurements per second. The system utilizes a Multi-Pulse in the Air option (MPIA). The sensor is also equipped with the ability to measure up to an unlimited number of targets per pulse from the laser.

A brief summary of the aerial acquisition parameters for the project are shown in the LiDAR System Specifications in Table 2.

Figure 2. Planned Flight Lines

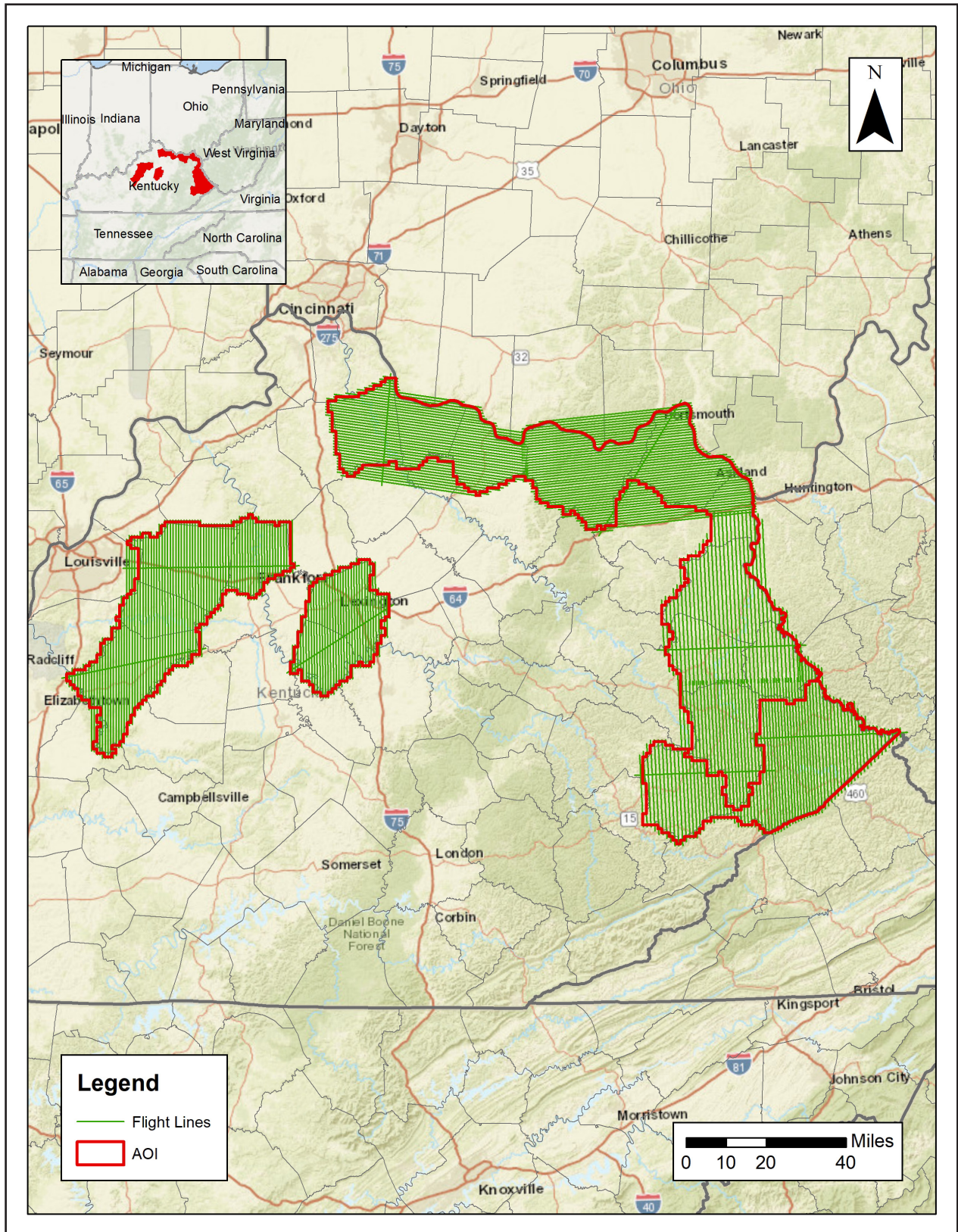
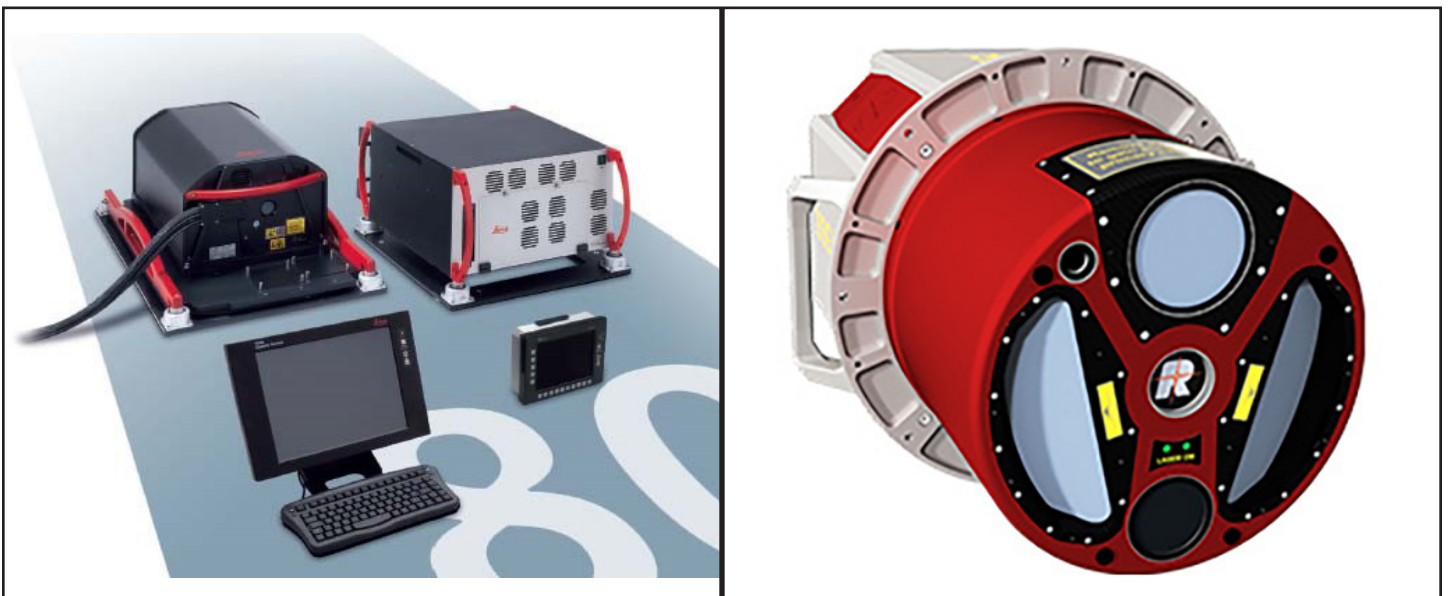


Table 2. LiDAR System Specifications

		Leica ALS80	Riegl VQ1560i
Terrain and Aircraft Scanner	Flying Height	2300 m	2000 m
	Recommended Ground Speed	140 kts	160 kts
Scanner	Field of View	40°	58.5°
	Scan Rate Setting Used	48 Hz	89 Hz
Laser	Laser Pulse Rate Used	357 kHz	700 kHz
	Multi Pulse in Air Mode	yes	yes
Coverage	Full Swath Width	1675 m	2000 m
	Line Spacing	1173 m	1400 m
Point Spacing and Density	Average Point Spacing	0.71 m	0.71 m
	Average Point Density	2 pts / m ²	2 pts / m ²

Figure 3. Leica ALS80 and Riegl VQ1560i LiDAR Sensors


2.3. Aircraft

All flights for the project were accomplished through the use of customized planes. Plane type and tail numbers are listed below.

LiDAR Collection Planes

- Piper Navajo (twin-piston) (PA31), Tail Number(s): N262AS, C-FFRY, N6GR, N73TM

These aircraft provided an ideal, stable aerial base for LiDAR acquisition. These aerial platforms have relatively fast cruise speeds, which are beneficial for project mobilization / demobilization while maintaining relatively slow stall speeds, proving ideal for collection of high-density, consistent data posting using state-of-the-art Leica and Riegl LiDAR systems. Some of Quantum Spatial's operating aircraft can be seen in Figure 4 below.

Figure 4. Some of Quantum Spatial's Planes



2.4. Time Period

Project specific flights were conducted between 19 February 2019 and 23 March 2019. 36 aircraft lifts were completed. Accomplished lifts are listed below.

- 20190219A (SN8227, N262AS)
- 20190219B (SN8227, N262AS)
- 20190225A (SN8227, N262AS)
- 20190225B (SN8227, N262AS)
- 20190225C (SN8227, N262AS)
- 20190226A (SN043-AI, C-FFRY)
- 20190226A (SN8227, N262AS)
- 20190226B (SN8227, N262AS)
- 20190306A (SN043-AI, C-FFRY)
- 20190306A (SN8146, N6GR)
- 20190306A (SN8227, N262AS)
- 20190306B (SN8227, N262AS)
- 20190307A (SN043-AI, C-FFRY)
- 20190311A (SN8146, N6GR)
- 20190311A (SN8227, N262AS)
- 20190311B (SN8227, N262AS)
- 20190311C (SN8227, N262AS)
- 20190312A (SN8146, N6GR)
- 20190312A (SN8227, N262AS)
- 20190312B (SN8146, N6GR)
- 20190312B (SN8227, N262AS)
- 20190312C (SN8227, N262AS)
- 20190316A (SN043-AI, C-FFRY)
- 20190316A (SN8227, N262AS)
- 20190317A (SN043-AI, C-FFRY)
- 20190317A (SN546, N73TM)
- 20190317A (SN8146, N6GR)
- 20190319A (SN043-AI, C-FFRY)
- 20190319A (SN546, N73TM)
- 20190319A (SN8227, N262AS)
- 20190320A (SN043-AI, C-FFRY)
- 20190320A (SN8146, N6GR)
- 20190320A (SN8227, N262AS)
- 20190320B (SN8146, N6GR)
- 20190323A (SN043-AI, C-FFRY)
- 20190323A (SN8146, N6GR)

3. Processing Summary

3.1. Flight Logs

Flight logs were completed by LIDAR sensor technicians for each mission during acquisition. These logs depict a variety of information, including:

- Job / Project #
- Flight Date / Lift Number
- FOV (Field of View)
- Scan Rate (HZ)
- Pulse Rate Frequency (Hz)
- Ground Speed
- Altitude
- Base Station
- PDOP avoidance times
- Flight Line #
- Flight Line Start and Stop Times
- Flight Line Altitude (AMSL)
- Heading
- Speed
- Returns
- Crab

Notes: (Visibility, winds, ride, weather, temperature, dew point, pressure, etc). Project specific flight logs for each sortie are available in Appendix A.

3.2. LiDAR Processing

Inertial Explorer/Applanix + POSPac Mobile Mapping Suite software was used for post-processing of airborne GPS and inertial data (IMU), which is critical to the positioning and orientation of the LiDAR sensor during all flights. Inertial Explorer/Applanix + POSPac combines aircraft raw trajectory data with stationary GPS base station data yielding a “Smoothed Best Estimate Trajectory (SBET) necessary for additional post processing software to develop the resulting geo-referenced point cloud from the LiDAR missions.

During the sensor trajectory processing (combining GPS & IMU datasets) certain statistical graphs and tables are generated within the Inertial Explorer/Applanix + POSPac processing environment which are commonly used as indicators of processing stability and accuracy. This data for analysis include: Max horizontal / vertical GPS variance, separation plot, altitude plot, PDOP plot, base station baseline length, processing mode, number of satellite vehicles, and mission trajectory.

The generated point cloud is the mathematical three dimensional composite of all returns from all laser pulses as determined from the aerial mission. Laser point data are imported into TerraScan and a manual calibration is performed to assess the system offsets for pitch, roll, heading and scale. At this point this data is ready for analysis, classification, and filtering to generate a bare earth surface model in which the above-ground features are removed from the data set. Point clouds were created using the Leica CloudPro software and the Riegl RiPROCESS Post Processor software. GeoCue distributive processing software was used in the creation of some files needed in downstream processing, as well as in the tiling of the dataset into more manageable file sizes. TerraScan and TerraModeler software packages were then used for the automated data classification, manual cleanup, and bare earth generation. Project specific macros were developed to classify the ground and remove side overlap between parallel flight lines.

All data was manually reviewed and any remaining artifacts removed using functionality provided by TerraScan and TerraModeler. Global Mapper was used as a final check of the bare earth dataset. GeoCue was used to create the deliverable industry-standard LAS files for both the All Point Cloud Data and the Bare Earth. In-house software was then used to perform final statistical analysis of the classes in the LAS files.

3.3. LAS Classification Scheme

The classification classes are determined by the USGS Version 1.3 specifications and are an industry standard for the classification of LIDAR point clouds. All data starts the process as Class 1 (Unclassified), and then through automated classification routines, the classifications are determined using TerraScan macro processing.

The classes used in the dataset are as follows and have the following descriptions:

- Class 1 – Processed, but Unclassified – These points would be the catch all for points that do not fit any of the other deliverable classes. This would cover features such as vegetation, cars, etc.
- Class 2 – Bare-Earth Ground – This is the bare earth surface
- Class 7 – Low Noise – Low points, manually identified below the surface that could be noise points in point cloud.
- Class 9 – Water – Points found inside of inland lake/ponds
- Class 17 – Bridge Decks – Points falling on bridge decks.
- Class 18 – High Noise – High points, manually identified above the surface that could be noise points in point cloud.
- Class 20 – Ignored Ground – Points found to be close to breakline features. Points are moved to this class from the Class 2 dataset. This class is ignored during the DEM creation process in order to provide smooth transition between the ground surface and hydro flattened surface.

3.4. Classified LAS Processing

The bare earth surface is then manually reviewed to ensure correct classification on the Class 2 (Ground) points. After the bare- earth surface is finalized; it is then used to generate all hydro-breaklines through heads-up digitization.

All ground (ASPRS Class 2) LiDAR data inside of the Lake Pond and Double Line Drain hydro flattening breaklines were then classified to water (ASPRS Class 9) using TerraScan macro functionality. A buffer of 3 feet was also used around each hydro flattened feature to classify these ground (ASPRS Class 2) points to Ignored ground (ASPRS Class 20). All Lake Pond Island and Double Line Drain Island features were checked to ensure that the ground (ASPRS Class 2) points were reclassified to the correct classification after the automated classification was completed.

All overlap data was processed through automated functionality provided by TerraScan to classify the overlapping flight line data to approved classes by USGS. The overlap data was identified using the Overlap Flag, per LAS 1.4 specifications.

All data was manually reviewed and any remaining artifacts removed using functionality provided by TerraScan and TerraModeler. Global Mapper is used as a final check of the bare earth dataset. GeoCue was then used to create the deliverable industry-standard LAS files for all point cloud data. Quantum Spatial's proprietary software was used to perform final statistical analysis of the classes in the LAS files, on a per tile level to verify final classification metrics and full LAS header

information.

3.5. Hydro-Flattened Breakline Processing

Class 2 LiDAR was used to create a bare earth surface model. The surface model was then used to heads-up digitize 2D breaklines of Inland Streams and Rivers with a 100 foot nominal width and Inland Ponds and Lakes of 2 acres or greater surface area.

Elevation values were assigned to all Inland Ponds and Lakes, Inland Pond and Lake Islands, Inland Streams and Rivers and Inland Stream and River Islands using TerraModeler functionality.

Elevation values were assigned to all Inland streams and rivers using Quantum Spatial's proprietary software.

All ground (ASPRS Class 2) LiDAR data inside of the collected inland breaklines were then classified to water (ASPRS Class 9) using TerraScan macro functionality. A buffer of 3 feet was also used around each hydro flattened feature. These points were moved from ground (ASPRS Class 2) to Ignored Ground (ASPRS Class 20).

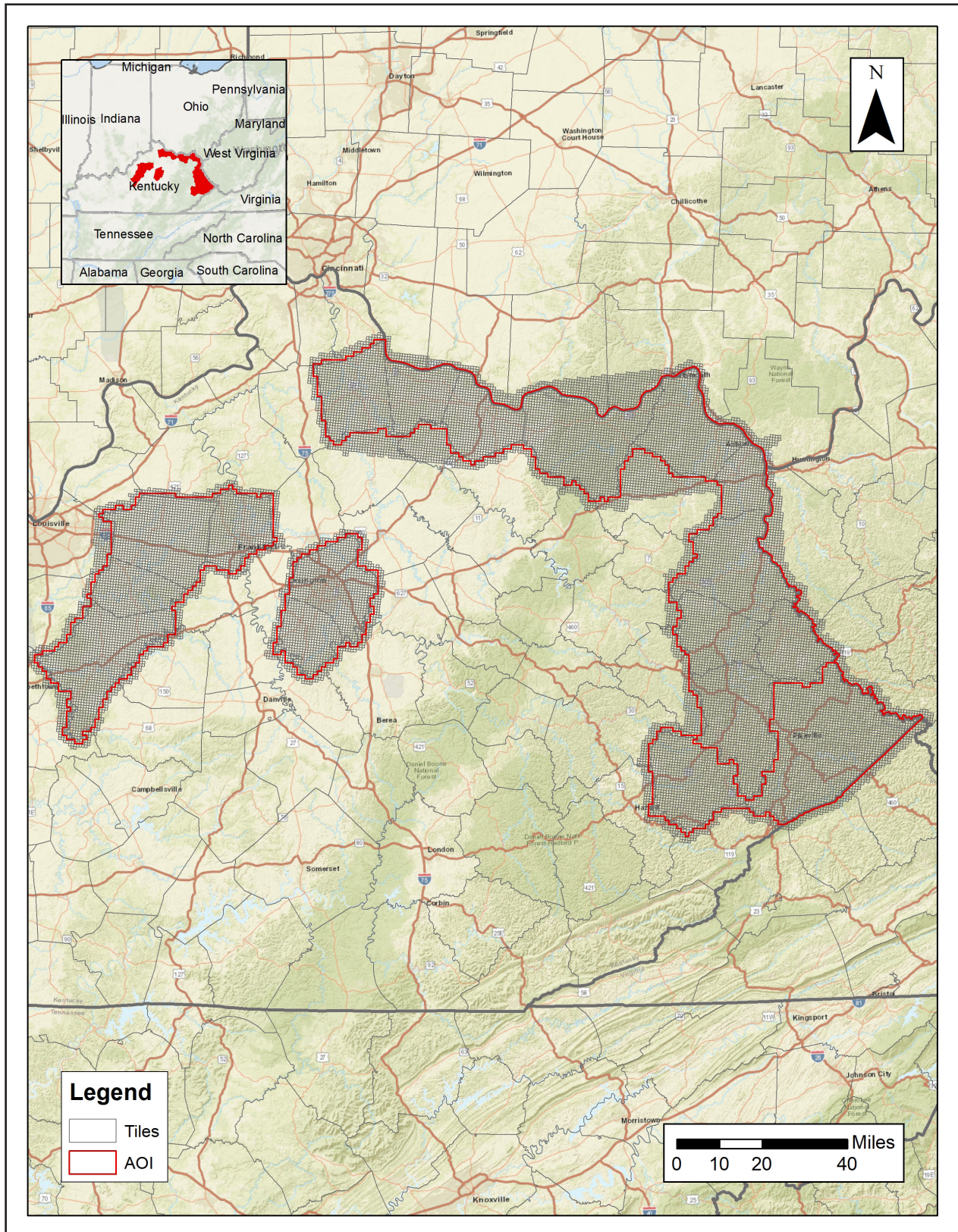
The breakline files were then translated to Esri file geodatabase format using Esri conversion tools.

Breaklines are reviewed against lidar intensity imagery to verify completeness of capture. All breaklines are then compared to TINs (triangular irregular networks) created from ground only points prior to water classification. The horizontal placement of breaklines is compared to terrain features and the breakline elevations are compared to lidar elevations to ensure all breaklines match the lidar within acceptable tolerances. Some deviation is expected between breakline and lidar elevations due to monotonicity, connectivity, and flattening rules that are enforced on the breaklines. Once completeness, horizontal placement, and vertical variance is reviewed, all breaklines are reviewed for topological consistency and data integrity using a combination of Esri Data Reviewer tools and proprietary tools.

3.6. Hydro-Flattened Raster DEM Processing

Class 2 LiDAR in conjunction with the hydro breaklines were used to create a 5-foot Raster DEM. Using automated scripting routines within ArcMap, an ERDAS Imagine .IMG file was created for each tile. Each surface is reviewed using Global Mapper to check for any surface anomalies or incorrect elevations found within the surface.

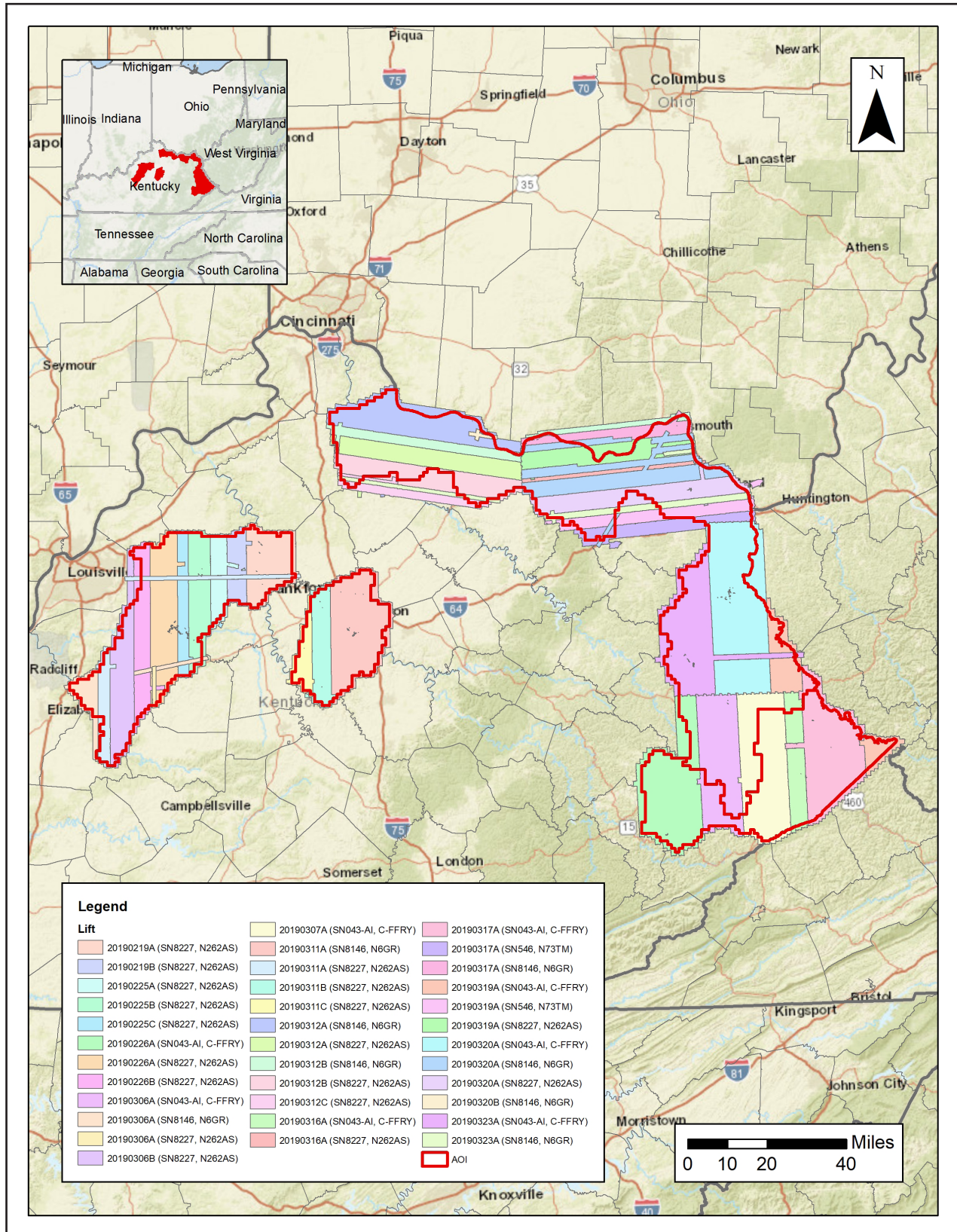
Figure 5. LiDAR Tile Layout



4. Project Coverage Verification

Coverage verification was performed by comparing coverage of processed .LAS files captured during project collection to generate project shape files depicting boundaries of specified project areas. Please refer to Figure 6.

Figure 6. LiDAR Flightline Coverage



5. Ground Control and Check Point Collection

Quantum Spatial completed a field survey of 59 ground control (calibration) points along with 235 blind QA points in Non-Vegetated and Vegetated land cover classifications (total of 294 points) as an independent test of the accuracy of this project.

A combination of precise GPS surveying methods, including static and RTK observations were used to establish the 3D position of ground calibration points and QA points for the point classes above. GPS was not an appropriate methodology for surveying in the forested areas during the leaf-on conditions for the actual field survey (which was accomplished after the LiDAR acquisition). Therefore the 3D positions for the forested points were acquired using a GPS-derived offset point located out in the open near the forested area, and using precise offset surveying techniques to derive the 3D position of the forested point from the open control point. The explicit goal for these surveys was to develop 3D positions that were three times greater than the accuracy requirement for the elevation surface. In this case of the blind QA points the goal was a positional accuracy of 5 cm in terms of the RMSE.

For more information, see the Survey Report in Appendix B.

The required accuracy testing was performed on the LiDAR dataset (both the LiDAR point cloud and derived DEM's) according to the USGS LiDAR Base Specification Version 1.3 (2018).

5.1. Calibration Control Point Testing

Figure 7 shows the location of each bare earth calibration point for the project area. TerraScan was used to perform a quality assurance check using the LiDAR bare earth calibration points. The results of the surface calibration are not an independent assessment of the accuracy of these project deliverables, but the statistical results do provide additional feedback as to the overall quality of the elevation surface.

5.2. Point Cloud Testing

The project specifications require that only Non-Vegetated Vertical Accuracy (NVA) be computed for raw lidar point cloud swath files. The required accuracy (ACCz) is: 19.6 cm at a 95% confidence level, derived according to NSSDA, i.e., based on RMSE of 10 cm in the “bare earth” and “urban” land cover classes. The NVA was tested with 133 checkpoints located in bare earth and urban (non-vegetated) areas. These check points were not used in the calibration or post processing of the lidar point cloud data. The checkpoints were distributed throughout the project area and were surveyed using GPS techniques. See survey report for additional survey methodologies.

Elevations from the unclassified lidar surface were measured for the x,y location of each check point. Elevations interpolated from the lidar surface were then compared to the elevation values of the surveyed control points. AccuracyZ has been tested to meet 19.6 cm or better Non-Vegetated Vertical Accuracy at 95% confidence level using $RMSE(z) \times 1.9600$ as defined by the

National Standards for Spatial Data Accuracy (NSSDA); assessed and reported using National Digital Elevation Program (NDEP)/ASRPS Guidelines.

5.3. Digital Elevation Model (DEM) Testing

The project specifications require the accuracy (ACCz) of the derived DEM be calculated and reported in two ways:

1. The required NVA is: 19.6 cm at a 95% confidence level, derived according to NSSDA, i.e., based on RMSE of 10 cm in the “bare earth” and “urban” land cover classes. This is a required accuracy. The NVA was tested with 133 checkpoints located in bare earth and urban (non-vegetated) areas. See Figure 8.
2. Vegetated Vertical Accuracy (VVA): VVA shall be reported for “brushlands/low trees” and “tall weeds/crops” land cover classes. The target VVA is: 29.4 cm at the 95th percentile, derived according to ASPRS Guidelines, Vertical Accuracy Reporting for Lidar Data, i.e., based on the 95th percentile error in all vegetated land cover classes combined. This is a target accuracy. The VVA was tested with 102 checkpoints located in tall weeds/crops and brushlands/low trees (vegetated) areas. The checkpoints were distributed throughout the project area and were surveyed using GPS techniques. See Figure 9.

AccuracyZ has been tested to meet 19.6 cm or better Non-Vegetated Vertical Accuracy at 95% confidence level using $RMSE(z) \times 1.9600$ as defined by the National Standards for Spatial Data Accuracy (NSSDA); assessed and reported using National Digital Elevation Program (NDEP)/ASRPS Guidelines.

A brief summary of results are listed below.

	Target	Measured	Point Count
Calibration	N/A	N/A	59
Raw NVA	0.196 m	0.094 m	133
NVA	0.196 m	0.093 m	133
VVA	0.294 m	0.217 m	102

Figure 7. Calibration Control Point Locations

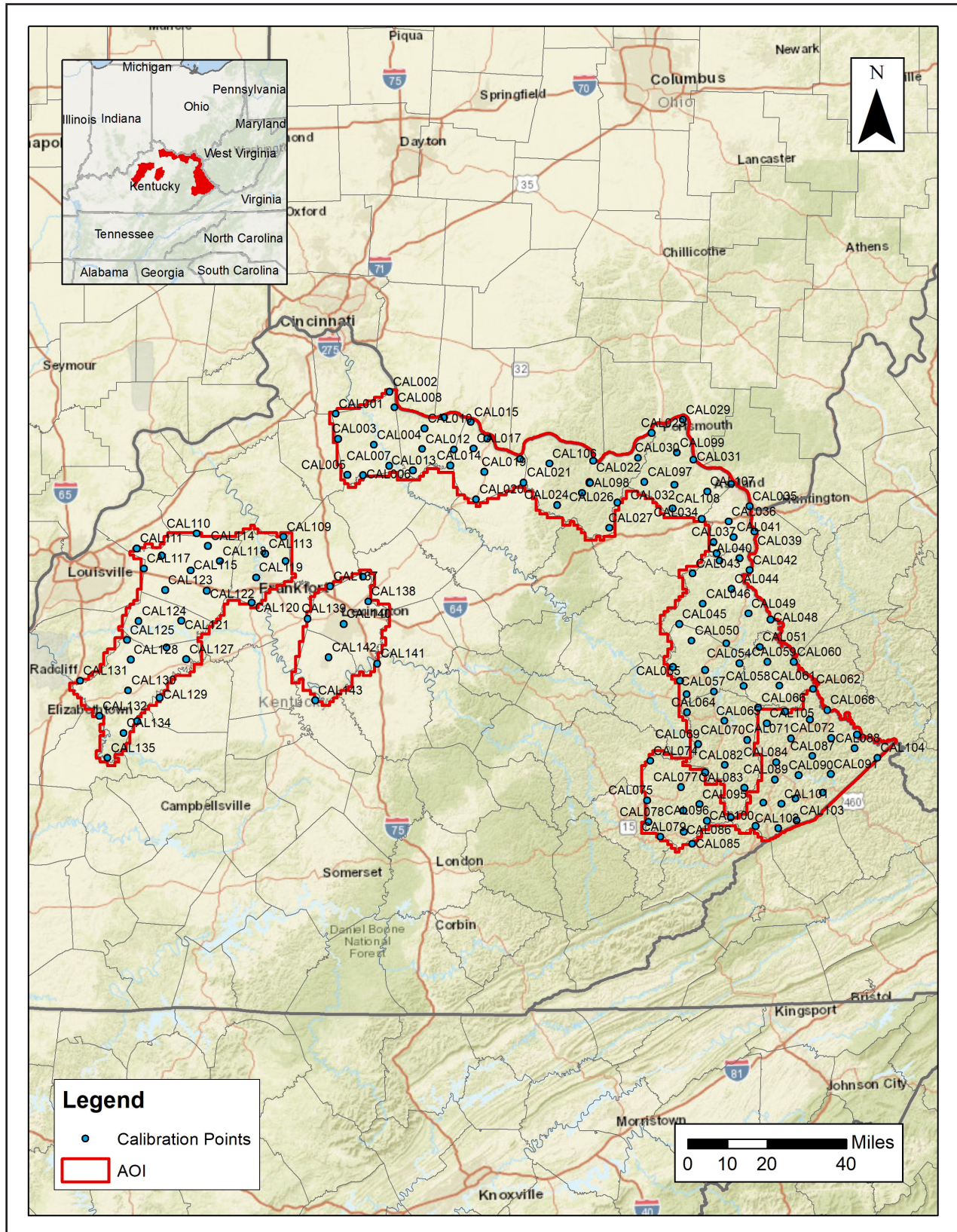


Figure 8. QC Checkpoint Locations - NVA

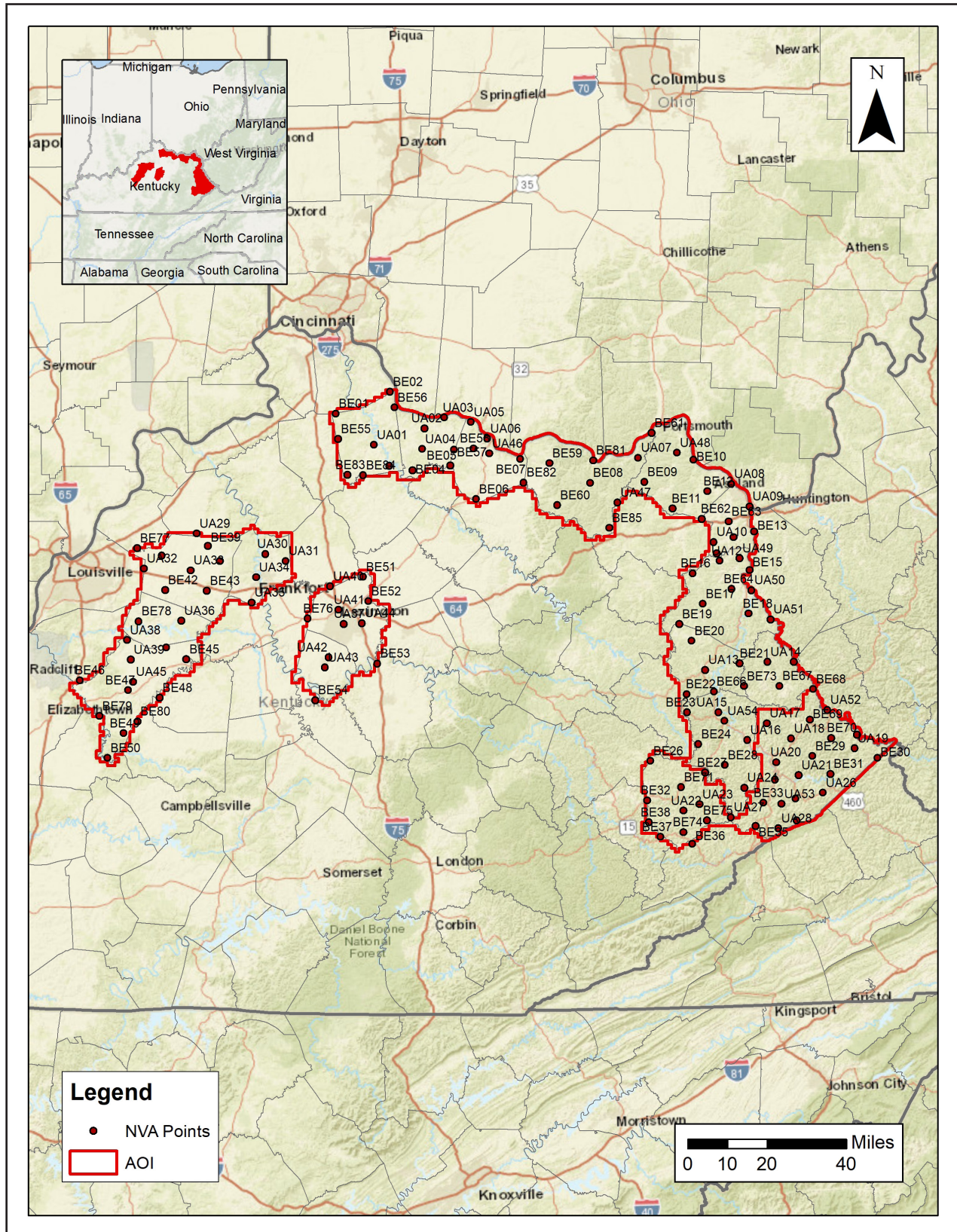
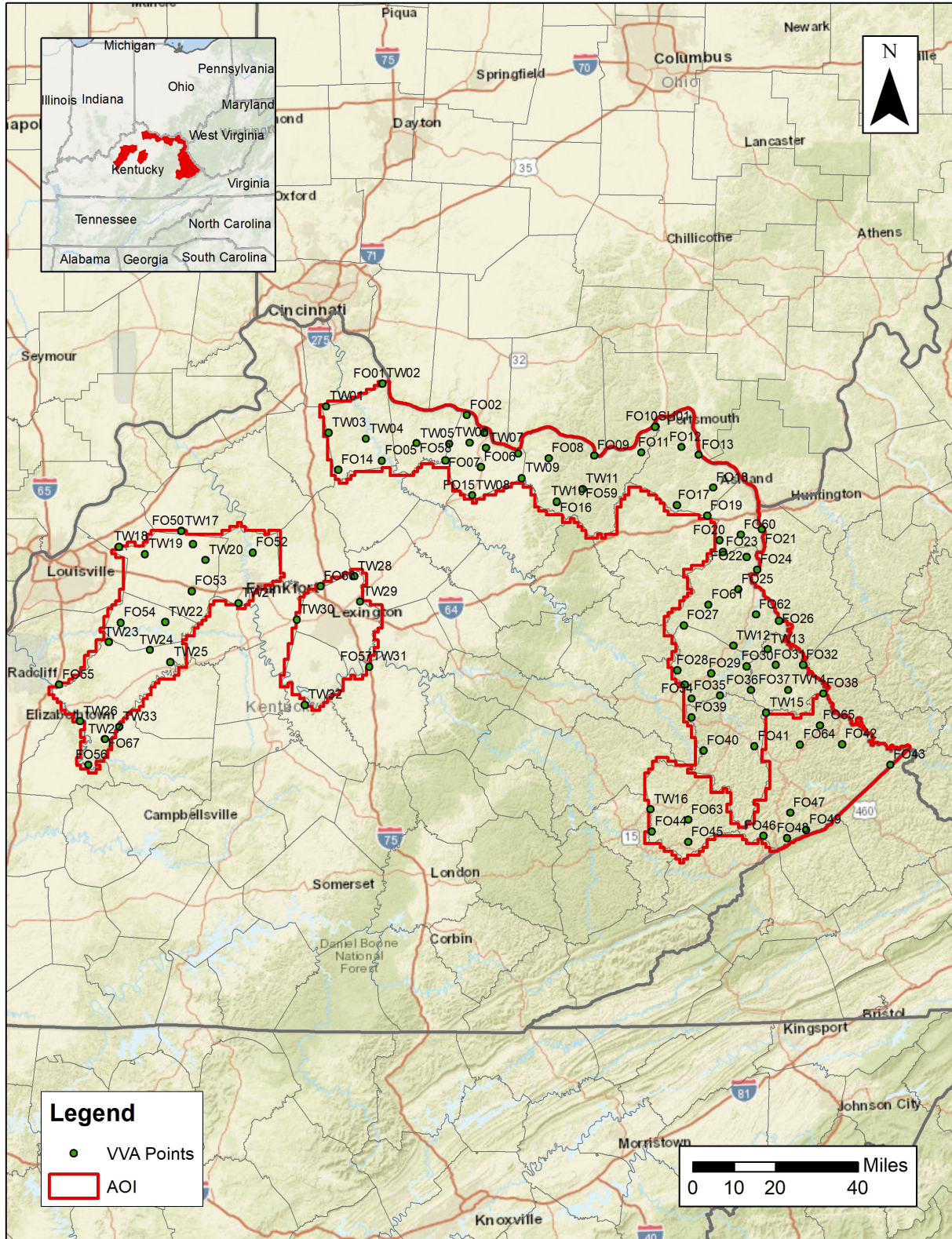


Figure 9. QC Checkpoint Locations - VVA



Project Report Appendices

The following section contains the appendices as listed in the Kentucky Statewide 2019 LiDAR Project Report.

Appendix A

Flight Logs

20190219A (SN8227, N262AS)



Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc

(email Log daily to flight_log_distribution_list@quantumspatial.com)

Date: 2-19-19
Lift: A B C D E Pg 1 of 2

Project: KY LIDAR	Proj #: 33656	Flight Mgmt File: 20190219-130644
Aircraft: AS263AS	Begin Hobbs: 7362.6	End Hobbs: 7366.2 Total: 3.6
Pilot: GATES	Co-Pilot: -	Tech: Schoone
Dep Apt: KLEX	Dep Time (Lcl): 08:10 (Z): 13:10	Arr Apt: KLEX Arr Time (Local): 12:01 (Z): 17:01
Tot Time Aloft:		
CORS: Y <input checked="" type="checkbox"/> Sta 1:	Sta 2:	Flyovers: Y <input checked="" type="checkbox"/> If Y, times: Sta1) Sta2)
GPS Unit: Y <input checked="" type="checkbox"/> Sta 1:	Sta 2:	Flyovers: Y <input checked="" type="checkbox"/> If Y, times: Sta1) Sta2)
Gd Temp beg: °C End: °C	OAT beg: °C End: °C	Altimeter begin: end:
LIDAR Type: ALS-80	Serial #: 8227	Alt AGL: 7100
Alt AMSL:	Avg Terr Ht:	Max Gdspd: 160
FOV: 40	Scan Freq: 48 Hz	MpiA <input checked="" type="checkbox"/> N
Pulses In Air: 3	Pulse Rate: 357 KHz	Power: 100%
PPSM:	Beg GB: 0	Storage Name/#: 2
	End GB: 130	
	Tot GB: 130	

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDOP/#Sats	GPS Altitude	Crab	Turb (0,-)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc		
1084	S	13:38	13:38	163	1.1/23	8227	10		BKN 24K		
1083	N	13:41	13:47	116	1.1/23	8126	-7				
1082	S	13:49	13:54	140	1.1/23	8126	10				
1081	N	13:57	14:03	123	1.0/24	8132	-8				
1080	S	14:05	14:10	139	1.1/24	8115	9				
1079	N	14:13	14:19	124	1.2/23	8086	-8				
1078	S	14:21	14:27	139	1.1/24	8031	7				
1077	N	14:30	14:36	128	1.1/24	7952	-7				
1076	S	14:38	14:44	136	1.2/23	7929	6				
1075	N	14:47	14:53	126	1.2/22	7916	-7				
1074	S	14:56	15:02	133	1.2/22	7912	7				
1073	N	15:05	15:12	118	1.2/21	7899	-8				
1072	S	15:15	15:23	132	1.1/25	7883	8				
1071	N	15:25	15:34	132	1.0/25	7896	-6				
1070	S	15:36	15:44	132	1.2/23	7883	7				
1069	N	15:47	15:55	136	1.2/22	7883	-6				
1068	S	15:57	16:06	138	1.1/20	7893	4				
1067	N	16:09	16:17	136	1.2/18	7916	-7				
Total Proj Lines:		Lines Flown: 20		Lines Remain:		Online Time: 3.1		Mob Time: 0.5		Notes:	

Scanned by CamScanner

20190219B (SN8227,
N262AS)

Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc

(email Log daily to flight_log_distribution_list@quantumspatial.com)

 Date: 2-19-19
 Lift: A B C D E Pg 1 of 2

Project: KY LIDAR		Proj #: 33656		Flight Mgmt File: 20190219-130644						
Aircraft: N262AS	Begin Hobbs: 7362.6	End Hobbs: 7366.2	Total: 3.6	Pilot: GATES	Co-Pilot: -	Tech: Schoone				
Dep Apt: KLEX	Dep Time (Lcl): 08:10 (Z): 13:10	Arr Apt: KLEX	Arr Time (Local): 12:01 (Z): 17:01	Tot Time Aloft:						
CORS: Y 1(N)	Sta 1:	Sta 2:	Flyovers: Y 1(N)	If Y, times: (Sta1) (Sta2)						
GPS Unit: Y 1(N)	Sta 1:	Sta 2:	Flyovers: Y 1(N)	If Y, times: (Sta1) (Sta2)						
Gd Temp beg: °C	End: °C	OAT beg: °C	End: °C	Altimeter begin: °C	end:					
LIDAR	Type: ALS-80	Serial #: 8227	Alt AGL: 7100	Alt AMSL:	Avg Terr Ht:	Max Gdspd: 160	Avg Pt Spacing:	Beg GB: 0	End GB: 130	Storage Name/#: 2
	FOV: 40	Scan Freq: 48 Hz	MplA: 1(N)	Pulses In Air: 3	Pulse Rate: 357 KHz	Power: 100%	PPSM:			

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDOP/#Sats	GPS Altitude	Crab	Turb (0,-)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc
1084	S	13:38	13:38	163	1.1/23	8227	10		BKN 24K
1083	N	13:41	13:47	116	1.1/23	8126	-7		
1082	S	13:49	13:54	140	1.1/23	8126	10		
1081	N	13:57	14:03	123	1.0/24	8132	-8		
1080	S	14:05	14:10	139	1.1/24	8115	9		
1079	N	14:13	14:19	124	1.2/23	8086	-8		
1078	S	14:21	14:27	139	1.1/24	8031	7		
1077	N	14:30	14:36	128	1.1/24	7952	-7		
1076	S	14:38	14:44	136	1.2/23	7929	6		
1075	N	14:47	14:53	126	1.2/22	7916	-7		
1074	S	14:56	15:02	133	1.2/22	7912	7		
1073	N	15:05	15:12	118	1.2/21	7899	-8		
1072	S	15:15	15:23	132	1.1/25	7883	8		
1071	N	15:25	15:34	132	1.0/25	7896	-6		
1070	S	15:36	15:44	132	1.2/23	7883	7		
1069	N	15:47	15:55	136	1.2/22	7883	-6		
1068	S	15:57	16:06	138	1.1/20	7893	4		
1067	N	16:09	16:17	136	1.2/18	7916	-7		

Total Proj Lines:	Lines Flown: 20	Lines Remain:	Online Time: 3.1	Mob Time: 0.5	Notes:
-------------------	------------------------	---------------	-------------------------	----------------------	--------

Scanned by CamScanner

20190225A (SN8227,
N262AS)


Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc

 Date: 2-25-19
 U/L: A B C D E Pg. 1 of 2

(email log daily to flight_log_distribution_List@quantumspatial.com)

Project: <u>KY-LIDAR</u>		Proj #: <u>33654</u>		Flight Mgmt File: <u>20190225-130114</u>			
Aircraft: <u>N262AS</u>	Begin Hobbs: <u>7368.4</u>	End Hobbs: <u>7371.1</u>	Total: <u>2.7</u>	Pilot: <u>GATES</u>	Co-Pilot: <u>-</u>	Tech: <u>Schoone</u>	
Dep Apt: <u>KLEX</u>	Dep Time (Lcl): <u>08:05</u> (Z): <u>13:05</u>	Arr Apt: <u>KFFT</u>	Arr Time (Local): <u>1150</u> (Z): <u>1550</u>	Tot Time Aloft:			
CORS: <u>Y</u> (1/0)	Sta 1:	Sta 2:	Flyovers: <u>Y</u> (1/0)	If Y, times: Sta1) Sta2)			
GPS Unit: <u>Y</u> (1/0)	Sta 1:	Sta 2:	Flyovers: <u>Y</u> (1/0)	If Y, times: Sta1) Sta2)			
Gd Temp beg: <u> </u> °C	End: <u> </u> °C	OAT beg: <u>-6</u> °C	End: <u> </u> °C	Altimeter begin: <u>30.43</u>	end: <u>30.48</u>	Beg GB: <u>69</u>	
LIDAR	Type: <u>ALS-80</u>	Serial #: <u>8227</u>	Alt AGL: <u>7100</u>	Alt AMSL: <u> </u>	Avg Terr Ht: <u> </u>	Max Gdepd: <u>160</u>	End GB: <u>105</u>
	FOV: <u>40</u>	Scan Freq: <u>49112</u>	MPIA: <u>Y</u> (1/0)	Pulses In Air: <u>3</u>	Pulse Rate: <u>357KHz</u>	Power: <u>100</u>	Tot GB: <u>36</u>

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDOP#sats	GPS Altitude	Crab	Turb (0-4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
1054	N	13:32	13:42	115	1.0/23	8089	-12		SKC VIS ±10 MILD TURBULANCE
1057	S	13:51	14:00	149	1.2/22	8089	+16		wind 333/52kts - HARD TO SEW DUE D
1057	N	14:04	14:14	122	1.0/23	8089	-12		
1056	N	14:25	14:34	121	1.3/21	8134	-11		
1055	N	14:44	14:54	124	1.2/20	8129	-10		
1054	N	15:04	15:15	124	1.1/20	8106	-11		
1053	N	15:27	15:36	126	1.1/20	8086	-9		
X-Tie	E	15:41	15:44	154	1.4/17	8001	-13		Mandul X-Tie
									S-TURN

Total Proj Lines:	Lines Flown: <u>6</u>	Lines Remain:	Online Time: <u>2.2</u>	Mob Time: <u>1.5</u>	Notes:
-------------------	-----------------------	---------------	-------------------------	----------------------	--------

Scanned by CamScanner

20190225B (SN8227, N262AS)

Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 2-25-19
U/L: A B C D E Pg 1 of 3

(email log daily to flight_log_distribution_List@quantumspatial.com)

Project: KY-LIDAR Proj #: 33654 Flight Mgmt File: 20190225-130114

Aircraft: N262AS Begin Hobbs: 7368.4 End Hobbs: 7371.1 Total: 2.7 Pilot: GATES Co-Pilot: - Tech: Schoone ^{SM, 174}

Dep Apt: KLEX Dep Time (Lcl): 08:05 (Z): 13:05 Arr Apt: KFFT Arr Time (Local): 1150 (Z): 1550 Tot Time Aloft:

CORS: Y Sta 1: Sta 2: Flyovers: Y If Y, times: Sta1) Sta2)

GPS Unit: Y Sta 1: Sta 2: Flyovers: Y If Y, times: Sta1) Sta2)

Gd Temp beg: °C End: °C OAT beg: -6 °C End: °C Altimeter begin: 30.43 end: 30.48

LIDAR	Type ALS-80	Serial # 8227	Alt AGL 7100	Alt AMSL	Avg Terr Ht	Max Gdspsd 160	Avg Pt Spacing	Beg GB 69	End GB 105	Storage Name#
	FOV 40	Scan Freq 49112	MPIA (Y) N	Pulses In Air 3	Pulse Rate 357 kHz	Power 100	PPSM			

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDPF#sats	GPS Altitude	Crab	Turb (0-4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
1054	N	13:32	13:42	115	1.0/23	8089	-12		SKC VIS ±10 MILD TURBULENCE
1057	S	13:51	14:00	149	1.2/22	8089	+16		WIND 333/52 KTS - HARD TO SEW DOWN
1057	N	14:04	14:14	122	1.0/23	8089	-12		
1056	N	14:25	14:34	121	1.3/21	8134	-11		
1055	N	14:44	14:54	124	1.2/20	8124	-10		
1054	N	15:04	15:15	124	1.1/20	8106	-11		
1053	N	15:27	15:36	126	1.1/20	8086	-9		
X-Tie	E	15:41	15:44	154	1.4/17	8001	-13		Manual X-Tie S-TURN

Total Proj Lines: Lines Flown: 6 Lines Remain: Online Time: 2.2 Mob Time: 1.5 Notes:

Scanned by CamScanner

20190225C (SN8227, N262AS)



Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 2-25-19
U/L: A B C D E Pg 1 of 2

(email log daily to flight_log_distribution_List@quantumspatial.com)

Project: KY-LIDAR Proj #: 33654 Flight Mgmt File: 20190225-130114

Aircraft: N262AS Begin Hobbs: 7368.4 End Hobbs: 7371.1 Total: 2.7 Pilot: GATES Co-Pilot: - Tech: Schoone

Dep Apt: KLEX Dep Time (Lcl): 08:05 (Z): 13:05 Arr Apt: KFFT Arr Time (Local): 1150 (Z): 1550 Tot Time Aloft:

CORS: Y Sta 1: Sta 2: Flyovers: Y If Y, times: Sta1) Sta2)

GPS Unit: Y Sta 1: Sta 2: Flyovers: Y If Y, times: Sta1) Sta2)

Gd Temp beg: °C End: °C OAT beg: -6 °C End: °C Altimeter begin: 30.43 end: 30.48

LIDAR	Type	Serial #	Alt AGL	Alt AMSL	Avg Terr Ht	Max Gdepd	Avg Pt Spacing	Beg GB	Storage Name#	
	FOV	Scan Freq	MPIA(Y)N	Pulses In Air	Pulse Rate	Power	PPSM			End GB
	40	49112		3	357KHZ	100				Tot GB

Beg GB: 69
End GB: 105
Tot GB: 36

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDPF#sats	GPS Altitude	Crab	Turb (0-+)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
1054	N	13:32	13:42	115	1.0/23	8089	-12		SKC VIS ±10 MIN TURBUANCE
1057	S	13:51	14:00	149	1.2/22	8089	+16		WIND 333/52KTS - HARD TO SEW DUE D
1057	N	14:04	14:14	122	1.0/23	8089	-12		
1056	N	14:25	14:34	121	1.3/21	8134	-11		
1055	N	14:44	14:54	124	1.2/20	8129	-10		
1054	N	15:04	15:15	124	1.1/20	8106	-11		
1053	N	15:27	15:36	126	1.1/20	8086	-9		
X-Tie	E	15:41	15:44	154	1.4/17	8001	-13		Manual X-Tie
									S-TURN

Total Proj Lines: Lines Flown: 6 Lines Remain: Online Time: 2.2 Mob Time: 1.5 Notes:

Scanned by CamScanner

20190226A (SN043- AI, C-FFRY)

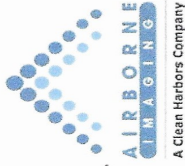
LIDAR Flight Log

Julian Day 057	Flight A
----------------	----------

Date 2019/02/26	Aircraft C-FFRY
Project 3174_QSI_BigSandyKY_QL2	Pilot MATHIASON
Location KSJS - Big Sandy Regional	Operator A. Blair
Mission Objective	
QL2, 2,650mi; Preliminary 'Field Calibrated' LAS	

System	Riegl Q1560i w/GSM
Unit	43
IMU	Applanix AP50
GPS Rx	Trimble
Scanner 1 Drive	
Scanner 2 Drive	

Additional Notes GRD Temp -3°C Pressure -1065 hPa Humidity -60% Temp @ Alt -0°C Time to 30Hr Maintenance: 15.4	
--	--



Aircraft Block Time	
Engine On 1418	Takeoff 1439
Engine Off 1955	Landing 1944
Total 5.1 hrs	Total 5.1 hrs

Mission Plan			
AGL Height 2000m	Pulse Rate 700KHz/850Ch		
Target Speed 160kts	Scan Rate 89 ips		
Laser Current 100%	FOV 60 degs		

Static Alignment		GPS Time	
Pre Mission	1430	Start	End
Post Mission	1947	1435	1952

Flight Line	LIDAR File Name	Flight Direction	GPS Time		Line Aborted		Mission ID	Comments
			Start	End	Time	nmi to End		
Test Strip	-	G	1445	1448			190226	
00	-	G	1449	1454			144544	
36	431905601	185°	1503	1509			150318	
37	02	005°	1518	1524			151824	
38	03	185°	1529	1536			152918	
39	04	005°	1541	1548			154104	
40	05	185°	1553	1601			155314	
41	06	005°	1606	1614			160631	
42	07	185°	1619	1628			161908	
43	08	005°	1633	1641			163306	
44	09	185°	1646	1655			164640	
45	10	005°	1700	1709			170022	
46	11	185°	1714	1722			171417	
47	12	005°	1727	1741			172727	
48	13	185°	1745	1759			174540	

20190226A (SN8227, N262AS)

Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 2 26 19

(email Log daily to flight_log_distribution_list@quantumspatial.com)

Utr: (A) B C D E

Pg. 1 of 1

Project: Ky Lidar		Proj #: 33156		Flight Mgmt File: 20190225			
Aircraft: 262AS	Begin Hobbs: 7375.6	End Hobbs: 7380.0	Total: 4.4	Pilot: Gates	Co-Pilot: SMITH		
Dep Apt: KLEX	Dep Time (Lcl): 8:44 (Z): 1344	Arr Apt: KFFT	Arr Time (Local): 1:09 (Z): 1809	Tot Time Aloft:			
CORS: Y (N)	Sta 1:	Sta 2:	Flyovers: Y (N)	If Y, times: Sta1) Sta2)			
GPS Unit: Y (N)	Sta 1:	Sta 2:	Flyovers: Y (N)	If Y, times: Sta1) Sta2)			
Gd Temp beg: °C	End: °C	OAT beg: °C	End: °C	Altimeter begin: 30.35 end: 30.34			
LIDAR	Type: AL590	Serial #: 8227	Alt AGL	Alt AMSL	Avg Terr Ht	Max Gdsd: 160	Avg Pt Spacing
	FOV	Scan Freq	MPIA Y / N	Pulse In Air	Pulse Rate	Power	PPSM
							Beg GB End GB Tot GB

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDR/#Sats	GPS Altitude	Crab	Turb (0..+)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
1040	N	1424	1439	132	1.2/22	7981	-14	0	S-Turn
1039	S	1441	1459	115	1.3/21	7975	+14	0	
1039	N	1501	1516	130	1.4/23	7955	-13	0	
1038	S	1519	1535	127	1.2/20	7916	+11	0	
1037	N	1538	1554	137	1.3/19	7909	-12	0	
1036	S	1557	1614	127	1.3/20	7909	+12	0	
1035	N	1617	1633	133	1.1/26	7896	-12	0	Error Message on Line - 12 m FNE
1034	S	1635	1652	119	1.2/20	7896	+12	0	
1033	N	1655	1710	145	1.5/17	7891	-13	0	
1032	S	1713	1730	121	1.5/18	7889	+11	0	
1031	N	1733	1750	132	1.3/21	7889	-11	0	
X-Tic	E	1755	1758	147	1.1/24	7879	-1	0	Manual X-Tic - S-Turn

Total Proj Lines:	Lines Flown: 11	Lines Remain:	Online Time: 3.5	Job Time: .9	Notes:
-------------------	------------------------	---------------	-------------------------	---------------------	--------

Scanned with CamScanner

20190226B (SN8227,
N262AS)



Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 2 26 19

(email Log daily to flight_log_distribution_list@quantumspatial.com)

Utr: A B C D E Pg. 1 of 1

Project: <u>Ky Lidar</u>	Proj #: <u>33256</u>	Flight Mgmt File: <u>20190225</u>				
Aircraft: <u>262AS</u>	Begin Hobbs: <u>7375.6</u>	End Hobbs: <u>7380.0</u>	Total: <u>4.4</u>	Pilot: <u>Gates</u>	Co-Pilot:	Tech: <u>Smith / Schoone</u>
Dep Apt: <u>KLEX</u>	Dep Time (Lcl): <u>8:44</u>	(Z): <u>1344</u>	Arr Apt: <u>KFFT</u>	Arr Time (Local): <u>1:09</u>	(Z): <u>1809</u>	Tot Time Aloft:
CORS: <u>Y 10</u>	Sta 1:	Sta 2:	Flyovers: <u>Y 10</u>	If Y, times: <u>Sta 1</u>	Sta 2)	
GPS Unit: <u>Y 10</u>	Sta 1:	Sta 2:	Flyovers: <u>Y 10</u>	If Y, times: <u>Sta 1</u>	Sta 2)	
Gd Temp beg: °C	End: °C	OAT beg: °C	End: °C	Altimeter begin: <u>30.35</u>	end: <u>30.34</u>	Beg GB
LIDAR Type: <u>AL590</u>	Serial #: <u>8227</u>	Alt AGL:	Alt AMSL:	Avg Terr Ht:	Max Gdspd: <u>160</u>	Avg Pt Spacing
FOV	Scan Freq	MpIA Y / N	Pulse In Air	Pulse Rate	Power	PPSM
						End GB
						Tot GB

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDOP/#Sats	GPS Altitude	Crab	Turb (0-4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
1040	N	1424	1439	132	1.2/22	7981	-14	0	S-Turn
1039	S	1441	1459	115	1.3/21	7975	+14	0	
1039	N	1501	1516	130	1.1/23	7955	-13	0	
1038	S	1519	1535	127	1.2/20	7916	+11	0	
1037	N	1538	1554	137	1.3/19	7909	-12	0	
1036	S	1557	1614	127	1.3/20	7909	+12	0	
1035	N	1617	1633	133	1.1/26	7896	-12	0	Error Message on Line - 12 M FNE
1034	S	1635	1652	119	1.2/20	7896	+12	0	
1033	N	1655	1710	145	1.5/17	7896	-13	0	
1032	S	1713	1730	121	1.5/18	7889	+11	0	
1031	N	1733	1750	132	1.3/21	7889	-11	0	
X-tic	E	1755	1758	147	1.1/24	7879	-1	0	Manual X-TIC - S-Turn

Total Proj Lines:	Lines Flown: <u>11</u>	Lines Remain:	Online Time: <u>3.5</u>	Mob Time: <u>.9</u>	Notes:
-------------------	------------------------	---------------	-------------------------	---------------------	--------

Scanned with CamScanner

20190306A (SN043- AI, C-FFRY)

LIDAR Flight Log



A Clean Harbors Company

Julian Day 065 Flight A

Date 2019/03/06 Aircraft C-FFRY
 Project 3174_QSI_BigSandyKY_QL2 Pilot MNThelison
 Location KSJS - Big Sandy Regional Operator A. Blair
 Mission Objective
 QL2, 2,650mi², Preliminary 'Field Calibrated' LAS

System Riegl Q1560i w/GSM
 Unit 43
 IMU Applanix AP50
 GPS Rx Trimble
 Scanner 1 Drive
 Scanner 2 Drive

Additional Notes
Temp -10C
Pressure - 1079HPA
Humidity - 72%
Temp @ Altitude - -12C
 Time to 50Hr Maintenance: 9.3 Hrs

Aircraft Block Time	
Engine On <u>1827</u>	Takeoff <u>1845</u>
Engine Off <u>2314</u>	Landing <u>2304</u>
Total <u>1.8</u> hrs	Total <u>4.3</u> hrs

Mission Plan	
AGL Height <u>2000m</u>	Pulse Rate <u>700KHz/350/Ch</u>
Target Speed <u>160kts</u>	Scan Rate <u>89 ips</u>
Laser Current <u>100%</u>	FOV <u>60 degs</u>

Static Alignment	GPS Time	
	Start	End
Pre Mission	<u>1834</u>	<u>1839</u>
Post Mission	<u>2306</u>	<u>2311</u>

Flight Line	LIDAR File Name	Flight Direction	GPS Time		Line Aborted	Mission ID	Comments
			Start	End			
TEST STRIP	-	G	<u>1849</u>	<u>1851</u>		<u>184947</u>	
00	-	G	<u>1851</u>	<u>1856</u>			
53	<u>431906501</u>	<u>185°</u>	<u>1903</u>	<u>1916</u>		<u>190357</u>	
54	<u>02</u>	<u>005°</u>	<u>1921</u>	<u>1934</u>		<u>192115</u>	
55	<u>03</u>	<u>185°</u>	<u>1939</u>	<u>1951</u>		<u>193905</u>	
56	<u>04</u>	<u>005°</u>	<u>1956</u>	<u>2009</u>		<u>195619</u>	
57	<u>05</u>	<u>185°</u>	<u>2013</u>	<u>2025</u>		<u>201328</u>	
58	<u>06</u>	<u>005°</u>	<u>2030</u>	<u>2043</u>		<u>203013</u>	
59	<u>07</u>	<u>185°</u>	<u>2047</u>	<u>2059</u>		<u>204730</u>	
60	<u>08</u>	<u>005°</u>	<u>2104</u>	<u>2117</u>		<u>210406</u>	
61	<u>09</u>	<u>185°</u>	<u>2121</u>	<u>2133</u>		<u>212138</u>	
62	<u>10</u>	<u>005°</u>	<u>2138</u>	<u>2152</u>		<u>213848</u>	
63	<u>11</u>	<u>185°</u>	<u>2156</u>	<u>2209</u>		<u>215649</u>	
64	<u>12</u>	<u>005°</u>	<u>2214</u>	<u>2224</u>		<u>221425</u>	
XTR12114	<u>13</u>	<u>271°</u>	<u>2238</u>	<u>2245</u>		<u>223816</u>	
00	-	G	<u>2245</u>	<u>2251</u>			

20190306A (SN8146, N6GR)

Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 3-6-19

Project: KYSW LIDAR		Flight Mgmt File: 20190306-192129	
Altofts: NLER Begin Hobbs: 4877.6 End Hobbs: 4880.8 Total: 2.4		Pilot: DOYLE Co-Pilot: Tech: CAREY	
Dep Apt: KLEX Dep Time (Lof): 1437 (Z): 1937 Arr Apt: KLEX Arr Time (Local): 1700 (Z): 2200		Tot Time Aloft: 2.4	
COND: Y/N Sta 1: PFP		Flyovers: Y/N IF Y, times: Sta1) Sta2)	
GPS Units: Y/N Sta 1: Sta 2:		Flyovers: Y/N IF Y, times: Sta1) Sta2)	
Gd Temp beg: °C End: °C OAT beg: °C End: °C		Altimeter begin: end:	
Type: ALS SC	Serial #: 8146	ALT ADJ: 7027	Max Gaspd: 837
AVG Pt Spacing: 100%	Scan Rate: 48 Hz	MPH in Air: 3	Power: 100%
FOV: 40	Scan Rate: 48 Hz	MPH in Air: 3	

Line #	Mag	Start UTC	End UTC	Gd Spd	Room Sns	GPS Altitude	Crab	Turb (0..4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
1012	185	2001	2010	7140	1.2	7863			KLEX SITE S/FIG
1011	5	2014	2023	7145	1.1	7864			RSK SET
1010	185	2025	2033		1.3	7863			
1009	5	2038	2043		1.3	7862			
1008	185	2047	2050		1.1	7861			
1007	5	2054	2057		1.1	7856			
1006	185	2059	2102	7145	1.1	7849			RSK BKN
1005	5	2106	2108		1.1	7849			
1004	185	2112	2113		1.1	7850			
1003	5	2116	2118		1.1	7849			
1002	185	2120	2122		1.1	7842			
1001	5	2126	2125		1.1	7848			Planned X-Flight
1085	93	2136	2149		1.1	7848			S/FIG SITE KLEX
Total Proj Lines: 13 Lines Flown: 13 Online Time: 1.8 Mob Time: 0.6 Notes:									

20190306A (SN8227, N262AS)

Quantum Spatial Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc
(Email Log daily to flight_log_distribution_user@quantumspatial.com)

Date: 03/06/2019
Page 1 of 2

Project: Ky Lide
Flight Mgmt File: 20190306_142340
Tech: Smith

Aircraft: 262AS
Begin Hobbs: 7382.9
End Hobbs: 7883.7
Total: 0.8
Pilot: GATES
Co-Pilot:
Tot Time Aloft: 6

Dep Apt: KLEX
Dep Time (UTC): 9:37
Arr Apt: KLEX
Arr Time (Local): 10:50
TA: 530

CORS: Y (N)
Flyovers: Y (N) IF Y, times: Sta1)
Flyovers: Y (N) IF Y, times: Sta1)

GPS Unit: Y (N)
Sta 1: Sea 2:
Sta 2: Sea 2:

Gd Temp beg: °C End: °C OAT beg: °C End: °C
Altimeter begin: 30.44 end: 30.42

Type FOV	Serial #	Start (UTC)	End (UTC)	Gd Spd	Foot-cans	GPS Altitude	Crab	Turb (0.1-1)	Avg Pt											
									Alt ADL	MpA	Y	N	Altitude	Speed	Heading	Roll				
LIDAR	1540	1505	1507	132	1.5/20	7846	0	0	160											
FLIGHT LINE NOTES - visibility, clouds, emuls, periods, etc.																				
Rtly 7.5mi to 8.5m ESE - 5-Town																				
Small clouds below assigned ALT																				

Total Proj Lines: Lines Flown: Lines Remaining: Online Time: 0.1 Job Time: 0.7 Notes: 178-Scans, Drive

Scanned with CamScanner

20190306B (SN8227,
N262AS)

Quantum Spatial Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc
(email log only to flight_log_distribution_line@quantumspatial.com)

Date: 3/6/2019
 UTE: A B C D E
 Page: 1 of 2

Project: KY Lidar
 Flight Mgmt File: 20190306_192f30
 Altitude: 192f30

Aircraft: 262AS Begin Hobbs: 7387.7 Total: 3.5 Pilot: GMS Contact: JWP/K Tech: Subseries
 Dep Apt: KLEX Dep Time (Ldt): 234 [2] 1934 AR Apt: LEX AR Time (Local): 609 [2] 2309 Tot Time Aloft:

CORS: Y (N) Sta 1: Flyovers: Y (N) If Y, times: Sta1) Sta2)
 GPS Unit: Y (N) Sta 2: Flyovers: Y (N) If Y, times: Sta1) Sta2)

God Temp beg: °C End: °C OAT beg: °C End: °C Altimeter begin: 70.57 end:
 Type ALS90 Serial # 8227
 Lidar FOV: Scan Prog

Line #	Hdg	Start (UTC)	End (UTC)	Alt (MSL)	Alt (AGL)	GPS Altitude	Crab	YRB (0.1-1)	YGB (0.1-1)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
1024	N	2004	2023	132	1.2/22	7873	-10	0	0	LT Haze - STUN -
1023	S	2026	2045	136	1.3/23	7866	44	0	0	LT Haze
1022	N	2049	2103	132	1.1/24	7859	-11	0	0	LT Haze
1021	S	2106	2121	132	1.1/24	7859	44	0	0	LT Haze
1020	N	2124	2139	127	1.0/24	7859	-11	0	0	LT Haze
1019	S	2142	2156	138	1.2/23	7859	45	0	0	LT Haze
1018	N	2158	2211	132	1.2/22	7856	-11	0	0	LT Haze
1017	S	2214	2226	137	1.1/22	7859	45	0	0	LT Haze
1016	N	2229	2241	134	1.3/19	7875	-13	0	0	2242 - Error GMS5 antenna connection - 2249 STUN - RTB

Total Proj Lines: 9 Lines Flown: 9 Lines Remain: 4 Online Time: 2.7 Prob Time: 0.8 Notes:

20190307A (SN043- AI, C-FFRY)

LIDAR Flight Log

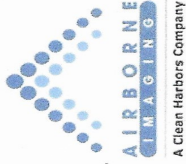
Julian Day 066	Flight A
----------------	----------

Date 2019/03/07	Aircraft C-FFRY
Project 3174_QSL_BigSandyKY_QL2	Pilot Matheson
Location KSJS - Big Sandy Regional	Operator A. Blair
Mission Objective	

QL2, 2,650mi, Preliminary 'Field Calibrated' LAS

System	Riegl Q1560i w/GSM
Unit	43
IMU	Applanix AP50
GPS Rx	Trimble
Scanner 1 Drive	
Scanner 2 Drive	

Additional Notes
 Temp - -7°C
 Pressure - 1029.1hPa
 Humidity - 65%
 Temp @ Alt - -8
 Time to 50Hr Maintenance:



Aircraft Block Time	
Engine On 1300	Takeoff 1317
Engine Off 1848	Landing 1829
Total 5.8 hrs	Total 5.4 hrs

Mission Plan			
AGL Height 2000m	Pulse Rate 700KHz/350/Ch		
Target Speed 160kts	Scan Rate 89 ips		
Laser Current 100%	FOV 60 degs		

Static Alignment	GPS Time	
	Start	End
Pre Mission	1306	1311
Post Mission	1841	1846

Flight Line	LIDAR File Name	Flight Direction	GPS Time		Line Aborted		Mission ID	Comments
			Start	End	Time	nmi to End		
Test Strip	-	G	1323	1324			190307	
00	-	G	1305	1331			132310	
65	431906601	185°	1334	1346			133413	
66	02	005°	1351	1405			135148	
67	03	185°	1410	1422			141000	
68	04	005°	1427	1441			142727	
69	05	185°	1446	1458			144609	
70	06	005°	1504	1518			150404	
71	07	185°	1522	1536			152254	
72	08	005°	1541	1556			154126	
73	09	185°	1600	1613			160027	
74	10	005°	1618	1632			161848	
75	11	185°	1637	1650			163708	
76	12	005°	1654	1708			165453	
77	13	185°	1712	1725			171253	

20190311A (SN8146, N6GR)

Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc

 Date: 3-11-19
 Utc: A B C D E Pg. 1 of 1

(email log daily to flight_log_distribution_list@quantumspatial.com)

Project: KYSW LIDAR	Proj #: 33656	Flight Mgmt File: 20190311_121752
Aircraft: N6GR	Begin Hobbs: 4080.0	End Hobbs: 555
Dep Apt: KLEX	Dep Time (Lat/Long): 830 (Z)	Arr Time (Local): (Z)
Tot Time Aloft: TA		
Tech: CAREY		
Co-Pilot:		
Arr Time (Local):		
Arr Apt:		
Sta 2:		
Flyovers: Y/N IF Y, times: Sta 1		
Flyovers: Y/N IF Y, times: Sta 1		
Altimeter begin: end:		
Avg Pt Spacing:		
Power: 10072		
#2 MM		
Range Name:		

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	POD/Sec	GPS Altitude	Crab	Turb (0..-1)	Alt. AGL	Alt. AGL	Avg Terr Ht	Max Cloud	Power	PPSM	Notes
2038	186	1243	1245	140	1.3	8370			7863	7863	837		357	10072	KLEX → SITE
2037	6	1249	1251		1.3	8296									11K OVC
2036	186	1256	1300		1.3	8283									
2035	6	1303	1307		1.0	8247									
2034	186	1311	1317		1.2	8030									
2033	6	1320	1329	140	1.3	7875									11K OVC - H2
2032	186	1332	1341		1.3	7904									
2031	6	1343	1354		1.3	8000									
2030	186	1356	1406		1.1	7994									
2029	6	1409	1419		1.1	7994									
2028	186	1421	1431	140	1.2	7994									
2027	6	1434	1444		1.1	7997									
2026	186	1447	1456		1.1	7990									
2025	6	1459	1509		1.5	7981									
2024	186	1512	1522		1.2	7992									
2023	6	1525	1535		1.2	7992									

Total Proj Lines:	Lines Flown:	Lines Remain:	Online Time:	Job Time:	Notes: SEE LOG 2A
-------------------	--------------	---------------	--------------	-----------	-------------------

Scanned by CamScanner

20190311A (SN8227, N262AS)

Quantum Spatial
Project: KY L10AA
Date: 3/11/19
Flight Mgmt File: 20190311-121552
Alt: A B C D E
7/1 of 8

Aircraft: 626AS Begin Hobbs: 73872 End Hobbs: 73913 Total: 4.1 Pilot: STEVENSON Co-Pilot:
Dep Apt: KLEX Dep Time (UTC): 1223 AT Apt: KLEX Arr Time (Local): 1228 (TA 1628) Tech:
CORS: Y (N) Sta 1: **Sta 2:** **Flyovers: Y (N)** IF Y, times: Sta1) **Sta2)** **Tot Time Aloft:**
GPS Unit: Y (N) **Sta 1:** **Sta 2:** **Flyovers: Y (N)** IF Y, times: Sta1) **Sta2)**

Gd Temp beg: +4 °C **End:** **OAT beg: °C** **End:** **Altimeter beg: 30.33** **end: 30.35**

Line #	Type	Mag	Start (UTC)	End (UTC)	Gd Spd	100ft/sec	GPS Altitude	Crab	Turb (0-1-3)	Alt		Pulse	Rate	Pulse	Rate	Avg Pt	Avg Pt	Spacing	IFSM	
										MSL	AGL									
1017	S	1250	1300	131	1.2/21	7862	7	0		5-Turn	180									
1018	N	1304	1314	138	1.0/23	7888	4	0		LT-Haze										
1014	S	1318	1324	139	1.2/21	7871	4	0		LT-Haze										
1010	N	1336	1347	138	1.2/20	7872	5	0		LT-Haze										
2015	S	1432	1444	145	1.0/21	7814	7	0		5-Turn	180									
2014	N	1438	1439	140	1.4/18	7977	2	0		LT-Haze										
2013	S	1502	1514	141	1.3/19	7911	7	0		LT-Haze										
2012	N	1516	1527	138	1.2/19	7974	6	1		LT-Haze										
2011	S	1531	1542	138	1.2/18	7952	7	1		LT-Haze										
2010	N	1546	1551	144	1.2/18	7949	5	0		LT-Haze										
2009	S	1559	1610	142	1.4/17	7972	7	0		LT-Haze										
K-Tic	W	1613	1616	148	1.5/16	7910	7	0		Manual K-Tic										

FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
 20190311-121552
 5-Turn
 LT-Haze
 LT-Haze
 LT-Haze
 Manual K-Tic
 5-Turn
 LT-Haze
 LT-Haze
 LT-Haze
 LT-Haze
 LT-Haze
 Manual K-Tic
 Pilot Display - Fsm1 - SW off and on

Total Prof Lines: 12 **Lines Flown:** 12 **Lines Remain:** 0 **Online Time:** 1.1 **Job Time:** 1.1 **Notes:**

Scanned with CamScanner

20190311B (SN8227,
N262AS)

Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Project: **KY L10AA** Flight Mgmt File: **20190311-121552** Date: **3/11/19**
(email log only to flight_log_distribution_list@quantumspatial.com)

Aircraft: **626AS** Begin Hobbs: **73872** End Hobbs: **73913** Total: **4.1** Pilot: **STEVENSON** Co-Pilot: **Substeno**
 Dep Apt: **KLEX** Dep Time (Local): **1228** AT Apt: **KLEX** Arr Time (Local): **1228** (TA) **1628** Tech: **Substeno**
 CORS: **Y (N)** Sta 1: **Sta 2:** Flyovers: **Y (N)** IF Y, times: **Sta1)** **Sta2)** Tot Time Aloft:
 GPS Unit: **Y (N)** Sta 1: **Sta 2:** Flyovers: **Y (N)** IF Y, times: **Sta1)** **Sta2)**

Gd Temp beg: **+4** °C End: **8227** °C OAT beg: **°C** End: **°C** Altimeter beg: **30.33** end: **30.35**
 Type: **ALS80** Serial #: **8227** Alt: **180** Avg Pt Spacing: **PPPM**
 FOV: **Sum** Pres: **Rate** Pulse: **Rate**

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	100ft/sec	GPS Altitude	Crab	Turb (0.1-3)	IF Y, times: Sta1)	IF Y, times: Sta2)	Notes
2012	S	1250	1300	131	1.2/21	7862	7	0	5-Turn	LT Haze	
2013	N	1304	1314	138	1.0/23	7888	4	0	LT Haze		
2014	S	1318	1324	139	1.2/21	7871	4	0	LT Haze		
2015	N	1336	1347	138	1.2/20	7872	5	0	Manual K-Tic		
2016	E	1404	1425	141	1.0/24	7899	5	0	LT Haze		
2017	S	1432	1444	145	1.0/21	7914	4	0	5-Turn	LT Haze	
2018	N	1448	1459	140	1.4/18	797	2	0	LT Haze		
2019	S	1502	1514	141	1.3/19	7911	4	0	LT Haze		
2020	N	1516	1527	138	1.2/19	7974	6	1	LT Haze		
2021	S	1531	1542	138	1.2/18	7952	8	1	LT Haze		
2022	N	1546	1556	144	1.2/18	7949	5	0	LT Haze		
2023	S	1559	1610	142	1.4/17	7972	4	0	LT Haze		
2024	W	1613	1616	148	1.5/16	7910	3	0	Manual K-Tic		

FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.

20190311-142635

Online Time: **1.1** Job Time: **1.1** Notes:

Scanned with CamScanner

20190311C (SN8227,
N262AS)

Quantum Spatial
Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc
(email Log daily to flight_log_distribution_list@quantumspatial.com)

Date: 12/11/19
 Linc: A. P. C. D. E. PLS of 2

Project: Ky Lidar Prof #: 3151 Flight Mgmt File: 20190811-172428 Tech: J. Robinson

Aircraft: 222AS Begin Hobbs: 7393.1 Total: 1.8 Pilot: Co-Pilot: J. Robinson

Dep Apt: KLEX Dep Time (Local): 17:32 Arr Apt: KLEX Arr Time (Local): 17:47 Tot Time Aloft: 15

COMS: Y 1(N) Sta 1: 1(N) Flyovers: Y 1(N) If Y, times: Sta1) 0 Sta2) 0

GPS Unit: Y 1(N) Sta 1: 1(N) Flyovers: Y 1(N) If Y, times: Sta1) 0 Sta2) 0

Gd Temp bag: °C End: °C OAT bag: °C End: °C Altimeter begin: 20.35 end: 20.32

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	POOH-Hrs	GPS Altitude	Crab	Turb (0-3)	FLIGHT LINE NOTES - visibility, clouds, smoke, percol, etc.			
									Alt AGL	Alt MSL	Pressure In Air	
2008	N	1755	1804	146	1.3/22	7972	-9	0	STUN - LT Haz			
2007	S	1808	1816	137	1.3/23	7969	+8	0	LT Haz			
2006	N	1819	1825	138	1.3/21	7963	-8	0	LT Haz			
2005	S	1828	1836	131	1.2/21	7947	+8	0	LT Haz			
2004	N	1838	1842	145	1.2/22	7947	-8	0	LT Haz			
2003	S	1846	1849	133	1.1/20	7950	+8	0	LT Haz			
2002	N	1852	1855	142	1.5/19	7953	-8	0	LT Haz			
2001	S	1858	1900	133	1.6/19	7964	+8	0	LT Haz			
X-Tie	E	1904	1906	139	1.7/19	7964	+2	0	ADVISORY X-Tie S-Turn			

FLIGHT LINE NOTES - visibility, clouds, smoke, percol, etc.

Total Proj Lines: 8 Lines Flown: 8 Lines Remain: 0 Online Time: 1.0 Mob Time: 0.8 Notes:

Scanned with CamScanner

20190312A (SN8146, N6GR)

Date: 03/12/2019

Lift: (A) B C D E Pg. 1 of 1

Tech: SWINFORD

Project: KY_LIDAR_2014

Block 3 Proj #: 33656

Flight Mgmt File:

Pilot: NEILSON

Co-Pilot:

Aircraft: N6GR

Begin Hobbs: 4085.1

End Hobbs: 4089.7

Total: 4.6

Tot Time Aloft: 4.6

Dep Apt: LEX.

Dep Time (Lcl): 8:45Z

Arr Apt: LEX

Arr Time (Local): 1:40 Z

Tot Time Aloft: 4.6

CORS: Y / N

Sta 1: PPP

Sta 2:

Flyovers: Y / N

IF Y, times: Sta1)

Sta2)

GPS Unit: Y / N

Sta 1:

Sta 2:

Flyovers: Y / N

IF Y, times: Sta1)

Sta2)

Gd Temp beg:		°C		End:		°C		OAT beg:		°C		End:		°C		Altimeter begin:		end:		
Type	Serial #	Alt AGL	Alt AMSL	Pulse Rate	Alt	Pulse Rate	In Air	Avg Terr Ht	Max Gdepd	Power	Avg Pt Spacing	PPSM	Reg CB	End CB	Tot CB	Storage Name				
LIDAR	ALS80	8146	0	357	3	357	100%						712	608	104	5				
	FOV	40	MPIA	Y / N	3															

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	FOF/Rate	GPS Altitude	Crab	Turb	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
3040	011	13:08	13:19	135	1.2/22	7900			Fig 8 /
3001	285	13:22	13:24	135	1.3/20	7900			SMOKE FROM POWER PLANT BY RIVER
3002	105	13:26	13:28	145	1.3/21	7900			"
3003	285	13:31	13:33	130	1.3/21	7900			"
3004	105	13:35	13:38	155	1.3/21	7900			"
3005	285	13:42	13:44	130	1.2/21	7900			"
3006	105	13:46	13:54	145	1.2/24	7900			
3007	285	13:59	14:11	135	1.1/22	7900			
3008	105	14:13	14:24	145	1.2/20	7900			
3009	285	14:27	14:41	135	1.1/20	7900			
3010	105	14:42	14:55	148	1.4/19	7800			
3011	285	14:58	15:12	140	1.0/20	7800			
3012	105	15:15	15:30	145	1.2/20	7900			
3013	285	15:33	15:49	140	1.3/19	7900			
3014	105	15:51	16:10	150	1.4/18	7900			
3015	285	16:12	16:31	150	1.5/17	7900			
3016	105	16:34	16:50	150	1.4/17	7900			
3017	285	16:53	17:13	145	1.1/21	7900			Fig 8 / RTB FOR FUEL

Total Proj Lines: 40	Lines Flow: 18	Lines Remain:	Online Time: 4:0	Mobile Time: .5	Notes:
-----------------------------	-----------------------	----------------------	-------------------------	------------------------	---------------

20190312A (SN8227, N262AS)

Project: KY Lidar **Date:** 3/12/19 **Page:** 1 of 1

Altcraft: 626AS **Begin Hobbs:** 7393.1 **End Hobbs:** 7396.7 **Total:** 3.6 **Pilot:** Stevenson **Co-Pilot:** *[Signature]*

Dep Apt: KLEX **Dep Time (local):** 3/2/24 17:32 **Arr Apt:** KFFT **Arr Time (local):** 12/12/24 16:12 **Tot Time Aloft:** 3.5

COBS: Y (N) **Sta 1:** **Sta 2:** **Flyovers:** Y (N) **IF Y, times: Sta1)** **Sta2)**

GPS Unit: Y (N) **Sta 1:** **Sta 2:** **Flyovers:** Y (N) **IF Y, times: Sta1)** **Sta2)**

Gd Temp beg: °C **End:** °C **OAT beg:** °C **End:** °C **Altimeter beg:** 30.39 **end:** 30.40

Line #	Hdg	Start (UTC)	End (UTC)	Gd spd	Foot/sec	GPS Altitude			Crab	Yrb (0.-)	Verb (0.-)	FLIGHT LINE NOTES - visibility, clouds, emols, partial, etc.
						MpA	Y	N				
3020	094	1247	1253	128	1.1/24	7691	-5	0	0	0	0	Storm Mainly X-Tra - Haze
3021	274	1323	1343	145	1.0/26	7904	-6	0	0	0	0	Haze - powerplant steam 17 mi IS in FEE
3022	099	1347	1405	140	1.2/23	7923	+8	0	0	0	0	Haze
3023	274	1408	1428	134	1.1/25	7951	-5	0	0	0	0	Haze
3024	099	1431	1450	143	1.1/23	7969	+8	0	0	0	0	Haze
3025	274	1454	1513	132	1.3/20	7966	-6	0	0	0	0	Haze
2026	099	1516	1535	142	1.1/21	7979	-7	0	0	0	0	Haze
2027	274	1538	1557	133	1.2/20	7982	+5	0	0	0	0	Haze
												S Turn

Total Prof Lines: 8 **Lines Flown:** 8 **Lines Remain:** 0 **Online Time:** 3.0 **Job Time:** 0.6 **Notes:**

Scanned with CamScanner

20190312B (SN8146,
N6GR)

Date: 03/12/2019 Pg. 1 of 1

Lift: A B C D E

Project: KY LIDAR-2019 Flight Mgmt File: SWINIFORD

Aircraft: N66R Begin Hobbs: 409.7 End Hobbs: 4092.2 Total: 2.5 Pilot: NEILSON Co-Pilot: NEILSON

Dep Apt: LEX Dep Time (Lcl): 2:45 (Z): 18:45 Arr Apt: LEX Arr Time (Local): 5:20 (Z): 21:20 Tot Time Aloft: 2.5

CORR: Y / N Sta 1: PPP Flyovers: Y / N IF Y, times: Sta 1) Sta 2)

GPS Units: Y / N Sta 1: Flyovers: Y / N IF Y, times: Sta 1) Sta 2)

Gd Temp beg:		°c		End:		°c		OAT beg:		°c		End:		°c		Altimeter begin:		end:	
Type	Serial #	Alt AGL	Alt AMSL	Avg Temp Ht	Max Gndpd	Avg Pt Spacing	Power PPSM												
LIDAR	ALS80	48	MPIA	3	357	100%													
	FOV	40																	

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	POD/Sat	GPS Altitude	Crab	Turb (0-4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
X-Tie	011	19:00	19:03	140	1.5/19	7900			FIG 8 / UNPLANNED CROSS FLIGHT
3018	105	19:07	19:25	150	1.6/20	7900			
3019	285	19:28	19:45	140	1.2/23	7900			
3020	105	19:48	20:08	140	1.1/24	7900			MOVED TO BLOCK 4
4002	092	20:11	20:23	140	1.2/23	7900			
4001	273	20:26	20:28	140	1.1/24	7900			
X-Tie	178	20:30	20:31	155	1.1/25	7900			UNPLANNED CROSS FLIGHT
4003	273	20:34	20:47	145	1.1/24	7900			FIG 8 / RTB

Total Proj Lines:	Lines Flown:	Lines Remain:	Online Time: 1.75	Mob Time: .75	Notes:
-------------------	--------------	---------------	-------------------	---------------	--------

20190312B (SN8227,
N262AS)

Q Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 3/12/19
 USE: (A) B C D E
 Page 1 of 3

Project: Ky Lidar
 Flight Mgmt File: 20190312-121739
 Tech: Steve Johnson

Aircraft: 626AS
 Begin Hobbs: 7393.1 End Hobbs: 7396.7 Total: 3.6
 Pilot: Stevenson Co-Pilot:
 Dep Apt: KLEX
 Arr Time (local): 1212 (Z) 1612
 Arr Apt: KFFT
 Arr Time (local): 1212 (Z) 1612
 Tot Time Aloft: 3.5

CORS: Y (N) Sta 1: Flyovers: Y (N) IF Y, times: Sta1) Sta2)
 GPS Unit: Y (N) Sta 1: Flyovers: Y (N) IF Y, times: Sta1) Sta2)
 Gd Temp beg: °C End: °C OAT beg: °C End: °C Altimeter begin: 30.39 end: 30.40

Line #	Hgt	Start (UTC)	End (UTC)	Gd Spd	Foot/sec	GPS Altitude			Crab	Yrb (0-3)	Verb	FLIGHT LINE NOTES - visibility, clouds, emols, partial, etc.
						MpA	Y	N				
3020	284	1247	1253	128	11/24	7691	-5	0	0	0	0	Storm Mainly X-Tra - Haze
3021	279	1323	1343	145	10/26	7904	-6	0	0	0	0	Haze - power plant steam 17 mi IS in FEE
3022	299	1347	1405	140	12/23	7923	+8	0	0	0	0	Haze
3023	279	1408	1428	134	11/25	7951	-5	0	0	0	0	Haze
3024	299	1431	1450	143	11/23	7969	+8	0	0	0	0	Haze
3025	279	1454	1513	132	11/21	7966	-6	0	0	0	0	Haze
2026	299	1516	1535	142	13/20	7966	+7	0	0	0	0	Haze
2027	279	1538	1557	133	11/21	7979	-7	0	0	0	0	Haze
					12/20	7982	+5	0	0	0	0	Haze
												S Turn

Total Prof Lines: 8 Lines Flown: 8 Lines Remain: Online Time: 3.0 Mob Time: 0.6 Notes:

Scanned with CamScanner

20190312C (SN8227, N262AS)

Q Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 3/12/19
 USE: (A) B C D E
 Pg. 1 of 3

Project: Ky LIDAR
 Flight Mgmt File: 20190312-121739
 Tech: Steve S. [unclear]

Aircraft: 626AS
 Begin Hobbs: 7393.1
 End Hobbs: 7396.7
 Total: 3.6
 Pilot: STEVENSON
 Co-Pilot: [unclear]

Dep Apts: KLEX
 Dep Time (local): 8:37
 Arr Time (local): 12:12
 Arr Apts: KFFT
 Arr Time (local): 12:12
 Tot Time Aloft: 3.5

COAS: Y (N)
 GPS Unit: Y (N)
 OAT beg: °C
 OAT end: °C
 Altimeter begin: 30.39
 Altimeter end: 30.40

Flyovers: Y (N) IF Y, times: Sta1)
 Flyovers: Y (N) IF Y, times: Sta1)

Line #	Hgt	Start (UTC)	End (UTC)	Gd spd	Mpd/Sec	GPS Altitude	Crab	Yrb (0-3)	FLIGHT LINE NOTES - visibility, clouds, emols, partial, etc.		
									Avg Pt Spacing (FT)	Power	Power
3020	284	1247	1253	128	1.1/24	7691	-5	0	Storn	Manuel X-Tea	- Haze
3021	274	1323	1343	145	1.0/26	7904	-6	0	Haze	power plant steam	17 mi. S in FEE
3022	299	1347	1405	140	1.2/23	7823	+8	0	Haze		
3023	274	1408	1428	134	1.1/25	7951	-5	0	Haze	power plant steam	6-4 mi. S, FEE
3024	299	1431	1450	143	1.1/21	7966	-6	0	Haze		
3025	274	1454	1513	132	1.3/20	7966	+7	0	Haze		
2026	299	1516	1535	142	1.1/21	7979	-7	0	Haze		
2027	274	1538	1557	133	1.2/20	7982	+5	0	Haze		
										S Turn	

Total Proj Lines: 8
 Lines Flown: 8
 Lines Remain: 0
 Online Time: 3.0
 Mob Time: 0.6
 Notes:

Scanned with CamScanner

20190316A (SN043- AI, C-FFRY)

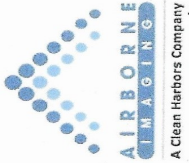
LIDAR Flight Log

Julian Day **075** Flight **A**

Date	2019/03/16	Aircraft	C-FFRY
Project	3174_QSL_BigSandyKY_QL2	Pilot	M. Whelton
Location	KSJS - Big Sandy Regional	Operator	A. Blair
Mission Objective	QL2, 2,650mi; Preliminary 'Field Calibrated' LAS		

System	Regl Q1560i w/GSM
Unit	43
IMU	Applanix AP50
GPS Rx	Trimble
Scanner 1 Drive	
Scanner 2 Drive	

Additional Notes
 Temp - 0°C
 Humidity - 71.90
 Pressure - 1032.44 hPa
 Temperature - 6°C
 Time to 50Hr Maintenance:



A Clean Harbors Company

Aircraft Block Time			
Engine On	1209	Takeoff	1227
Engine Off	1508	Landing	1459
Total	3.0 hrs	Total	2.6 hrs

Mission Plan			
AGL Height	2000m	Pulse Rate	700KHz/350Ch
Target Speed	160kts	Scan Rate	89 ips
Laser Current	100%	FOV	60 degs

Static Alignment		GPS Time	
Pre Mission	1215	Start	End
Post Mission	1502	1502	1507

Flight Line	LIDAR File Name	Flight Direction	GPS Time		Line Aborted		Mission ID	Comments
			Start	End	Time	nmi to End		
Teal Strip	-	G	1234	1235			190316	
00	-	G	1236	1240			123415	
80	431907501	186°	1244	1256			124444	
81	02	006°	1301	1315			130144	
82	03	186°	1319	1331			131937	
83	04	006°	1336	1349			133642	
84	05	186°	1355	1409			135558	
85	06	006°	1414	1428			141423	Clouds in south - move to north
00	-	G	1440	1447			141423	Clouds in south - abort due to clouds

20190316A (SN8227, N262AS)

Quantum Spatial Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc
(Email Log daily to flight_log_distribution_list@quantumspatial.com)

Project: Ky LIDAR Flight Mgmt File: 20190316- Date: 3/6/19
UTC: (A) B C D E

Aircraft: 262AS Begin Hobbs: 7402.4 End Hobbs: 7404.1 Total: 1.7 Pilot: Stinson Co-Pilot: SMA
 Dep Apt: KLEX Dep Time (UTC): 858 (Z): 1251 Arr Apt: 1087 (Z): 1457 Tot Time Aloft: 1:05

CORS: Y (N) Sea 1: 1(N) Sea 2: 1(N) Flyovers: Y (N) If Y, times: Sea 1) 0 Sea 2) 0
 GPS Unit: Y (N) Sea 1: 1(N) Sea 2: 1(N) Flyovers: Y (N) If Y, times: Sea 1) 0 Sea 2) 0

Gd Temp beg: °C End: °C OAT beg: °C End: °C Altimeter begin: 2031 end: 160
 Type: Q1580 Serial #: 8227 Alt: 160 Avg Pt Spacing: PPPH
 FOV: 173 Beam Proj: 173 Mps/A: Y/N Pulse Rate: 160 Power: PPPH

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	POOH/Sea	GPS Altitude	Crab	Turb (0,5,1)	Notes
4019	085	1324	1341	141	13/25	7938	-10	0	S-TORN - Haze
4020	265	1345	1405	116	1.1/23	7918	17	0	Haze -
X-114	173	1408	1410	162	1.7/22	7996	415	0	Haze - Small clouds S-TORN Clouded out

FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.

Total Prog Lines: 44 Lines Flown: _____ Lines Remain: _____
 Online Time: 0:6 Mob Time: 1:1 NetSec: _____

Scanned with CamScanner

20190317A (SN043- AI, C-FFRY)

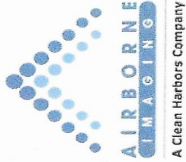
LIDAR Flight Log

Julian Day 076	Flight A
----------------	----------

Date 2019/03/17	Aircraft C-FRRY
Project 3174_QS_BigSandyKY_QL2	Pilot Matthew Wilson
Location KSJS - Big Sandy Regional	Operator A. Blair
Mission Objective	
QL2, 2,650mi, Preliminary 'Field Calibrated' LAS	

System Riegl Q1560i w/GSM
Unit 43
IMU Applix AP50
GPS Rx Trimble
Scanner 1 Drive
Scanner 2 Drive

Additional Notes
Temp - 0
Humidity - 56%
Pressure - 1032 hPa
Temp @ Alt - 6°C
Time to 50HR Maintenance: 35



Aircraft Block Time		
Engine On 1210	Takeoff 1228	
Engine Off 17:42	Landing 1732	
Total 5.5 hrs	Total 5.1 hrs	

Mission Plan		
AGL Height 2000m	Pulse Rate 700KHz/350/Ch	
Target Speed 160kts	Scan Rate 89 lbs	
Laser Current 100%	FOV 60 degs	

Static Alignment	GPS Time	
	Start	End
Pre Mission	1216	1221
Post Mission	1735	1740

Flight Line	LIDAR File Name	Flight Direction	GPS Time		Line Aborted	Mission ID	Comments
			Start	End			
Test Strip	-	G	1234	1235		190317	
00	-	G	1235	1240		123429	
85	431907601	186°	1244	1247		124424	Fill Hole
86	02	186°	1256	1309		125616	
87	03	006°	1314	1328		131412	
88	04	186°	1333	1346		133300	
89	05	006°	1351	1405		135143	
90	06	186°	1409	1421		140904	
91	07	006°	1425	1438		142551	
92	08	186°	1443	1453		144324	
93	09	006°	1458	1507		145813	
94	10	186°	1511	1520		151135	
95	11	006°	1524	1532		152421	
96	12	186°	1537	1545		153733	
97	13	006°	1549	1557		154940	

20190317A (SN546, N73TM)


Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 3/17/2019

(email log daily to flight_log_distribution_list@quantumspatial.com)

Ultrasonic Page 1 of 1

Project:	KY LIDAR		Proj #:	33656	Flight Mgmt File:	20190317A_33656-KY-VQ1560i									
Aircraft:	N73TM	Begin Hobbs:	7658.9	End Hobbs:	76615	Total:	2.6	Pilot:	GSIMONDS	Co-Pilot:		Tech:	SKROHN		
Dep Apt:	KLEX	Dep Time (Lcl):	9:28 (Z): 13:28	Arr Apt:	KLEX	Arr Time (Local):	11:52 (Z): 15:52	Tot Time Aloft:	2.6						
CORS:	Y 1(N)	Sta 1:		Sta 2:		Flyovers:	Y 1(N)	If Y, times: Sta1		Sta2)					
GPS Unit:	Y 1(N)	Sta 1:		Sta 2:		Flyovers:	Y 1(N)	If Y, times: Sta1		Sta2)					
Gd Temp beg:	°c	End:	°c	OAT beg:	°c	End:	°c	Altimeter begin:	end:		Mag GB	Storage Name/No			
LIDAR	Type	1560i	Serial #	3546	Alt AGL		Alt AMSL		Avg Terr Ht		Mag Gdepd	Avg Pt Spacing	2A		
	FOV	58.5	Scan Freq		MPIA	Y 1(N)	Pulse In Air		Pulse Rate	350 kHz	Power	100%		PPSM	2

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDOP # stars	GPS Altitude	Crab	Yurb (0-4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.		
		13:56	13:58						S-turns		
125	272								laser went on momentarily flying past end of line		
125	272	140115		120					Smooth		
124	92	140844		140	.9	23					
123	272	142909		137	1.1	20					
122	92	145140		140	.9	22					
121	272	151333	15:30	137	1.0	21			Broke off line due to cloud deck our altitude possible rain/sleet		
Shipper Drive: : Toshiba-3509 B/u Drive: Seagate 5800											
Total Proj Lines:		Lines Flown:	4	Lines Remain:	Online Time: 1.5					Mob Time: 1.1	Notes:

Scanned by CamScanner

20190317A (SN8146, N6GR)

Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

Date: 03/17/2019
Lift: A B C D E Pg. 1 of 1

(email log daily to flight_log_distribution_list@quantumspatial.com)

Project: KY-LIDAR-2019 Flight Mgmt File: 33656
 Aircraft: N6GR Begin Hobbs: 4097.0 End Hobbs: 4099.9 Total: 2.9 Pilot: NEILSON Co-Pilot: SWINFORD
 Dep Apt: LEX Dep Time (Lcl): 9:00 (Z): 13:00 Arr Apt: LEX Arr Time (Local): 12:10 (Z): 16:10 Tot Time Aloft: 2.9
 CORS: Y/N Sta 1: PPP Sta 2: Flyovers: Y/N IF Y, times: Sta 1) Sta 2)
 GPS Unit: Y/N Sta 1: Sta 2: Flyovers: Y/N IF Y, times: Sta 1) Sta 2)
 Gd Temp beg: °C End: °C OAT beg: °C End: °C Altimeter begin: end:
 Type ALS80 Serial # 8146 Avg Trr Ht Max Gdepd Power Avg Pt Spacing
 FOV 40° Scan Freq 48 MpiA Y/N Pulses In Air 100% PPSM

Bag GB	552
End GB	500
Tot GB	52

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	POOP/Sats	GPS Altitude	Crab	Turb (0-4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
4004	092	13:44	14:00	150	12/18	8000	-10		Fig 8 /
4005	272	14:03	14:20	131	11/18	8000	+3		
4006	092	14:22	14:38	146	11/17	7900	-10		THICK HAZE FEE. 30 MI, TO WEST END (BOTTOM OF CLOUD LAYER)
4007	272	14:40	14:58	135	12/18	7900	+3		" " FEE. 20 MI. TO WEST END "
4008	092	15:00	15:14	149	13/16	7900	-9		FSE 15 MI. TO SOUTHWEST END HEAVY HAZE (BOTTOM OF CLOUD LAYER)
4047	220	15:19	15:35	150	14/16	7900	-5		RTB

Total Proj Lines: Lines Flown: Lines Remain: Online Time: 2.0 Mob Time: 1.0 Notes:

20190319A (SN043- AI, C-FFRY)

LIDAR Flight Log


AIRBORNE
IMAGING
A Clean Harbors Company

Additional Notes
 Temp - 74°
 Humidity - 74%
 Pressure - 10.91 HPA
 Temp @ D/L - 5
 ~ 71% complete
 Time to 50HR Maintenance

Julian Day 078 Flight A

Date 2019/03/19	Aircraft C-FFRY
Project 3174_QSI_BigSandyKY_QL2	Pilot <i>M. K. S. O. J.</i>
Location KSUS - Big Sandy Regional	Operator A. Blair
Mission Objective	
QL2, 2,650mi; Preliminary 'Field Calibrated' LAS	

System Regi Q15601 w/GSM
Unit 43
IMU Applinix AP50
GPS Rx Trimble
Scanner 1 Drive
Scanner 2 Drive

Aircraft Block Time	
Engine On 1203	Takeoff 1220
Engine Off 1610	Landing 1559
Total 4.1 hrs	Total 3.7 hrs

Mission Plan	
AGL Height 2000m	Pulse Rate 700KHz/350/Ch
Target Speed 160kts	Scan Rate 89 lps
Laser Current 100%	FOV 60 degs

Static Alignment		GPS Time	
Pre Mission	Post Mission	Start	End
1207	1603	1212	1608

Flight Line	LIDAR File Name	Flight Direction	GPS Time		Line Aborted		Mission ID	Comments
			Start	End	Time	nmi to End		
Test Strip	-	G	1227	1228			190319	
00	-	G	1228	1234			122718	
104	431907801	186°	1242	1245			124202	
105	02	006°	1250	1253			125001	
106	03	186°	1257	1300			125752	
107	04	006°	1305	1307			130510	
108	05	186°	1311	1313			131135	
109	06	006°	1318	1319			131808	
110	07	186°	1323	1325			132341	
111	08	006°	1329	1330			132932	
112	09	186°	1334	1335			133442	
XTIE 115	10	277°	1340	1344			134052	
35	11	006°	1353	1356			135305	
34	12	186°	1401	1404			140102	
33	13	006°	1409	1413			140915	

20190319A (SN546, N73TM)

Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc Date: 3/19/2019
(email log daily to flight_log_distribution_list@quantumspatial.com) LIDAR A B C D E Pg. 2 of 3

Project: KY-LIDAR		Proj #: 33656		Flight Mgmt File: 20190319A_33656-KY-VG1560i						
Aircraft: N73TM		Begin Hobbs: 7661.5	End Hobbs: 7664.6	Total: 3.1	Pilot: GSIMANDS					
Dep Apt: KLEX		Dep Time (Lcl): 9:29 (Z: 13:29)	Arr Apt: KHTS	Arr Time (Local): 12:38 (Z: 16:38)	Tot Time Aloft: 3.1					
CORS: Y (N)		Sta 1:	Sta 2:	Flyovers: Y (N)	If Y, times: Sta1) Sta2)					
GPS Unit: Y (N)		Sta 1:	Sta 2:	Flyovers: Y (N)	If Y, times: Sta1) Sta2)					
Gd Temp beg: °C		End: °C	OAT beg: °C	End: °C	Altimeter begin: end:					
LIDAR	Type	Serial #	Alt AGL	Alt AMSL	Avg Terr Ht	Max Gdspd	Avg Pt Spacing	beg GB	End GB	Storage Name#
	FOV	Scan Freq	MplA (Y/N)	Pulse In Air	Pulse Rate	Power	PPSM			
	1560i	3546								
	58.5				350khz	100%	2			

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDOP/sens	GPS Altitude	Crsb	Turb (0-4)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc
		13:49	13:51						Sturn
120	92	135249		140	9.23				Slight Haze
121	272	141433		138	9.23				Reflight of Partial plus remaining
118	92	143850		134	9.22				
119	272	150325		142	10.22				
116	92	152919		142	12.21				Cloud 6.5 to forecasted End of Line PARTIAL
117	272	155009							Laser Fired while pulling up line - IGNORE
117	272	(Video dip (mount not working) REFLY)							Clouds last 12mi to Eastern End of Line PARTIAL
117	272								Clouds last unable to finish 117 due to cu.
									Shipping Drive: WD 2444 Blk Drive: Seagate 5800

Total Proj Lines	Lines Flown:	Lines Remain:	Online Time: 1.9	Job Time: 1.2	Notes: Pilot Display went out multiple times
------------------	--------------	---------------	-------------------------	----------------------	---

Scanned by CamScanner

20190319A (SN8227, N262AS)

Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc		Date: 03/19/2019							
(email log daily to flight_log_distribution_list@quantumspatial.com)		Pg 1 of 1							
Project: KY-LIDAR-2019	Proj #: 33656	Flight Mgmt File: 20190319_132229	Co-Pilot: NEILSON						
Aircraft: N262AS	Begin Hobbs: 7404.1	Total: 40	Tech: SWINFORD						
Dep Apt: LEX	Dep Time (Lcl): 9:15 Z: 13:15	Arr Apt: LEX	Arr Time (Local): 1:15 Z: 17:15						
CORS: 01N Sta 1: PPP		Tot Time Aloft: 4.0							
GPS Unit: Y1N Sta 1:		Sta 2:							
Gd Temp beg: °C End: °C OAT beg: °C End: °C		Altimeter begin: end:							
Type ALS80 Serial # 8227		Max Gdspd 140 Avg Pt Spacing							
FOV 40 Scan Freq 48 Alt AGL MPIA 01N Pulse Rate 357 Power 100%		PPSM							
Beg CB 549 Storage Name		End CB 457							
Tot CB 92									
FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc									
Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	PDPF (s)	GPS Altitude	Crab	Turb (0..-)	Notes
4009	085	13:38	15:54	145	1.1/22	7900	-5		RESTART SENSOR - PILOT VISA, NOT WORKING / FIG 8 / FEE 5 MI. THIN CLOUDS
4010	265	13:56	14:13	145	1.1/20	7900	+15		FEE 0-5 MILES THIN CLOUDS - 91% R1
4011	085	14:16	14:32	146	1.1/20	7900	-5		FEE 15 MI. - 0660 + PD60 BOTH FLICKERED FOR A SECOND
4012	265	14:35	14:51	145	1.1/21	7900	+15		FEE 25 MI. " " " "
4013	085	14:54	15:10	144	1.2/21	7900	-5		FEE 0-6 MI. THIN CLOUDS BELOW / R1 98% @ LOWEST
4014	265	15:13	15:29	135	1.3/20	7900	+15		FEE 0-6 MI. " " " "
4015	085	15:31	15:47	140	1.4/20	7900	-5		RELOAD FLIGHT PLAN /
4016	265	15:50	16:07	148	1.4/19	7900	+15		FEE 20 + 25 MI. 0C6 + PD60 FLICKER / FEE 33-35 SMALL CLOUD 100% R1
4017	085	16:10	16:26	140	1.2/21	7900	-5		FEE 35-33, 31-30, 12-11, 4-2 SMALL SCATTERED CLOUDS - GOOD RETURNS
4018	265	16:28	16:45	139	1.0/24	7900	+15		FEE 3-5, 13-15, 16-17, (31-33 REFLY), 34-36 REFLY
X-FLY	360	16:48	16:50	146	1.2/23	7900	0		UNPLANNED CROSS LINE TO COVER LINES FLOWN / RTB
Total Proj Lines: _____ Lines Flown: _____ Lines Remain: _____ Online Time: 3.25 Mob Time: 1.75 Notes: _____									

20190320A (SN043- AI, C-FFRY)

LIDAR Flight Log

Julian Day 79	Flight a
---------------	----------

Date	March 20, 2019	Aircraft	C-FERRY
Project	3174 QSI Big Sandy KY	Pilot	Jay Mathieson
Location	KHKS	Operator	R. Canelon
Mission Objective	<i>0.12, 2,650 mi², Preliminary 'Field Collected' LAS</i>		

System	Riegl Q1560i
Unit	43
IMU	Applanix AP50
GPS Rx	Trimble
Scanner 1 Drive	
Scanner 2 Drive	

<p>A Clean Harbors Company</p>	Additional Notes
--------------------------------	------------------

Aircraft Block Time			
Engine On	1313	Ramp Out	Takeoff 13:33
Engine Off	18:49	Ramp In	Landing 18:40
Total	5.6 hrs	Total	5.1 hrs

Mission Plan			
AGL Height	2000m	Pulse Rate	700KHz
Target Speed	160kts	Scan Rate	129lps
Laser Current	100%	FOV	60 degs

Static Alignment	GPS Time	
	Start	End
	Pre Mission	13:21:00
Post Mission	18:42:30	18:47:30

Flight Line	LIDAR File Name	Flight Direction	GPS Time		Line Aborted	Mission ID	Comments
			Start	End			
Figure 8	—	/////	13:40:20	13:45:45		/////	
27	431907901	N	13:52:23	14:06:05		190320_135223	
26	02	S	14:11:11	14:25:45		141111	
25	03	N	14:29:52	14:44:20		142952	
24	04	S	14:48:28	15:03:15		144828	
23	05	N	15:07:44	15:22:15		150744	
22	06	S	15:26:37	15:41:30		152637	
21	07	N	15:45:34	16:00:10		154534	
20	08	S	16:04:36	16:19:30		160436	
19	09	N	16:23:23	16:37:50		162323	
18	10	S	16:42:02	16:56:50		164202	
17	11	N	17:01:29	17:15:50		170129	
16	12	S	17:19:55	17:34:55		171955	
15	13	N	17:39:06	17:53:30		173906	

20190320A (SN8146, N6GR)

Airborne LIDAR Data Collection Log Sheet :: Quantum Spatial, Inc

 Date: **03/20/2019**

LIDAR B C D E Pg. 1 of 1

Project: **KY-LIDAR_2019** Prof #: **33656** Flight Mgmt File: **20190320-115538**
 Aircraft: **N6GR** Begin Hobbs: **4099.9** End Hobbs: **4105.0** Total: **5.1** Pilot: **NEILSON** Co-Pilot: **SWINFORD**
 Dep Apt: **LEX.** Dep Time (Local): **8:10** Arr Apt: **LEX** Arr Time (Local): **1:25** Tot Time Aloft: **5.1**
 CORS: **01N** Sta 1: **PPP** Flyovers: **Y 10** IF Y, times: Sta 1) Sta 2)
 GPS Unit: **Y 10N** Sta 1: Flyovers: **Y 10** IF Y, times: Sta 1) Sta 2)
 Gd Temp beg: °C End: °C OAT beg: °C End: °C Altimeter begin: end:
 LIDAR Type: **ALS80** Serial #: **8146** Alt ANSL: **48** Max Gdspd: **140** Avg Ft Spacing: **1000** Storage Name: **500**
 FOV: **40°** Scan Freq: **48** MplA: **01N** Pulse Rate: **1000** End CB: **393**
 Tot CB: **107**

Line #	Hdg	Start UTC	End UTC	Gd Spd	Profile	GPS Altitude	Crab	Tech (0-1)	FLIGHT LINE NOTES - visibility, clouds, smoke, partial, etc.
4021	092	12:38	12:55	149	12/22	8000	-7		Fig 8 /
4022	272	12:59	13:18	139	13/22	8000	+2		
4024	092	13:21	13:41	155	11/21	8000	-7		SENSOR SKIPPED LINE 23 + DID NOT NOTICE TILL ON LINE WILL FLY LAST.
4025	273	13:43	14:01	142	11/21	8000	+2		
4026	092	14:03	14:23	136	10/20	8000	-7		
4023	272	14:27	14:43	148	11/20	8000	+2		
4018	092	14:46	15:02	146	12/18	8000	-7		REFLIGHT OF LINE
4017	273	15:09	15:26	135	14/17	8000	+2		REFLIGHT OF LINE
4008	092	15:29	15:39	148	16/15	8000	-7		REFLIGHT FEE 15-WEST END
4007	273	15:42	15:51	145	15/16	8000	+2		REFLIGHT FEE 25-WEST END
4016	092	15:54	15:58	152	13/17	8000	-6		REFLIGHT FEE 30-WEST END
4014	092	16:05	16:09	152	13/18	8000	-6		REFLIGHT FEE 0-10
4013	273	16:12	16:15	144	16/22	8000	+3		REFLIGHT FEE 0-10
4010	092	16:18	16:21	150	11/19	8000	-7		REFLIGHT FEE 0-10
4009	273	16:26	16:29	145	11/20	8000	+3		REFLIGHT FEE 0-10
4047	220	16:34	16:48	142	11/20	7900	0		REFLIGHT FSE 0-34 To cover today's flight + clouds on S end

Total Proj Lines: _____ Lines Flown: _____ Lines Remain: _____ Online Time: **4:25** Mob Time: **1:0** Notes:

20190320A (SN8227, N262AS)

Airborne LiDAR Data Collection Log Sheet :: Quantum Spatial, Inc
(email Log daily to flight_log_distribution_list@quantumspatial.com)

Date: 3/20/2019
 UIC: D B C D E
 Pg 1 of 1

Project: KY-LIDAR
 Flight Mgmt File: 33656
 Aircraft: N262AS Begin Hobbs: 7482 End Hobbs: 7412.0 Total: 3.8
 Pilot: Cam Stevenson Co-Pilot: Tech: Gary Lee
 Dep Apt: KLEX Arr Time (Local): 12:11 (Z): 16:11 Tot Time Aloft: 13:50
 CORS: Y (N) Sta 1: PPR Arr Apt: KLEX
 GPS Unit: Y (N) Sta 1: PPR
 Flyovers: Y / N if Y, times: Sta 1) Sta 2)
 Flyovers: Y / N if Y, times: Sta 1) Sta 2)

Type	ALS 80	Serial #	8227	Alt AGL	7075'	Alt APL	7915'	Avg Temp	900'	Max Gdspd	140kt	Spd	End	236	Storage Number	SN
FOV	40°	Scan Freq	98Hz	MPIA	Y / N	Pulses In Air	3	Pulse Rate	357 Hz	Power	100%	PPSH	End	328		8146-B

Line #	Hdg	Start (UTC)	End (UTC)	Gd Spd	POD/P-Stats	GPS Altitude	Crab	Turb (0-3)	Alt	Temp	Power	PPSH	Notes
		12:39	12:43										Opening Start
4027	E	12:46	13:06	140kt	1273	8000'	0°	0					clear
4028	W	13:09	13:30	130kt	1123	7442'	0°	0					"
4029	E	13:33	13:52	140	1270	7460'	0°	0					"
4030	W	13:55	14:11	132	1119	7950'	0°	0					hazy
4031	E	14:14	14:39	140	1319	7988'	0°	0					hazy ; Imu Data missing warning @ end of line
4032	W	14:42	15:03	140	1219	7955'	0°	0					X TIE
4033	E	15:05	15:25	173	1118	8000'	0°	0					Closeout S turn
4600	N	15:32	15:36			7900'							Block 4 completed

Total Proj Lines: 47
 Lines Flown: 7/47
 Lines Remain: 0
 Online Time: 3.0
 Mob Time: .8
 Notes:

Scanned by CamScanner

20190320B (SN8146, N6GR)

20190323A (SN043- AI, C-FFRY)

LIDAR Flight Log

Julian Day 82	Flight a
----------------------	-----------------

Date	March 23, 2019	Aircraft	C-FFRY
Project	3174 QSI Big Sandy KY	Pilot	Jay Mathieson
Location	KHKS	Operator	R. Canelon
Mission Objective	Q.L.2, 2,650 mi ² , Preliminary 'Field' Calibrated LRS		

System	Riegl Q1560i
Unit	43
IMU	Applanix AP50
GPS Rx	Trimble
Scanner 1 Drive	
Scanner 2 Drive	

Additional Notes	
-------------------------	--



Aircraft Block Time			
Engine On	1311	Ramp Out	Takeoff 1328
Engine Off	17:50	Ramp In	Landing 17:42
Total	hrs 4.7	Total	hrs 4.2

Mission Plan			
AGL Height	2000m	Pulse Rate	700KHz
Target Speed	160kts	Scan Rate	129ips
Laser Current	100%	FOV	60 degs

Static Alignment		GPS Time	
Pre Mission	13:16:10	Start	13:21:10
Post Mission	17:43:40	End	17:48:40

Flight Line	LIDAR File Name	Flight Direction	GPS Time		Line Aborted	Mission ID	Comments
			Start	End			
Figure 8	-	/////	13:39:30	13:44:45		/////	
713	431908201	W	13:48:29	14:01:30		190323_134829	Cross tie
1	02	N	14:06:29	14:12:15		140629	
2	03	S	14:16:21	14:22:50		141621	
3	04	N	14:27:52	14:36:00		142752	
4	05	S	14:40:12	14:48:20		144012	
5	06	N	14:53:14	15:03:10		150310	
6	07	S	15:09:52	15:20:40		150952	
7	08	N	15:25:16	15:37:40		152516	
8	09	S	15:42:07	15:53:10		154207	
9	10	N	15:58:14	16:10:50		155814	
10	11	S	16:15:29	16:26:45		161529	
11	12	N	16:31:40	16:45:00		163140	
12	13	S	16:49:21	17:01:40		164921	

Appendix B

Survey Report



July 19, 2019

Survey Report of
LiDAR Calibration & Quality Control Points

Commonwealth Office of Technology
Kentucky Division of Geographic Information

2019 QL2 LiDAR

Master Agreement: 1800000325

Presented to:





CONTENTS OF REPORT

PROJECT PROCEDURE SUMMARY.....	1
AREA OF INTEREST & POINT LOCATION MAPS.....	5
• CALIBRATION POINTS.....	6
• NVA – BARE EARTH POINTS.....	7
• NVA - URBAN AREA POINTS.....	8
• VVA - TALL WEED POINTS.....	9
• VVA - FOREST POINTS.....	10
• VVA - BRUSHLAND POINTS.....	11
FINAL POINT COORDINATES.....	12
• CALIBRATION POINTS.....	13
• NVA – BARE EARTH POINTS.....	17
• NVA - URBAN AREA POINTS.....	20
• VVA - TALL WEED POINTS.....	22
• VVA - FOREST POINTS.....	24
• VVA - BRUSHLAND POINTS.....	26
POINT LOCATION & ACCURACY DATA SHEETS.....	27
• CALIBRATION POINTS.....	28
• NVA – BARE EARTH POINTS.....	173
• NVA - URBAN AREA POINTS.....	259



- VVA - TALL WEED POINTS.....314
- VVA – FOREST POINTS.....348
- VVA – BRUSHLAND POINTS.....417

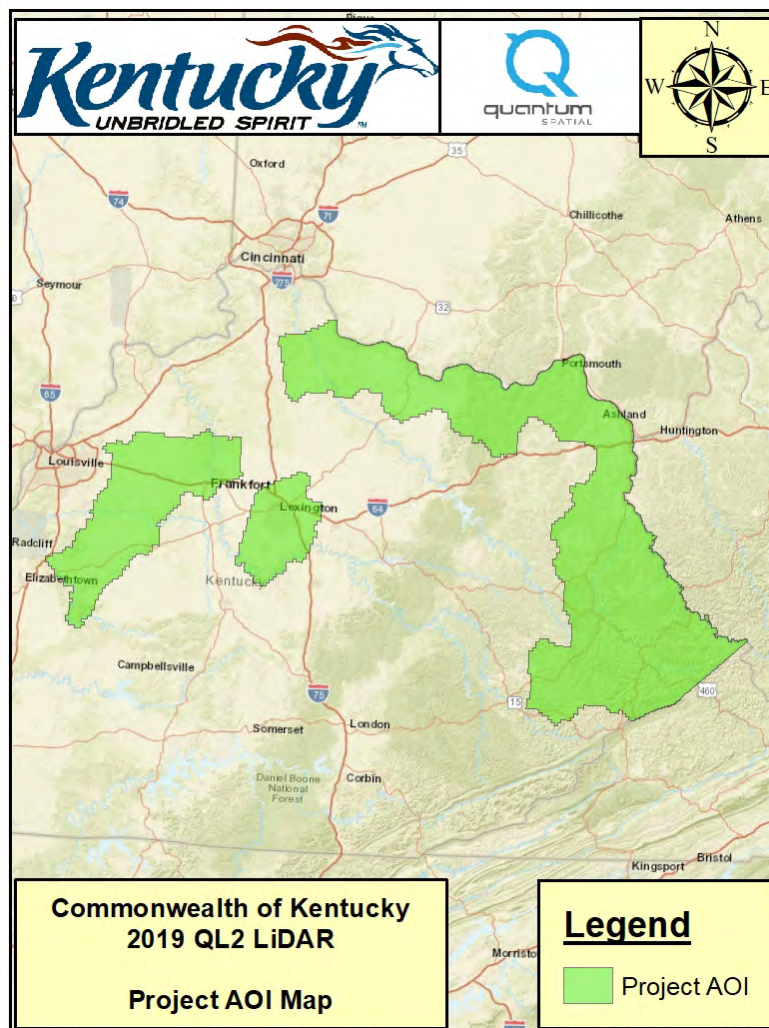


Introduction

Quantum Spatial, Inc. was contracted by the Commonwealth of Kentucky's Office of Technology, Division of Geographic Information under Master Agreement 1800000325 to survey LiDAR calibration and quality control points in support of the 2019 QL2 LiDAR project. The project area covered the counties of Boyd, Bracken, Greenup, Fayette, Floyd, Franklin, Jessamine, Johnson, Knott, Lawrence, Lewis, Martin, Mason, Nelson, Pendleton, Pike, Shelby, and Spencer. This is the report of the technical approach used and detail of each point surveyed.

Project Area

The Project Area, shown in the figure below, consist of approximately 6,336 square miles.





Technical Approach to Land Cover Validation Point Selection

Referencing ASPRS Positional Accuracy Standards for Digital Geospatial Data (Edition 1, Version 1.0, - November, 2014) table C.1 Recommended Number of Checkpoints based on Area, Quantum Spatial calculated the total number of checkpoints required for the entire north and south project areas. It was determined that 139 Non-Vegetated Vertical Assessment (NVA) and 102 Vegetated Vertical Assessment (VVA) points are required for this southern 5 county project area.

To ensure that checkpoints were distributed generally proportionate among the various vegetated land cover types, Quantum Spatial used existing USGS Land Cover data to divide both the NVA and VVA categories among the various types, calculating the approximate number of required points in each representative type proportionate to the total project area. The resulting point classes are detailed below:

<u>NVA Class</u>	<u># of Points</u>	<u>VVA Class</u>	<u># of Points</u>
Bare Earth	85	Forested	68
Urban Area	54	Tall Weeds/Crops	33
		Bushland	1

Quantum Spatial has adopted the philosophy that each vegetative class must be well distributed throughout the project area. While points in varying classes may be near to one another, points of a single vegetative class may not. Proposed point locations are selected with this distribution methodology in mind.

Survey Accuracy Requirements

Given that the survey accuracy of calibration and quality control check points should be 3 times more accurate than the required accuracy of the data set, Quantum Spatial requires that calibration and NVA points are better than 3 centimeters RMSE, both horizontally and vertically, and that VVA points be better than 5 centimeters RMSE, both horizontally and vertically. The surveyed accuracy of each point must be determined through redundant measurements and/or network adjustment using procedures and methodologies that reliably and consistently result in the aforementioned accuracies.

Due to variances in reference control accuracy and adjustment, Quantum Spatial requires that the survey methodology used be explained, so that it can be repeated if necessary.



Field Survey Methodology

Date Range: March 16, 2019 – April 30, 2019

Equipment Used:

Field crews used Trimble R8 dual frequency GNSS receivers as base stations and rovers. A Trimble M3 Total Station was used for conventional measurements.

GNSS Methodology:

A combination of fast static and RTK GPS surveying methods were used during this project. The RTK GPS method used the KYCORS RTN network for control and corrections. The fast static GPS method consisted of collecting a minimum 15 minutes of static data. The data was downloaded and baselines processed to KYCORS base stations. The network was adjusted holding the KYCORS as control.

Conventional Methodology:

A total station was used to determine the positions of VVA-Forest points under the tree canopy. After backsight and instrument station positions were established with GNSS observations in open areas, a total station was used to observe the foresighted Forest point.

All the GNSS and conventional information was downloaded, processed and analyzed using Trimble Business Center processing software. A network was formed and adjusted.

Overall Project Accuracy Statement

All point coordinates have been reported in the North American Datum of 1983 (NAD83 2011), Kentucky State Plane – Single Zone coordinates in US Survey Foot horizontally. Elevations are relative to the North American Vertical Datum of 1988 (NAVD 88) which were derived using the Geoid 12B model and are reported in US Survey Foot.

Calibration Points

Average Horizontal RMSE is 0.034 usft.

Average Elevation RMSE is 0.047 usft.



Average 3 dimensional RMSE is 0.058 usft.

NVA Points

Average Horizontal RMSE is 0.033 usft.

Average Elevation RMSE is 0.046 usft.

Average 3 dimensional RMSE is 0.057 usft.

VVA Points

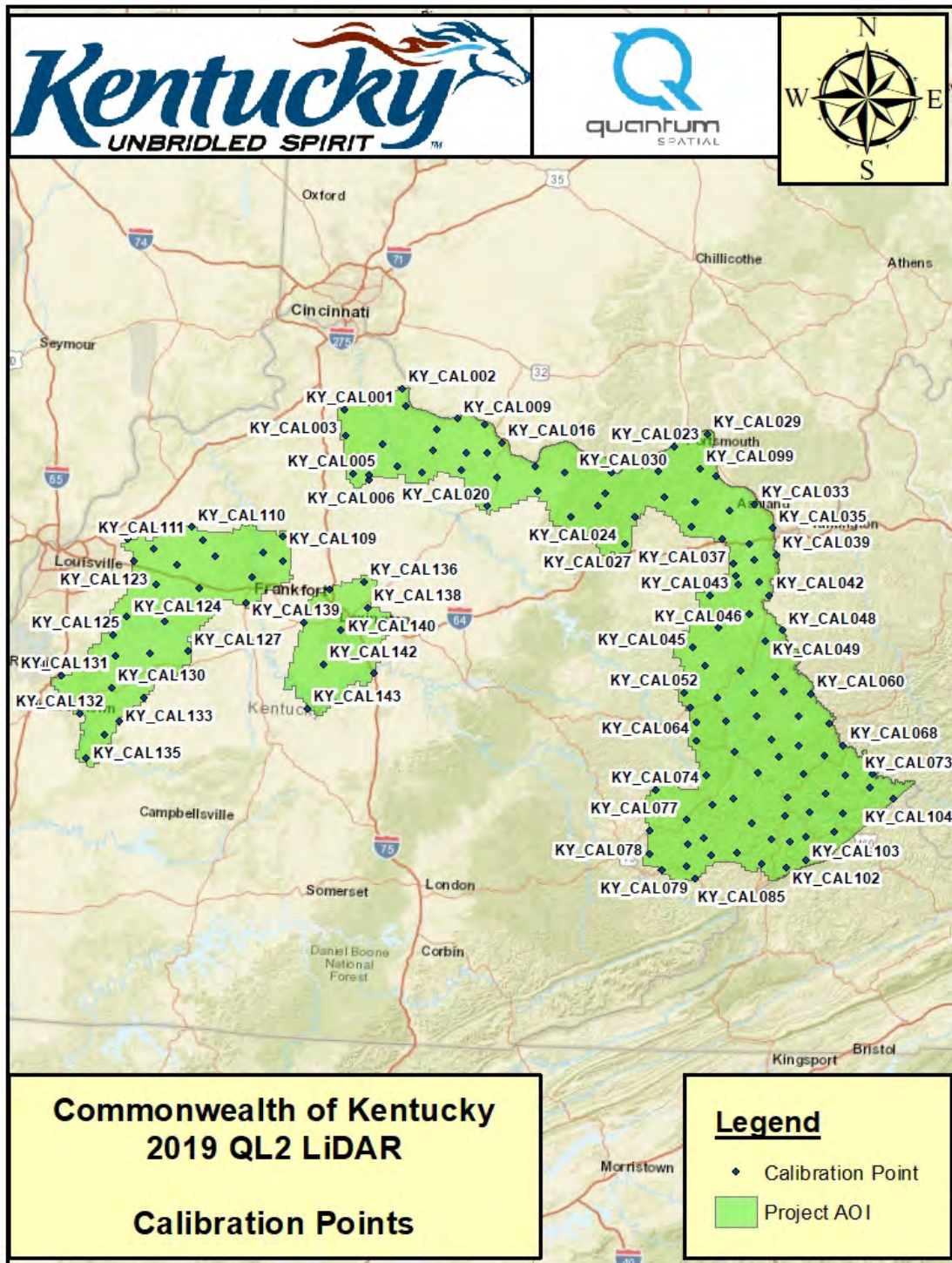
Average Horizontal RMSE is 0.048 usft.

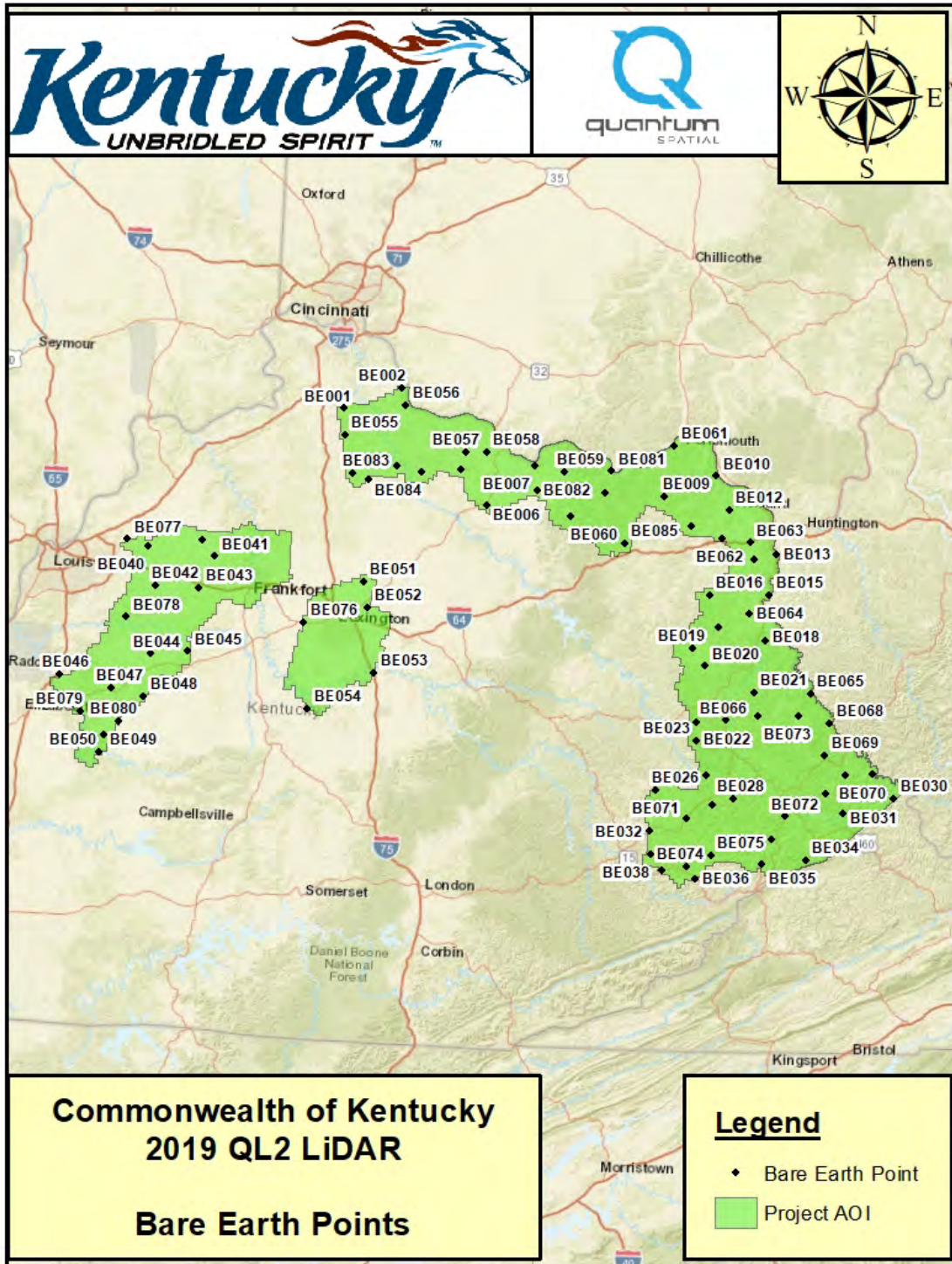
Average Elevation RMSE is 0.066 usft.

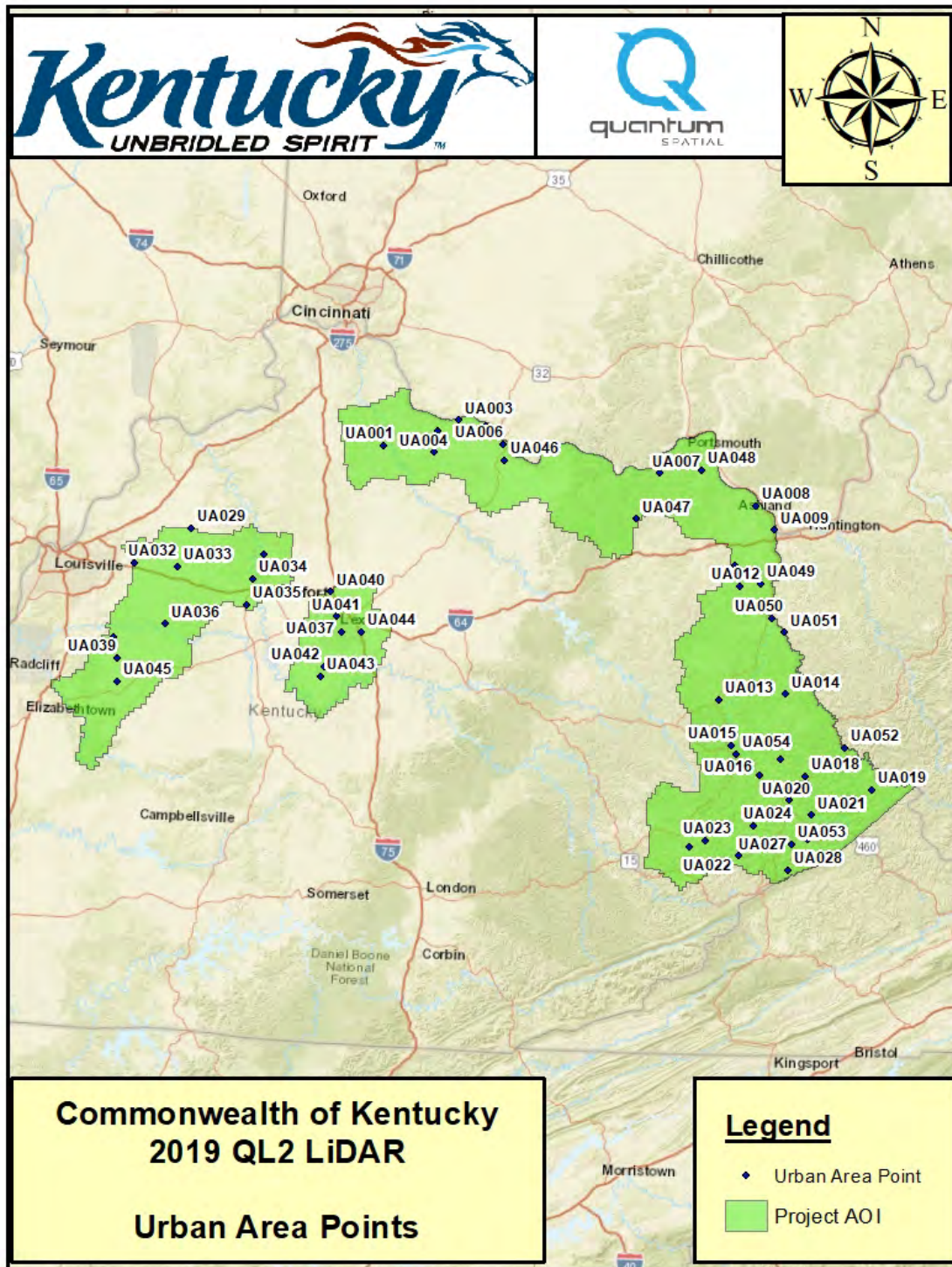
Average 3 dimensional RMSE is 0.081 usft.

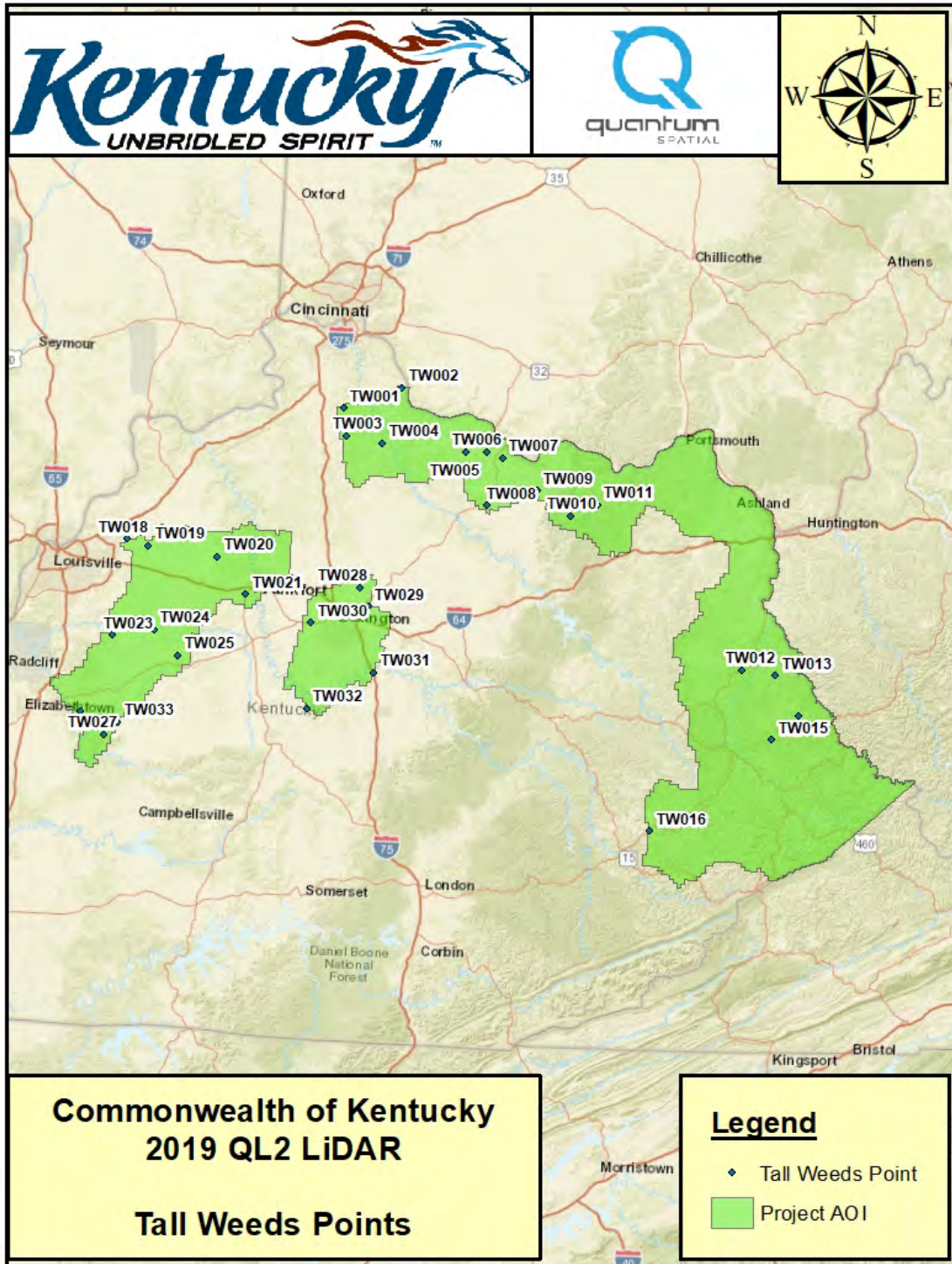


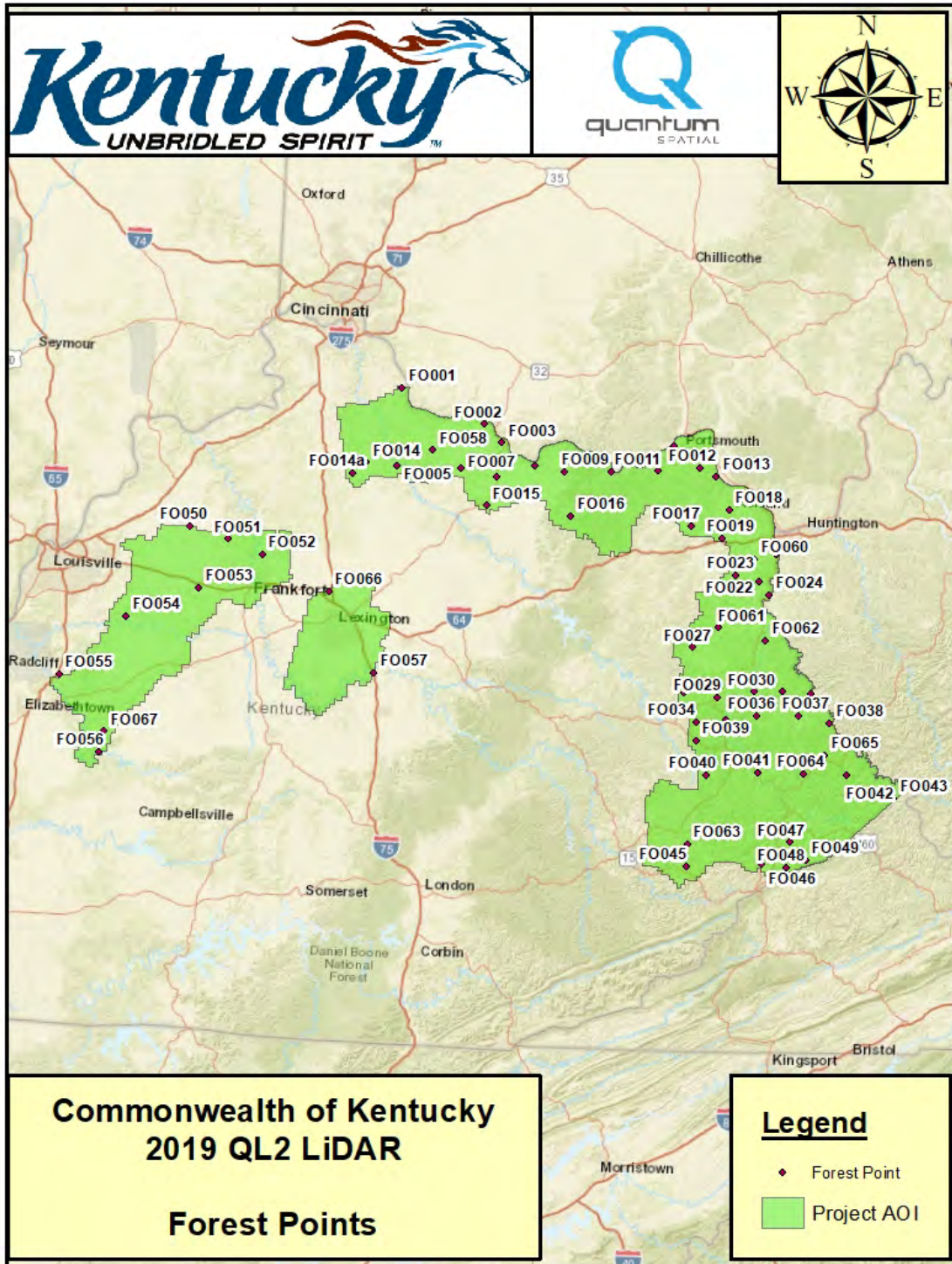
PROJECT AOI & POINT LOCATION MAPS

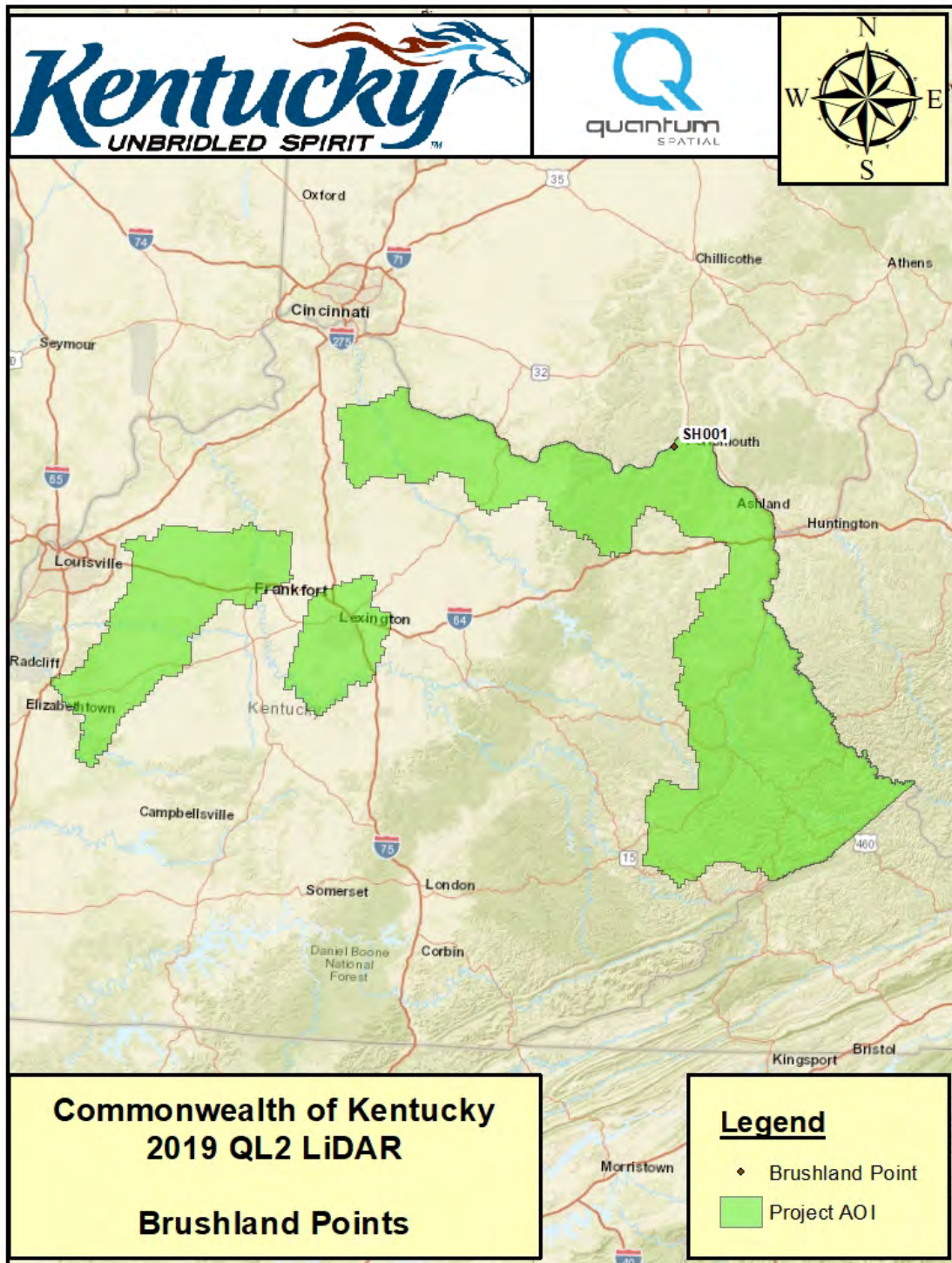














FINAL POINT COORDINATES

**CALIBRATION POINT COORDINATES**

Horizontal Datum - NAD83(2011)
KENTUCKY STATE PLANE - SINGE ZONE
Vertical Datum - NAVD 88
Geoid - GEOID12B
Units – US Survey Feet

Point ID	Northing (m)	Easting (m)	Elev. (m)
KY_CAL001	4178041.310	5273394.556	658.371
KY_CAL002	4207491.106	5345206.710	616.790
KY_CAL003	4144957.083	5276715.479	930.070
KY_CAL004	4136794.830	5324326.485	554.572
KY_CAL005	4097108.221	5289319.044	839.421
KY_CAL006	4090783.360	5309180.547	687.151
KY_CAL006a	4096785.383	5310004.395	812.810
KY_CAL007	4109031.247	5344747.201	582.991
KY_CAL008	4186588.052	5351613.876	711.609
KY_CAL009	4173099.595	5418095.881	518.920
KY_CAL010	4158686.737	5391678.737	583.158
KY_CAL011	4130638.783	5430939.533	970.116
KY_CAL012	4131271.368	5388740.212	964.637
KY_CAL013	4102902.172	5376135.757	614.454
KY_CAL014	4109337.761	5425938.486	861.419
KY_CAL015	4167240.440	5453275.566	549.307
KY_CAL016	4145361.309	5475560.762	557.233
KY_CAL017	4132100.614	5456730.437	940.241
KY_CAL018	4117981.185	5519074.638	513.286
KY_CAL019	4100999.045	5471395.691	700.419
KY_CAL020	4064480.037	5460420.559	915.182
KY_CAL021	4086774.798	5523430.201	786.970
KY_CAL022	4115730.559	5615892.364	516.200
KY_CAL023	4152593.093	5693808.507	574.723
KY_CAL024	4056963.819	5568111.116	831.094
KY_CAL025	4089122.500	5610150.235	705.720
KY_CAL026	4060103.394	5648319.695	1102.701
KY_CAL027	4026387.973	5637408.669	799.234
KY_CAL028	3982454.383	5784366.720	696.436
KY_CAL029	4170135.768	5735356.190	535.402



KY_CAL030	4119603.647	5675689.963	608.293
KY_CAL031	4116785.111	5749513.550	557.368
KY_CAL032	4083484.748	5723976.682	741.570
KY_CAL033	4084783.916	5799535.619	557.732
KY_CAL034	4038420.408	5760454.237	840.887
KY_CAL035	4055046.423	5823850.196	546.196
KY_CAL036	4034669.562	5795986.201	671.409
KY_CAL037	4007611.022	5776149.325	669.602
KY_CAL038	3992550.446	5780078.286	695.110
KY_CAL039	4021319.522	5830254.436	572.791
KY_CAL040	3985901.484	5810569.353	609.257
KY_CAL041	4014195.513	5802711.342	688.020
KY_CAL042	3970079.079	5824046.174	577.797
KY_CAL043	3965784.091	5748432.104	623.227
KY_CAL044	3945112.158	5800015.872	637.623
KY_CAL045	3898522.315	5730293.228	704.408
KY_CAL046	3925194.084	5761994.598	663.985
KY_CAL047	3872631.279	5793358.597	636.892
KY_CAL048	3926108.137	5842425.368	581.416
KY_CAL049	3912481.255	5822275.136	586.734
KY_CAL050	3876354.519	5746981.017	819.080
KY_CAL051	3867902.425	5837291.361	874.614
KY_CAL052	3841234.274	5721848.427	921.465
KY_CAL053	3837446.699	5765022.749	605.114
KY_CAL054	3846285.689	5810757.976	1130.365
KY_CAL055	3822846.007	5731660.411	872.702
KY_CAL056	3805067.916	5740298.284	685.796
KY_CAL057	3808658.471	5776611.228	619.192
KY_CAL058	3815939.879	5816089.297	1212.163
KY_CAL059	3848331.243	5847792.725	668.542
KY_CAL060	3848017.459	5882865.361	624.231
KY_CAL061	3819119.996	5868150.446	1089.161
KY_CAL062	3811690.182	5908542.702	654.631
KY_CAL063	3782211.529	5871121.629	796.193
KY_CAL064	3781001.032	5740778.243	732.505
KY_CAL065	3769406.721	5790673.141	667.554
KY_CAL066	3786895.217	5835627.811	662.600
KY_CAL067	3770981.814	5904143.522	742.102
KY_CAL068	3784213.541	5927468.646	672.328
KY_CAL069	3738730.108	5755735.804	745.297
KY_CAL070	3744146.537	5820970.426	656.787



KY_CAL071	3746150.824	5879126.382	758.168
KY_CAL072	3746863.254	5932438.313	860.166
KY_CAL073	3749590.484	5965996.177	722.088
KY_CAL074	3716289.248	5692199.819	888.889
KY_CAL075	3663734.503	5687498.943	1241.051
KY_CAL076	3700740.309	5765014.495	707.338
KY_CAL077	3681358.814	5732892.926	1104.394
KY_CAL078	3635064.651	5689605.184	984.421
KY_CAL079	3615394.087	5705746.185	950.763
KY_CAL080	3650268.730	5736142.900	1070.155
KY_CAL081	3641404.770	5799036.115	1279.532
KY_CAL082	3710646.209	5791026.462	686.068
KY_CAL083	3680712.899	5816915.289	1063.354
KY_CAL084	3714575.413	5859492.683	669.224
KY_CAL085	3605926.907	5748058.625	1182.314
KY_CAL086	3622048.013	5736254.902	1062.750
KY_CAL087	3722753.707	5907440.004	904.385
KY_CAL088	3733162.136	5963684.655	842.301
KY_CAL089	3691688.321	5857916.925	1113.098
KY_CAL090	3697453.171	5889316.970	689.933
KY_CAL091	3699125.248	5931806.345	796.442
KY_CAL092	3660489.682	5842432.964	836.626
KY_CAL093	3666253.247	5885165.960	1080.231
KY_CAL094	3673972.370	5921414.776	1334.059
KY_CAL095	3658485.543	5757123.103	979.923
KY_CAL096	3636879.429	5767252.899	1234.519
KY_CAL097	4087476.339	5684360.845	737.600
KY_CAL098	4072892.110	5600842.082	713.283
KY_CAL099	4126431.445	5727440.652	572.505
KY_CAL100	3629879.154	5832079.556	1135.490
KY_CAL101	3659101.619	5866283.841	1353.314
KY_CAL102	3626866.128	5862146.861	1233.705
KY_CAL103	3637322.859	5886642.448	1061.753
KY_CAL104	3720584.110	5994120.846	877.341
KY_CAL105	3766354.061	5846740.874	687.919
KY_CAL106	4112092.416	5557657.168	741.468
KY_CAL107	4074907.279	5767623.592	826.580
KY_CAL108	4052242.980	5721372.101	645.035
KY_CAL109	4013242.098	5204734.383	703.857
KY_CAL110	4019000.437	5088444.785	904.237
KY_CAL111	3999263.617	5009077.636	679.697



KY_CAL112	3982280.662	5206675.183	787.042
KY_CAL113	3991945.736	5180192.779	718.056
KY_CAL114	4002506.507	5103224.361	891.832
KY_CAL115	3970954.583	5072193.659	734.349
KY_CAL116	3989709.968	5042104.196	814.926
KY_CAL117	3972361.027	5018078.998	672.056
KY_CAL118	3982885.933	5119814.782	894.352
KY_CAL119	3960058.597	5167495.944	800.756
KY_CAL120	3927021.059	5161635.926	790.238
KY_CAL121	3897179.172	5061032.570	730.323
KY_CAL122	3942641.773	5102082.738	757.321
KY_CAL123	3943454.497	5046432.394	762.357
KY_CAL124	3901304.488	5012572.132	533.532
KY_CAL125	3877224.295	4995779.812	682.896
KY_CAL126	3856074.896	5044468.594	713.437
KY_CAL127	3861477.772	5091669.652	843.286
KY_CAL128	3851056.695	5000827.035	699.395
KY_CAL129	3800409.763	5039636.180	520.396
KY_CAL130	3810290.765	4997190.643	603.483
KY_CAL131	3823069.836	4933615.834	457.033
KY_CAL132	3775903.847	4959245.980	463.234
KY_CAL133	3769143.001	5008943.219	683.988
KY_CAL134	3751213.401	4991103.899	570.573
KY_CAL135	3720383.775	4970109.413	523.099
KY_CAL136	3961300.685	5309697.075	956.209
KY_CAL137	3948743.405	5266329.240	846.409
KY_CAL138	3928603.918	5316678.451	920.749
KY_CAL139	3905725.643	5236065.782	900.234
KY_CAL140	3898521.133	5284047.325	1016.681
KY_CAL141	3845863.420	5328924.276	925.959
KY_CAL142	3854092.220	5264184.009	1009.942
KY_CAL143	3797005.194	5246091.460	831.944

**BARE EARTH POINT COORDINATES**

Horizontal Datum - NAD83(2011)
KENTUCKY STATE PLANE - SINGE ZONE
Vertical Datum - NAVD 88
Geoid - GEOID12B
Units – US Survey Feet

Point ID	Northing (m)	Easting (m)	Elev. (m)
BE001	4178318.195	5273598.556	654.503
BE002	4207557.435	5345801.364	607.955
BE003	4108997.267	5344652.109	585.146
BE004	4102831.326	5375773.986	628.355
BE005	4109365.387	5425958.579	859.834
BE006	4064589.332	5460414.413	915.631
BE007	4117976.298	5518873.406	512.040
BE008	4089136.977	5610210.561	705.268
BE009	4087419.153	5684334.442	733.834
BE010	4116755.409	5749523.634	555.278
BE011	4052224.129	5721397.290	641.104
BE012	4074949.371	5767649.517	824.408
BE013	4021347.015	5830232.263	573.027
BE014	4013949.240	5802783.179	700.566
BE015	3970049.578	5823896.370	580.317
BE016	3965895.981	5748186.732	619.372
BE017	3925330.439	5761733.010	672.262
BE018	3912475.229	5822350.867	585.832
BE019	3898495.223	5730260.033	705.330
BE020	3876177.504	5746886.143	814.890
BE021	3846340.401	5810688.773	1127.675
BE022	3805053.052	5740224.755	684.070
BE023	3780965.427	5740777.538	732.597
BE024	3738733.520	5755701.519	745.130
BE025	3749737.069	5965919.486	721.075
BE026	3716348.684	5692188.081	889.614
BE027	3700741.074	5764978.892	707.187
BE028	3710936.190	5791155.450	689.684
BE029	3722827.161	5907466.357	899.870
BE030	3720624.643	5994168.785	877.813
BE031	3699056.594	5931730.228	795.546



BE032	3663744.312	5687566.305	1240.296
BE033	3660606.502	5842711.271	854.493
BE034	3637321.243	5886751.394	1057.668
BE035	3629872.773	5832150.624	1135.536
BE036	3605873.996	5748049.261	1180.926
BE037	3615416.399	5705715.308	952.032
BE038	3634704.971	5689941.927	982.331
BE039	4002437.083	5103256.066	894.670
BE040	3992105.995	5034875.646	813.115
BE041	3982844.837	5119935.791	888.289
BE042	3942854.760	5046578.631	744.411
BE043	3942635.917	5102154.109	754.392
BE044	3855986.259	5044866.120	708.539
BE045	3861460.084	5091687.215	842.082
BE046	3824352.760	4931153.310	458.496
BE047	3811014.432	4997095.700	585.051
BE048	3801376.945	5039489.967	515.294
BE049	3751195.923	4991134.779	570.963
BE050	3729278.740	4985818.623	535.688
BE051	3961286.833	5309737.514	955.192
BE052	3928718.524	5316749.667	923.633
BE053	3845955.458	5328909.287	927.708
BE054	3797149.200	5246420.041	830.038
BE055	4144995.779	5276876.910	920.307
BE056	4186556.628	5351627.380	710.569
BE057	4130549.556	5430940.817	965.867
BE058	4132132.564	5456769.338	941.871
BE059	4112255.868	5557574.733	735.163
BE060	4056663.380	5568002.724	833.312
BE061	4152575.372	5693796.867	576.505
BE062	4038558.494	5760542.357	838.814
BE063	4034827.777	5796041.217	678.788
BE064	3945097.377	5800282.442	644.533
BE065	3848298.436	5882532.617	629.448
BE066	3808675.355	5776677.756	622.945
BE067	3819069.220	5868120.371	1089.207
BE068	3811703.369	5908573.276	653.995
BE069	3771010.343	5904199.485	748.332
BE070	3746881.418	5932506.252	860.103
BE071	3681505.552	5733143.680	1109.637
BE072	3691431.893	5857887.544	1096.658



BE073	3815979.456	5816561.999	1214.017
BE074	3621552.170	5736136.199	1032.600
BE075	3637291.596	5767233.840	1229.145
BE076	3905766.678	5236113.606	898.309
BE077	3999320.071	5009082.829	678.693
BE078	3901263.781	5012613.372	530.691
BE079	3778779.607	4960031.949	457.538
BE080	3769173.988	5008916.577	684.871
BE081	4116093.634	5615859.288	526.397
BE082	4086776.163	5523408.750	787.498
BE083	4097154.414	5289267.865	840.379
BE084	4090805.126	5309178.382	688.608
BE085	4026403.845	5637336.017	797.712

**URBAN AREA POINT COORDINATES**

Horizontal Datum - NAD83(2011)
KENTUCKY STATE PLANE - SINGE ZONE
Vertical Datum - NAVD 88
Geoid - GEOID12B
Units – US Survey Feet

Point ID	Northing (m)	Easting (m)	Elev. (m)
UA001	4136812.110	5324340.374	555.045
UA002	4158910.208	5391729.266	565.996
UA003	4173091.785	5418068.703	518.936
UA004	4131235.846	5388742.489	966.701
UA005	4167225.502	5453262.084	548.805
UA006	4145385.037	5475518.246	556.436
UA007	4119569.730	5675717.895	608.890
UA008	4084806.189	5799554.763	557.889
UA009	4055028.078	5823858.697	545.432
UA010	4007614.072	5776128.712	669.530
UA011	3992628.881	5780065.493	694.382
UA012	3982460.124	5784346.949	697.200
UA013	3837463.668	5765043.878	604.605
UA014	3848318.194	5847785.442	668.470
UA015	3780825.215	5782606.417	629.448
UA016	3744167.147	5820974.399	657.633
UA017	3766363.682	5846715.892	687.574
UA018	3746121.713	5879138.369	757.823
UA019	3733172.287	5963662.322	840.891
UA020	3714567.106	5859513.343	669.018
UA021	3697469.833	5889292.465	688.293
UA022	3650258.475	5736137.783	1069.663
UA023	3658470.398	5757130.993	978.646
UA024	3680697.753	5816924.281	1061.714
UA025	3666259.217	5885152.570	1080.277
UA026	3673963.796	5921437.452	1334.397
UA027	3641372.419	5799058.777	1278.387
UA028	3626826.090	5862179.049	1234.023
UA029	4019806.186	5087374.450	912.131
UA030	3990793.389	5180688.670	773.250



UA031	3982279.307	5206689.004	787.039
UA032	3972356.414	5018099.071	671.439
UA033	3970937.039	5072193.441	734.126
UA034	3960066.159	5167469.228	799.930
UA035	3927015.884	5161662.403	790.304
UA036	3897210.395	5061038.722	729.677
UA037	3898499.171	5284052.287	1016.527
UA038	3877427.146	4995376.558	683.089
UA039	3851470.623	5001225.418	683.637
UA040	3948717.764	5266301.673	846.967
UA041	3917507.591	5276390.940	964.952
UA042	3854082.065	5264214.197	1009.739
UA043	3840883.122	5259334.346	909.769
UA044	3899566.121	5308466.528	978.735
UA045	3821582.476	5003767.554	657.853
UA046	4125455.995	5477708.895	860.832
UA047	4060140.948	5648323.962	1106.074
UA048	4126416.639	5727452.131	572.076
UA049	3985941.742	5810571.840	608.070
UA050	3943449.182	5826285.229	589.963
UA051	3926140.931	5842449.387	579.648
UA052	3784211.657	5927419.724	671.908
UA053	3659133.385	5866308.214	1353.065
UA054	3769386.063	5790676.924	667.472

**TALL WEED POINT COORDINATES**

Horizontal Datum - NAD83(2011)
KENTUCKY STATE PLANE - SINGE ZONE
Vertical Datum - NAVD 88
Geoid - GEOID12B
Units – US Survey Feet

Point ID	Northing (m)	Easting (m)	Elev. (m)
TW001	4178183.014	5273405.191	657.541
TW002	4207651.988	5345801.774	606.029
TW003	4143724.085	5278096.483	916.717
TW004	4136882.261	5325061.215	563.477
TW005	4130489.014	5430643.846	946.950
TW006	4132173.377	5456700.162	942.347
TW007	4125463.141	5477637.752	857.531
TW008	4064657.910	5460481.781	914.303
TW009	4086746.810	5523266.652	796.668
TW010	4056934.282	5568063.142	829.824
TW011	4072854.149	5600743.731	707.837
TW012	3872597.399	5793460.965	635.556
TW013	3868086.325	5837205.955	886.944
TW014	3819042.846	5868189.455	1087.573
TW015	3786992.695	5835690.378	660.622
TW016	3663691.939	5687574.833	1239.000
TW017	4015774.767	5091652.844	838.529
TW018	3999285.140	5009057.831	677.633
TW019	3992160.881	5035507.356	805.645
TW020	3982909.546	5123077.695	901.071
TW021	3936719.720	5162229.491	819.339
TW022	3899452.969	5069260.900	759.054
TW023	3877077.523	4995657.898	694.375
TW024	3886242.934	5047819.085	739.201
TW025	3855738.112	5079568.220	808.886
TW026	3778079.438	4959923.458	453.411
TW027	3750807.238	4991467.586	577.476
TW028	3952862.170	5306009.640	921.146
TW029	3929291.910	5317269.565	933.640
TW030	3905000.787	5245494.000	841.117
TW031	3845855.836	5329028.980	915.690



TW032	3796827.350	5246209.581	841.255
TW033	3767987.376	5007761.347	657.223

**FOREST POINT COORDINATES**

Horizontal Datum - NAD83(2011)
KENTUCKY STATE PLANE - SINGE ZONE
Vertical Datum - NAVD 88
Geoid - GEOID12B
Units – US Survey Feet

Point ID	Northing (m)	Easting (m)	Elev. (m)
FO001	4207664.554	5345953.773	608.096
FO002	4167085.619	5453201.012	553.457
FO003	4145047.302	5475680.247	552.351
FO004	4118042.235	5519215.606	496.797
FO005	4109165.355	5344613.993	587.154
FO006	4101012.797	5471284.551	683.073
FO007	4109470.092	5425909.286	850.425
FO008	4112160.547	5557674.825	742.446
FO009	4115560.194	5615823.993	504.658
FO010	4152723.817	5694193.560	571.649
FO011	4119275.639	5676025.092	612.853
FO012	4126262.731	5727563.792	550.363
FO013	4116365.121	5749566.538	523.801
FO014	4111340.498	5305673.243	588.965
FO014a	4097391.403	5289042.057	799.165
FO015	4064620.705	5460483.512	910.730
FO016	4056374.437	5568278.050	823.046
FO017	4052333.347	5721534.179	687.741
FO018	4074591.144	5767574.616	839.916
FO019	4038691.208	5760303.061	826.996
FO020	4007312.224	5776406.250	668.854
FO021	4021338.143	5830123.817	600.504
FO022	3985862.438	5810647.482	611.328
FO023	3992780.905	5779943.565	697.512
FO024	3969828.739	5823881.742	579.664
FO025	3944718.823	5800001.855	646.147
FO026	3926079.998	5842400.774	577.837
FO027	3898659.194	5730334.624	709.146
FO028	3841247.027	5721871.018	920.254
FO029	3837223.783	5765189.299	607.797
FO030	3846433.623	5810649.628	1145.959
FO031	3848268.233	5847631.992	669.933



FO032	3848056.217	5882883.803	622.407
FO033	3822759.081	5731614.502	863.663
FO034	3804974.028	5740306.255	681.334
FO035	3808712.586	5776574.891	622.591
FO036	3815945.163	5815990.705	1218.813
FO037	3818999.521	5868268.188	1088.584
FO038	3811602.692	5908637.416	635.481
FO039	3781014.565	5740564.668	740.500
FO040	3738604.426	5755795.223	742.023
FO041	3744261.058	5820781.860	649.277
FO042	3746950.421	5932634.543	871.950
FO043	3720463.316	5994036.102	863.784
FO044	3634975.550	5689790.745	980.461
FO045	3621585.647	5736101.817	1033.787
FO046	3629793.129	5831992.922	1121.491
FO047	3659019.486	5866147.633	1370.998
FO048	3626851.053	5862431.915	1230.509
FO049	3637462.651	5886777.487	1056.035
FO050	4019835.203	5087329.907	907.856
FO051	4005561.157	5135564.497	855.307
FO052	3988163.717	5180012.644	745.878
FO053	3942732.888	5102027.839	760.776
FO054	3902116.071	5011706.649	471.948
FO055	3824401.409	4931121.391	460.603
FO056	3729302.822	4985832.922	537.364
FO057	3845762.471	5328862.988	925.746
FO058	4131312.238	5388886.018	950.326
FO059A	4072659.470	5600942.586	707.754
FO060	4014264.242	5802968.070	702.663
FO061	3925112.830	5761921.006	654.871
FO062	3912424.762	5822486.817	582.909
FO063	3650068.990	5736052.053	1064.949
FO064	3746493.924	5879023.363	773.634
FO065	3770815.507	5904089.260	736.563
FO066	3946274.715	5266712.389	858.059
FO067	3754909.216	4991200.860	484.845



BRUSHLAND POINT COORDINATES

Horizontal Datum - NAD83(2011)
KENTUCKY STATE PLANE - SINGE ZONE
Vertical Datum - NAVD 88
Geoid - GEOID12B
Units – US Survey Feet

Point ID	Northing (m)	Easting (m)	Elev. (m)
SH001	4152485.261	5693810.664	577.348



POINT DATA AND ACCURACY LOG SHEETS



CALIBRATION POINT LOG SHEETS



Point ID	KY_CAL001
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Walton

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4178041.310	5273394.556	658.371

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/27/2019
RMSE Hz	0.032
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



JD117 R033656 KY_Cal001 Pavement 2019-04-27 11:20:17-04:00
 Quad: Walton



JD117 R033656 KY_Cal001 Pavement 2019-04-27 11:20:29-04:00
 Quad: Walton



JD117 R033656 KY_Cal001 Pavement 2019-04-27 11:21:00-04:00
 Quad: Walton



JD117 R033656 KY_Cal001 Pavement 2019-04-27 11:21:21-04:00
 Quad: Walton



Point ID	KY_CAL002
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Campbell
Quad	Butler

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4207491.106	5345206.710	616.790

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.025
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD118 R033656
Quad: Butler
KY_Cal002 Pavement
2019-04-28
10:14:18-04:00



JD118 R033656
Quad: Butler
KY_Cal002 Pavement
2019-04-28
10:14:35-04:00



JD118 R033656
Quad: Butler
KY_Cal002 Pavement
2019-04-28
10:14:51-04:00



JD118 R033656
Quad: Butler
KY_Cal002 Pavement
2019-04-28
10:15:02-04:00



Point ID	KY_CAL003
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Pendleton
Quad	Williamstown

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4144957.083	5276715.479	930.070

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-10-2019
RMSE Hz	0.028
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL004
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Falmouth

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4136794.830	5324326.485	554.572

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.042
RMSE Z	0.053
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL005
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Pendleton
Quad	Berry

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4097108.221	5289319.044	839.421

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-10-2019
RMSE Hz	0.027
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL006
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Harrison
Quad	Berry

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4090783.360	5309180.547	687.151

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-10-2019
RMSE Hz	0.032
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



KY LiDAR KY_Cal006 2019-04-10 14:40:20-04:00



KY LiDAR KY_Cal006 2019-04-10 14:40:16-04:00



KY LiDAR KY_Cal006 2019-04-10 14:40:11-04:00



KY LiDAR KY_Cal006 2019-04-10 14:40:07-04:00



Point ID	KY_CAL006a
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Berry Berry

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4096785.383	5310004.395	812.810

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/27/2019
RMSE Hz	0.028
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD117 R033656 KY_Cal006 Pavement 2019-04-27 16:15:32-04:00 Quad: Berry_Berry



JD117 R033656 KY_Cal006 Pavement 2019-04-27 16:15:41-04:00 Quad: Berry_Berry



JD117 R033656 KY_Cal006 Pavement 2019-04-27 16:15:50-04:00 Quad: Berry_Berry



JD117 R033656 KY_Cal006 Pavement 2019-04-27 16:15:59-04:00 Quad: Berry_Berry



Point ID	KY_CAL007
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Kelat

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4109031.247	5344747.201	582.991

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.030
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



2019-04-28
 16:02:37-04:00
 KY_Cal007
 Pavement
 JD118 R033656
 Quad: Kelat



JD118 R033656
 Quad: Kelat
 KY_Cal007 Pavement
 2019-04-28
 16:02:50-04:00



JD118 R033656
 Quad: Kelat
 KY_Cal007 Pavement
 2019-04-28
 16:03:03-04:00



JD118 R033656
 Quad: Kelat
 KY_Cal007 Pavement
 2019-04-28
 16:03:18-04:00



Point ID	KY_CAL008
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Moscow

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4186588.052	5351613.876	711.609

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.042
RMSE Z	0.063
GPS Method	RTN

PHOTOS:



JD118 R033656
Quad: Moscow
KY_Cal008 Pavement
2019-04-28
12:01:28-04:00



JD118 R033656
Quad: Moscow
KY_Cal008 Pavement
2019-04-28
12:01:39-04:00



JD118 R033656
Quad: Moscow
KY_Cal008 Pavement
2019-04-28
12:01:53-04:00



JD118 R033656
Quad: Moscow
KY_Cal008 Pavement
2019-04-28
12:02:04-04:00



Point ID	KY_CAL009
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Felicity

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4173099.595	5418095.881	518.920

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.023
RMSE Z	0.030
GPS Method	RTN

PHOTOS:



JD119 R033656 KY_Cal009 Pavement 2019-04-29 14:18:07-04:00
Quad: Felicity



JD119 R033656 KY_Cal009 Pavement 2019-04-29 14:18:19-04:00
Quad: Felicity



JD119 R033656 KY_Cal009 Pavement 2019-04-29 14:18:31-04:00
Quad: Felicity



JD119 R033656 KY_Cal009 Pavement 2019-04-29 14:18:52-04:00
Quad: Felicity



Point ID	KY_CAL010
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Brooksville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4158686.737	5391678.737	583.158

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.036
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL011
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Germantown

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4130638.783	5430939.533	970.116

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.038
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



JD119 R033656 KY_Cal011 Pavement 2019-04-29 09:55:21-04:00
Quad: Germantown



JD119 R033656 KY_Cal011 Pavement 2019-04-29 09:55:31-04:00
Quad: Germantown



JD119 R033656 KY_Cal011 Pavement 2019-04-29 09:55:42-04:00
Quad: Germantown



JD119 R033656 KY_Cal011 Pavement 2019-04-29 09:55:51-04:00
Quad: Germantown



Point ID	KY_CAL012
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Brooksville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4131271.368	5388740.212	964.637

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.049
RMSE Z	0.076
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL013
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Claysville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4102902.172	5376135.757	614.454

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.045
RMSE Z	0.053
GPS Method	RTN

PHOTOS:



JD118 R033656 KY_Cal013 Pavement 2019-04-28 18:04:35-04:00 Quad: Claysville



JD118 R033656 KY_Cal013 Pavement 2019-04-28 18:04:46-04:00 Quad: Claysville



JD118 R033656 KY_Cal013 Pavement 2019-04-28 18:04:58-04:00 Quad: Claysville



JD118 R033656 KY_Cal013 Pavement 2019-04-28 18:05:09-04:00 Quad: Claysville



Point ID	KY_CAL014
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Sardis

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4109337.761	5425938.486	861.419

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.025
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD116 R033656 KY_Cal014 Pavement 2019-04-26 10:06:32-04:00 Quad: Sardis



JD116 R033656 KY_Cal014 Pavement 2019-04-26 10:06:42-04:00 Quad: Sardis



JD116 R033656 KY_Cal014 Pavement 2019-04-26 10:06:56-04:00 Quad: Sardis



JD116 R033656 KY_Cal014 Pavement 2019-04-26 10:07:09-04:00 Quad: Sardis



Point ID	KY_CAL015
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Higginsport

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4167240.440	5453275.566	549.307

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.023
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD119 R033656 KY_Cal015 Pavement 2019-04-29 15:24:24-04:00 Quad: Higginsport



JD119 R033656 KY_Cal015 Pavement 2019-04-29 15:24:37-04:00 Quad: Higginsport



JD119 R033656 KY_Cal015 Pavement 2019-04-29 15:24:48-04:00 Quad: Higginsport



JD119 R033656 KY_Cal015 Pavement 2019-04-29 15:24:59-04:00 Quad: Higginsport



Point ID	KY_CAL016
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Maysville-West

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4145361.309	5475560.762	557.233

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.042
RMSE Z	0.045
GPS Method	RTN

PHOTOS:



JD119 R033656 KY_Cal016 Pavement 2019-04-29 18:02:37-04:00
Quad: Maysville-West



JD119 R033656 KY_Cal016 Pavement 2019-04-29 18:02:48-04:00
Quad: Maysville-West



JD119 R033656 KY_Cal016 Pavement 2019-04-29 18:03:05-04:00
Quad: Maysville-West



JD119 R033656 KY_Cal016 Pavement 2019-04-29 18:03:17-04:00
Quad: Maysville-West



Point ID	KY_CAL017
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Maysville-West

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4132100.614	5456730.437	940.241

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.034
RMSE Z	0.049
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL018
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Orangeburg

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4117981.185	5519074.638	513.286

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.008
RMSE Z	0.011
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL019
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Mays Lick

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4100999.045	5471395.691	700.419

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.023
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD116 R033656 KY_Cal019 Pavement 2019-04-26 13:09:10-04:00 Quad: Mays Lick



JD116 R033656 KY_Cal019 Pavement 2019-04-26 13:09:21-04:00 Quad: Mays Lick



JD116 R033656 KY_Cal019 Pavement 2019-04-26 13:09:28-04:00 Quad: Mays Lick



JD116 R033656 KY_Cal019 Pavement 2019-04-26 13:10:21-04:00 Quad: Mays Lick



Point ID	KY_CAL020
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Elizaville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4064480.037	5460420.559	915.182

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.036
RMSE Z	0.055
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL021
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Orangeburg

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4086774.798	5523430.201	786.970

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.040
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



JD115 R033656 KY_CAL021 Pavement 2019-04-25 12:12:35-04:00 Quad: Orangeburg



JD115 R033656 KY_CAL021 Pavement 2019-04-25 12:12:45-04:00 Quad: Orangeburg



JD115 R033656 KY_CAL021 Pavement 2019-04-25 12:12:55-04:00 Quad: Orangeburg



JD115 R033656 KY_CAL021 Pavement 2019-04-25 12:13:04-04:00 Quad: Orangeburg



Point ID	KY_CAL022
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Vanceburg

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4115730.559	5615892.364	516.200

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/09/2019
RMSE Hz	0.042
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



JD099 R033656 KY_Cal022 Pavement 2019-04-09 15:14:54-04:00
Quad: Vanceburg



JD099 R033656 KY_Cal022 Pavement 2019-04-09 15:15:07-04:00
Quad: Vanceburg



JD099 R033656 KY_Cal022 Pavement 2019-04-09 15:15:18-04:00
Quad: Vanceburg



JD099 R033656 KY_Cal022 Pavement 2019-04-09 15:15:35-04:00
Quad: Vanceburg



Point ID	KY_CAL023
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Friendship

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4152593.093	5693808.507	574.723

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.021
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD098 R033656 KY_Cal023 Pavement 2019-04-08 12:54:27-04:00 Quad: Friendship



JD098 R033656 KY_Cal023 Pavement 2019-04-08 12:54:42-04:00 Quad: Friendship



JD098 R033656 KY_Cal023 Pavement 2019-04-08 12:54:54-04:00 Quad: Friendship



JD098 R033656 KY_Cal023 Pavement 2019-04-08 12:55:37-04:00 Quad: Friendship



Point ID	KY_CAL024
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Stricklett

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4056963.819	5568111.116	831.094

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.030
RMSE Z	0.045
GPS Method	RTN

PHOTOS:



JD115 R033656 KY_Cal024 Pavement 2019-04-25 09:45:32-04:00 Quad: Stricklett



JD115 R033656 KY_Cal024 Pavement 2019-04-25 09:46:07-04:00 Quad: Stricklett



JD115 R033656 KY_Cal024 Pavement 2019-04-25 09:46:22-04:00 Quad: Stricklett



JD115 R033656 KY_Cal024 Pavement 2019-04-25 09:46:38-04:00 Quad: Stricklett



Point ID	KY_CAL025
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Vanceburg

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4089122.500	5610150.235	705.720

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.013
RMSE Z	0.028
GPS Method	RTN

PHOTOS:



JD100 R033656 KY_Cal025 Pavement 2019-04-10 09:33:51-04:00 Quad: Vanceburg



JD100 R033656 KY_Cal025 Pavement 2019-04-10 09:34:05-04:00 Quad: Vanceburg



JD100 R033656 KY_Cal025 Pavement 2019-04-10 09:34:18-04:00 Quad: Vanceburg



JD100 R033656 KY_Cal025 Pavement 2019-04-10 09:34:47-04:00 Quad: Vanceburg



Point ID	KY_CAL026
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Carter
Quad	Wesleyville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4060103.394	5648319.695	1102.701

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.049
RMSE Z	0.057
GPS Method	RTN

PHOTOS:



JD100 R033656 KY_Cal026 Pavement 2019-04-10 15:31:26-04:00 Quad: Wesleyville



JD100 R033656 KY_Cal026 Pavement 2019-04-10 15:31:39-04:00 Quad: Wesleyville



JD100 R033656 KY_Cal026 Pavement 2019-04-10 15:31:58-04:00 Quad: Wesleyville



JD100 R033656 KY_Cal026 Pavement 2019-04-10 15:32:13-04:00 Quad: Wesleyville



Point ID	KY_CAL027
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Soldier

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4026387.973	5637408.669	799.234

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.045
RMSE Z	0.053
GPS Method	RTN

PHOTOS:



JD100 R033656 KY_Cal027 Pavement 2019-04-10 16:28:47-04:00 Quad: Soldier



JD100 R033656 KY_Cal027 Pavement 2019-04-10 16:28:58-04:00 Quad: Soldier



JD100 R033656 KY_Cal027 Pavement 2019-04-10 16:29:09-04:00 Quad: Soldier



JD100 R033656 KY_Cal027 Pavement 2019-04-10 16:30:45-04:00 Quad: Soldier



Point ID	KY_CAL028
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Fallsburg

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3982454.383	5784366.720	696.436

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/05/2019
RMSE Hz	0.032
RMSE Z	0.047
GPS Method	FS PPK

PHOTOS:





Point ID	KY_CAL029
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Portsmouth

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4170135.768	5735356.190	535.402

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.015
RMSE Z	0.023
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL030
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Brushart

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4119603.647	5675689.963	608.293

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.015
RMSE Z	0.023
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL031
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Greenup

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4116785.111	5749513.550	557.368

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.036
RMSE Z	0.049
GPS Method	RTN

PHOTOS:



JD097 R033656 KY_Cal031 Pavement 2019-04-07 15:30:05-04:00 Quad: Greenup



JD097 R033656 KY_Cal031 Pavement 2019-04-07 15:30:12-04:00 Quad: Greenup



JD097 R033656 KY_Cal031 Pavement 2019-04-07 15:30:20-04:00 Quad: Greenup



JD097 R033656 KY_Cal031 Pavement 2019-04-07 15:30:28-04:00 Quad: Greenup



Point ID	KY_CAL032
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Load

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4083484.748	5723976.682	741.570

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.019
RMSE Z	0.028
GPS Method	RTN

PHOTOS:



JD097 R033656 KY_Cal032 Pavement 2019-04-07 14:23:51-04:00
Quad: Load



JD097 R033656 KY_Cal032 Pavement 2019-04-07 14:24:00-04:00
Quad: Load



JD097 R033656 KY_Cal032 Pavement 2019-04-07 14:24:09-04:00
Quad: Load



JD097 R033656 KY_Cal032 Pavement 2019-04-07 14:24:20-04:00
Quad: Load



Point ID	KY_CAL033
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Ironton

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4084783.916	5799535.619	557.732

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.027
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD097 R033656 KY_Cal033 Pavement 2019-04-07 09:24:21-04:00
Quad: Ironton



JD097 R033656 KY_Cal033 Pavement 2019-04-07 09:24:36-04:00
Quad: Ironton



JD097 R033656 KY_Cal033 Pavement 2019-04-07 09:24:52-04:00
Quad: Ironton



JD097 R033656 KY_Cal033 Pavement 2019-04-07 09:25:10-04:00
Quad: Ironton



Point ID	KY_CAL034
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Argillite

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4038420.408	5760454.237	840.887

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.023
RMSE Z	0.030
GPS Method	RTN

PHOTOS:



JD096 R033656 KY_Cal034 Pavement 2019-04-06 14:36:08-04:00 Quad: Argillite



JD096 R033656 KY_Cal034 Pavement 2019-04-06 14:36:20-04:00 Quad: Argillite



JD096 R033656 KY_Cal034 Pavement 2019-04-06 14:36:30-04:00 Quad: Argillite



JD096 R033656 KY_Cal034 Pavement 2019-04-06 14:36:45-04:00 Quad: Argillite



Point ID	KY_CAL035
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Catlettsburg

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4055046.423	5823850.196	546.196

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.030
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



JD096 R033656 KY_Cal035 Pavement 2019-04-06 16:01:58-04:00
Quad: Catlettsburg



JD096 R033656 KY_Cal035 Pavement 2019-04-06 16:02:10-04:00
Quad: Catlettsburg



JD096 R033656 KY_Cal035 Pavement 2019-04-06 16:02:22-04:00
Quad: Catlettsburg



JD096 R033656 KY_Cal035 Pavement 2019-04-06 16:02:35-04:00
Quad: Catlettsburg



Point ID	KY_CAL036
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Boltsfork

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4034669.562	5795986.201	671.409

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.032
RMSE Z	0.042
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL037
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Rush

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4007611.022	5776149.325	669.602

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/05/2019
RMSE Hz	0.047
RMSE Z	0.061
GPS Method	RTN

PHOTOS:



JD095 R033656 KY_Cal037 Pavement 2019-04-05 17:24:01-04:00 Quad: Rush



JD095 R033656 KY_Cal037 Pavement 2019-04-05 17:24:22-04:00 Quad: Rush



JD095 R033656 KY_Cal037 Pavement 2019-04-05 17:24:33-04:00 Quad: Rush



JD095 R033656 KY_Cal037 Pavement 2019-04-05 17:24:42-04:00 Quad: Rush



Point ID	KY_CAL038
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Rush

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3992550.446	5780078.286	695.110

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/05/2019
RMSE Hz	0.015
RMSE Z	0.061
GPS Method	FS PPK

PHOTOS:



JD095 R033656 KY_Cal038 Pavement 2019-04-05 14:59:57-04:00
Quad: Rush



JD095 R033656 KY_Cal038 Pavement 2019-04-05 15:00:08-04:00
Quad: Rush



JD095 R033656 KY_Cal038 Pavement 2019-04-05 15:00:18-04:00
Quad: Rush



JD095 R033656 KY_Cal038 Pavement 2019-04-05 15:00:27-04:00
Quad: Rush



Point ID	KY_CAL039
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Burnaugh

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4021319.522	5830254.436	572.791

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.028
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD096 R033656 KY_Ca1039 Pavement 2019-04-06 09:25:42-04:00
Quad: Burnaugh



JD096 R033656 KY_Ca1039 Pavement 2019-04-06 09:25:52-04:00
Quad: Burnaugh



JD096 R033656 KY_Ca1039 Pavement 2019-04-06 09:26:03-04:00
Quad: Burnaugh



JD096 R033656 KY_Ca1039 Pavement 2019-04-06 09:26:13-04:00
Quad: Burnaugh



Point ID	KY_CAL040
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Fallsburg

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3985901.484	5810569.353	609.257

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/05/2019
RMSE Hz	0.027
RMSE Z	0.040
GPS Method	FS PPK

PHOTOS:



JD095 R033656 Ky_Cal040 Pavement 2019-04-05
 Quad: Fallsburg 10:53:32-04:00



JD095 R033656 Ky_Cal040 Pavement 2019-04-05
 Quad: Fallsburg 10:53:48-04:00



JD095 R033656 Ky_Cal040 Pavement 2019-04-05
 Quad: Fallsburg 10:54:06-04:00



JD095 R033656 Ky_Cal040 Pavement 2019-04-05
 Quad: Fallsburg 10:54:39-04:00



Point ID	KY_CAL041
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Boltsfork

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4014195.513	5802711.342	688.020

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.027
RMSE Z	0.030
GPS Method	RTN

PHOTOS:



JD096 R033656 KY_Cal041 Pavement 2019-04-06 11:02:43-04:00
 Quad: Boltsfork



JD096 R033656 KY_Cal041 Pavement 2019-04-06 11:02:54-04:00
 Quad: Boltsfork



JD096 R033656 KY_Cal041 Pavement 2019-04-06 11:03:06-04:00
 Quad: Boltsfork



JD096 R033656 KY_Cal041 Pavement 2019-04-06 11:03:22-04:00
 Quad: Boltsfork



Point ID	KY_CAL042
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Prichard

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3970079.079	5824046.174	577.797

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.040
RMSE Z	0.059
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL043
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Webbville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3965784.091	5748432.104	623.227

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.011
RMSE Z	0.021
GPS Method	RTN

PHOTOS:



JD094 R033656 KY_Cal043 Pavement 2019-04-04 14:38:51-04:00
Quad: Webbville



JD094 R033656 KY_Cal043 Pavement 2019-04-04 14:39:04-04:00
Quad: Webbville



JD094 R033656 KY_Cal043 Pavement 2019-04-04 14:39:18-04:00
Quad: Webbville



JD094 R033656 KY_Cal043 Pavement 2019-04-04 14:39:52-04:00
Quad: Webbville



Point ID	KY_CAL044
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Adams

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3945112.158	5800015.872	637.623

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.044
RMSE Z	0.059
GPS Method	RTN

PHOTOS:



JD093 R033656 KY_Cal044 Pavement 2019-04-03 13:50:36-04:00
Quad: Adams



JD093 R033656 KY_Cal044 Pavement 2019-04-03 13:50:47-04:00
Quad: Adams



JD093 R033656 KY_Cal044 Pavement 2019-04-03 13:50:59-04:00
Quad: Adams



JD093 R033656 KY_Cal044 Pavement 2019-04-03 13:51:11-04:00
Quad: Adams



Point ID	KY_CAL045
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Redbush

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3898522.315	5730293.228	704.408

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.027
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD093 R033656 KY_Cal045 Gravel 2019-04-03 10:22:03-04:00 Quad: Redbush



JD093 R033656 KY_Cal045 Gravel 2019-04-03 10:22:15-04:00 Quad: Redbush



JD093 R033656 KY_Cal045 Gravel 2019-04-03 10:22:30-04:00 Quad: Redbush



JD093 R033656 KY_Cal045 Gravel 2019-04-03 10:22:46-04:00 Quad: Redbush



Point ID	KY_CAL046
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Blaine

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3925194.084	5761994.598	663.985

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.028
RMSE Z	0.034
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL047
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Richardson

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3872631.279	5793358.597	636.892

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.019
RMSE Z	0.023
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL048
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Louisa

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3926108.137	5842425.368	581.416

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.044
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



JD094 R033656 KY_Cal048 Pavement 2019-04-04 09:12:47-04:00 Quad: Louisa



JD094 R033656 KY_Cal048 Pavement 2019-04-04 09:13:00-04:00 Quad: Louisa



JD094 R033656 KY_Cal048 Pavement 2019-04-04 09:13:12-04:00 Quad: Louisa



JD094 R033656 KY_Cal048 Pavement 2019-04-04 09:13:24-04:00 Quad: Louisa



Point ID	KY_CAL049
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Louisa

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3912481.255	5822275.136	586.734

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.028
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL050
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Redbush

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3876354.519	5746981.017	819.080

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.021
RMSE Z	0.028
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL051
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Milo

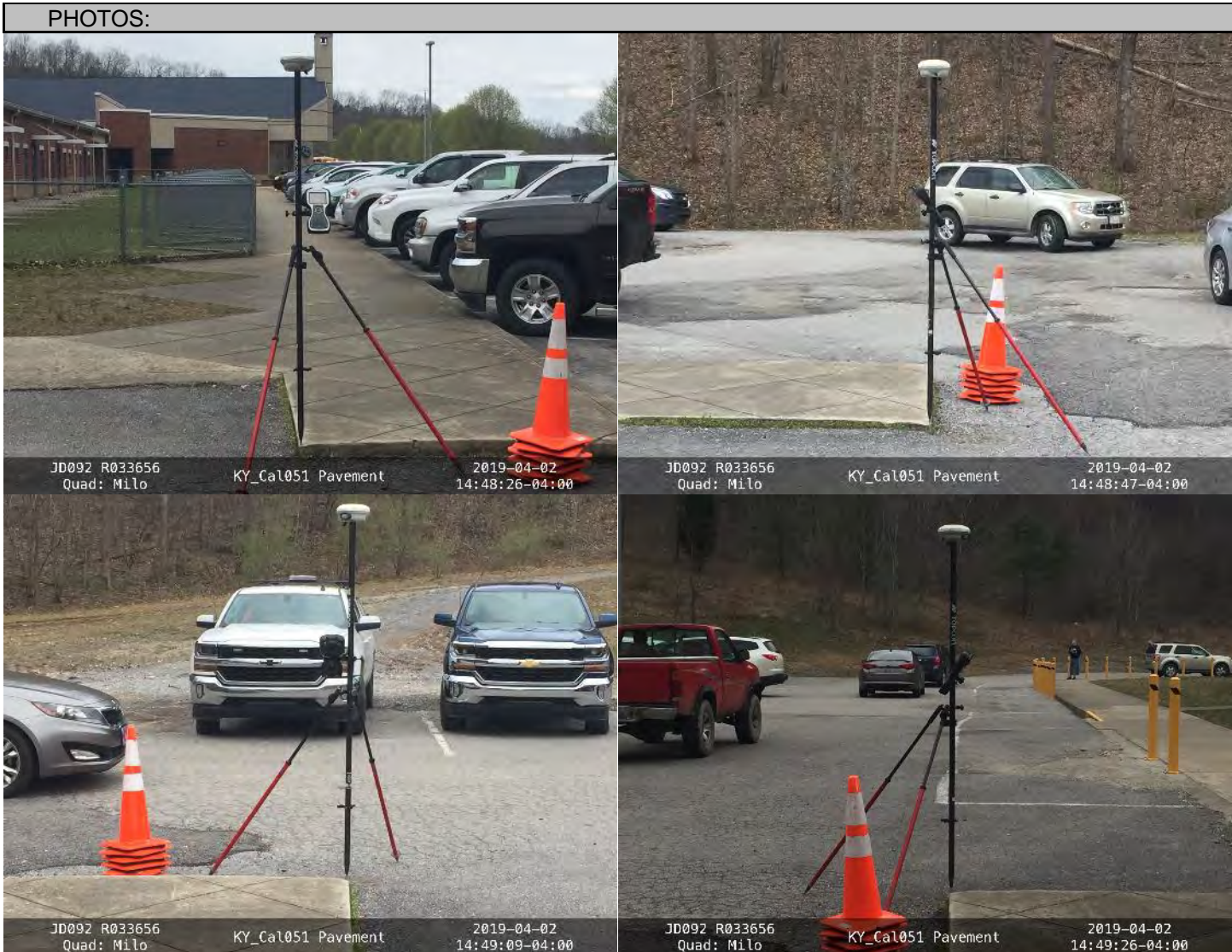
	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3867902.425	5837291.361	874.614

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.028
RMSE Z	0.036
GPS Method	RTN





Point ID	KY_CAL052
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Oil Springs

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3841234.274	5721848.427	921.465

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.055
RMSE Z	0.076
GPS Method	RTN

PHOTOS:



JD091 R033656 KY_Cal052 Pavement 2019-04-01 12:48:02-04:00
Quad: Oil Springs



JD091 R033656 KY_Cal052 Pavement 2019-04-01 12:48:13-04:00
Quad: Oil Springs



JD091 R033656 KY_Cal052 Pavement 2019-04-01 12:48:24-04:00
Quad: Oil Springs



JD091 R033656 KY_Cal052 Pavement 2019-04-01 12:48:38-04:00
Quad: Oil Springs



Point ID	KY_CAL053
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Paintsville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3837446.699	5765022.749	605.114

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.019
RMSE Z	0.025
GPS Method	RTN

PHOTOS:



JD091 R033656 KY_Cal053 Pavement 2019-04-01 09:33:23-04:00 Quad: Paintsville



JD091 R033656 KY_Cal053 Pavement 2019-04-01 09:33:34-04:00 Quad: Paintsville



JD091 R033656 KY_Cal053 Pavement 2019-04-01 09:33:45-04:00 Quad: Paintsville



JD091 R033656 KY_Cal053 Pavement 2019-04-01 09:34:01-04:00 Quad: Paintsville



Point ID	KY_CAL054
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Offutt

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3846285.689	5810757.976	1130.365

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.030
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL055
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Oil Springs

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3822846.007	5731660.411	872.702

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.027
RMSE Z	0.038
GPS Method	RTN

PHOTOS:



JD091 R033656 KY_Cal055 Pavement 2019-04-01 11:21:55-04:00 Quad: Oil Springs



JD091 R033656 KY_Cal055 Pavement 2019-04-01 11:22:06-04:00 Quad: Oil Springs



JD091 R033656 KY_Cal055 Pavement 2019-04-01 11:22:34-04:00 Quad: Oil Springs



JD091 R033656 KY_Cal055 Pavement 2019-04-01 11:22:54-04:00 Quad: Oil Springs



Point ID	KY_CAL056
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Ivyton

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3805067.916	5740298.284	685.796

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.023
RMSE Z	0.027
GPS Method	RTN

PHOTOS:



JD090 R033656 KY_Cal056 Pavement 2019-03-31 12:33:41-04:00 Quad: Ivyton



JD090 R033656 KY_Cal056 Pavement 2019-03-31 12:34:00-04:00 Quad: Ivyton



JD090 R033656 KY_Cal056 Pavement 2019-03-31 12:34:11-04:00 Quad: Ivyton



JD090 R033656 KY_Cal056 Pavement 2019-03-31 12:34:27-04:00 Quad: Ivyton



Point ID	KY_CAL057
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Prestonsburg

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3808658.471	5776611.228	619.192

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.032
RMSE Z	0.059
GPS Method	RTN

PHOTOS:



JD090 R033656 KY_Cal057 Pavement 2019-03-31 14:02:55-04:00
Quad: Prestonsburg



JD090 R033656 KY_Cal057 Pavement 2019-03-31 14:03:10-04:00
Quad: Prestonsburg



JD090 R033656 KY_Cal057 Pavement 2019-03-31 14:04:05-04:00
Quad: Prestonsburg



JD090 R033656 KY_Cal057 Pavement 2019-03-31 14:04:34-04:00
Quad: Prestonsburg



Point ID	KY_CAL058
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Offutt

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3815939.879	5816089.297	1212.163

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.032
RMSE Z	0.042
GPS Method	RTN

PHOTOS:



JD090 R033656 KY_Cal058 Pavement 2019-03-31 15:52:16-04:00
Quad: Offutt



JD090 R033656 KY_Cal058 Pavement 2019-03-31 15:52:28-04:00
Quad: Offutt



JD090 R033656 KY_Cal058 Pavement 2019-03-31 15:52:42-04:00
Quad: Offutt



JD090 R033656 KY_Cal058 Pavement 2019-03-31 15:52:52-04:00
Quad: Offutt



Point ID	KY_CAL059
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Inez

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3848331.243	5847792.725	668.542

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.023
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD092 R033656 KY_Cal059 Pavement 2019-04-02 10:47:14-04:00 Quad: Inez



JD092 R033656 KY_Cal059 Pavement 2019-04-02 10:47:26-04:00 Quad: Inez



JD092 R033656 KY_Cal059 Pavement 2019-04-02 10:47:36-04:00 Quad: Inez



JD092 R033656 KY_Cal059 Pavement 2019-04-02 10:47:45-04:00 Quad: Inez



Point ID	KY_CAL060
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Kermit

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3848017.459	5882865.361	624.231

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.053
RMSE Z	0.080
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL061
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Kermit

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3819119.996	5868150.446	1089.161

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.028
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL062
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Williamson

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3811690.182	5908542.702	654.631

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/29/2019
RMSE Hz	0.034
RMSE Z	0.057
GPS Method	RTN

PHOTOS:



JD088 R033656 KY_Cal062 Pavement 2019-03-29 13:54:11-04:00 Quad: Williamson



JD088 R033656 KY_Cal062 Pavement 2019-03-29 13:54:20-04:00 Quad: Williamson



JD088 R033656 KY_Cal062 Pavement 2019-03-29 13:54:27-04:00 Quad: Williamson



JD088 R033656 KY_Cal062 Pavement 2019-03-29 13:54:35-04:00 Quad: Williamson



Point ID	KY_CAL063
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Varney

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3782211.529	5871121.629	796.193

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/29/2019
RMSE Hz	0.040
RMSE Z	0.061
GPS Method	RTN

PHOTOS:



JD088 R033656 KY_Cal063 Pavement 2019-03-29 11:49:15-04:00 Quad: Pike



JD088 R033656 KY_Cal063 Pavement 2019-03-29 11:49:25-04:00 Quad: Pike



JD088 R033656 KY_Cal063 Pavement 2019-03-29 11:49:36-04:00 Quad: Pike



JD088 R033656 KY_Cal063 Pavement 2019-03-29 11:49:46-04:00 Quad: Pike



Point ID	KY_CAL064
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Ivyton

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

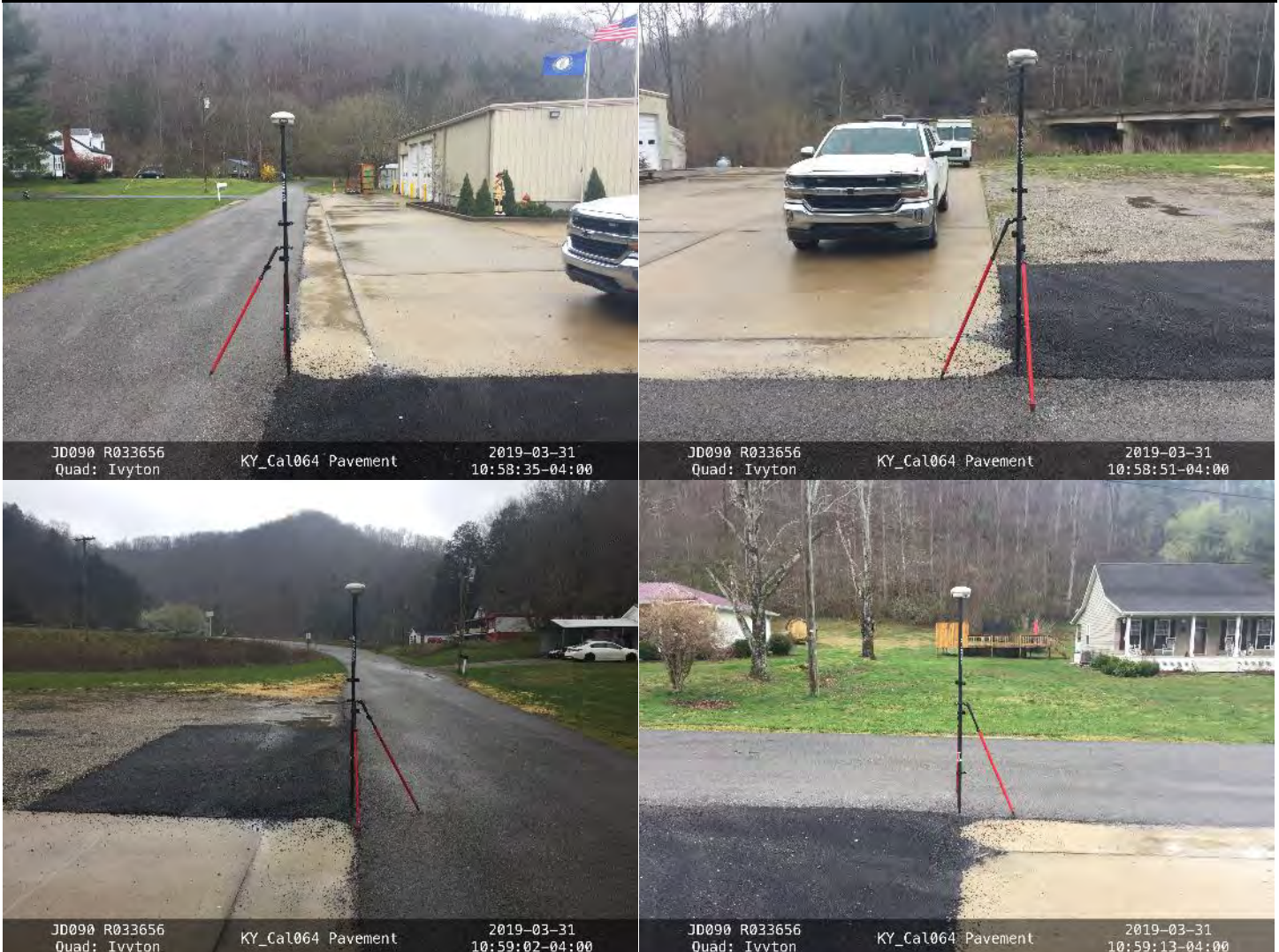
Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3781001.032	5740778.243	732.505

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.025
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL061
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Lancer

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3769406.721	5790673.141	667.554

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.023
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD089 R033656 KY_Cal065 Pavement 2019-03-30 10:03:35-04:00 Quad: Lancer



JD089 R033656 KY_Cal065 Pavement 2019-03-30 10:03:45-04:00 Quad: Lancer



JD089 R033656 KY_Cal065 Pavement 2019-03-30 10:03:57-04:00 Quad: Lancer



JD089 R033656 KY_Cal065 Pavement 2019-03-30 10:04:14-04:00 Quad: Lancer



Point ID	KY_CAL066
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Thomas

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3786895.217	5835627.811	662.600

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/29/2019
RMSE Hz	0.034
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



JD088 R033656 KY_Cal066 2019-03-29 09:01:26-04:00 Quad: Thomas



JD088 R033656 KY_Cal066 2019-03-29 09:01:47-04:00 Quad: Thomas



JD088 R033656 KY_Cal066 2019-03-29 09:02:01-04:00 Quad: Thomas



JD088 R033656 KY_Cal066 2019-03-29 09:02:39-04:00 Quad: Thomas



Point ID	KY_CAL067
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Williamson

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3770981.814	5904143.522	742.102

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.047
RMSE Z	0.080
GPS Method	RTN

PHOTOS:



JD087 R033656 KY_Cal067 Pavement 2019-03-28 10:35:00-04:00 Quad: Williamson



JD087 R033656 KY_Cal067 Pavement 2019-03-28 10:35:17-04:00 Quad: Williamson



JD087 R033656 KY_Cal067 Pavement 2019-03-28 10:35:31-04:00 Quad: Williamson



JD087 R033656 KY_Cal067 Pavement 2019-03-28 10:35:44-04:00 Quad: Williamson



Point ID	KY_CAL068
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Williamson

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

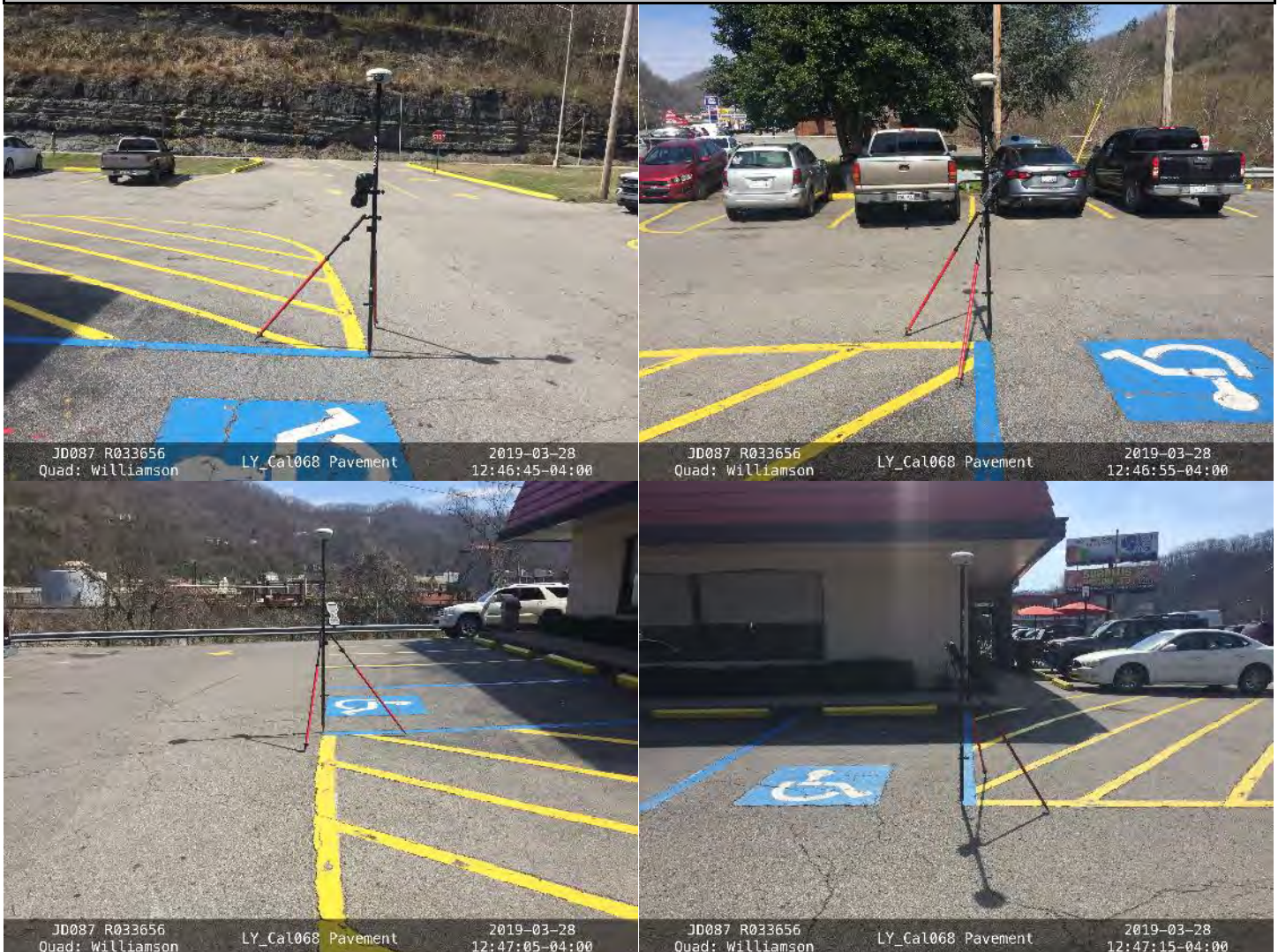
Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3784213.541	5927468.646	672.328

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.051
RMSE Z	0.070
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL069
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Martin

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3738730.108	5755735.804	745.297

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.028
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL070
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Harold

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3744146.537	5820970.426	656.787

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.023
RMSE Z	0.027
GPS Method	RTN

PHOTOS:



JD089 R033656 KY_Cal070 Pavement 2019-03-30 08:31:29-04:00 Quad: Harold



JD089 R033656 KY_Cal070 Pavement 2019-03-30 08:31:39-04:00 Quad: Harold



JD089 R033656 KY_Cal070 Pavement 2019-03-30 08:31:50-04:00 Quad: Harold



JD089 R033656 KY_Cal070 Pavement 2019-03-30 08:32:01-04:00 Quad: Harold



Point ID	KY_CAL071
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Meta

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3746150.824	5879126.382	758.168

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.034
RMSE Z	0.042
GPS Method	RTN

PHOTOS:



JD087 R033656
Quad: Meta
KY_Ca1071 PVD
2019-03-28
08:38:33-04:00



JD087 R033656
Quad: Meta
KY_Ca1071 PVD
2019-03-28
08:39:08-04:00



JD087 R033656
Quad: Meta
KY_Ca1071 PVD
2019-03-28
08:39:24-04:00



JD087 R033656
Quad: Meta
KY_Ca1071 PVD
2019-03-28
08:40:07-04:00



Point ID	KY_CAL072
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Belfry

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3746863.254	5932438.313	860.166

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.038
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



JD086 R033656
Quad: Belfry

KY_Ca1072 PVD

2019-03-27
16:51:23-04:00



JD086 R033656
Quad: Belfry

KY_Ca1072 PVD

2019-03-27
16:51:59-04:00



JD086 R033656
Quad: Belfry

KY_Ca1072 PVD

2019-03-27
16:52:10-04:00



JD086 R033656
Quad: Belfry

KY_Ca1072 PVD

2019-03-27
16:52:21-04:00



Point ID	KY_CAL073
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Matewan

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3749590.484	5965996.177	722.088

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.045
RMSE Z	0.080
GPS Method	RTN

PHOTOS:



JD086 R033656 KY_Cal073 Pavement 2019-03-27 15:43:45-04:00 Quad: Matewan



JD086 R033656 KY_Cal073 Pavement 2019-03-27 15:43:57-04:00 Quad: Matewan



JD086 R033656 KY_Cal073 Pavement 2019-03-27 15:44:09-04:00 Quad: Matewan



JD086 R033656 KY_Cal073 Pavement 2019-03-27 15:44:32-04:00 Quad: Matewan



Point ID	KY_CAL074
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Vest

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3716289.248	5692199.819	888.889

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.044
RMSE Z	0.070
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL075
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Carrie

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3663734.503	5687498.943	1241.051

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.034
RMSE Z	0.045
GPS Method	RTN

PHOTOS:



JD081 R033656 KY_Cal075 Pavement 2019-03-22 12:45:46-04:00
Quad: Carrie



JD081 R033656 KY_Cal075 Pavement 2019-03-22 12:45:58-04:00
Quad: Carrie



JD081 R033656 KY_Cal075 Pavement 2019-03-22 12:46:14-04:00
Quad: Carrie



JD081 R033656 KY_Cal075 Pavement 2019-03-22 12:46:26-04:00
Quad: Carrie



Point ID	KY_CAL076
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Knott
Quad	Vicco

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3700740.309	5765014.495	707.338

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-21-2019
RMSE Hz	0.040
RMSE Z	0.064
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL077
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Handshoe

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3681358.814	5732892.926	1104.394

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.045
RMSE Z	0.055
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL078
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Carrie

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3635064.651	5689605.184	984.421

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.038
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



JD082 R033656 KY_Cal078 Pavement 2019-03-23 11:25:43-04:00 Quad: Carrie



JD082 R033656 KY_Cal078 Pavement 2019-03-23 11:26:06-04:00 Quad: Carrie



JD082 R033656 KY_Cal078 Pavement 2019-03-23 11:26:21-04:00 Quad: Carrie



JD082 R033656 KY_Cal078 Pavement 2019-03-23 11:26:41-04:00 Quad: Carrie



Point ID	KY_CAL079
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Vicco

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3615394.087	5705746.185	950.763

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/19/2019
RMSE Hz	0.042
RMSE Z	0.053
GPS Method	RTN





Point ID	KY_CAL080
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Hindman

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3650268.730	5736142.900	1070.155

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.080
RMSE Z	0.121
GPS Method	RTN

PHOTOS:



J0081 R033656
Quad: Hindman
KY_Cal080 PVD
2019-03-22
14:48:03-04:00



J0081 R033656
Quad: Hindman
KY_Cal080 PVD
2019-03-22
14:48:18-04:00



J0081 R033656
Quad: Hindman
KY_Cal080 PVD
2019-03-22
14:48:30-04:00



J0081 R033656
Quad: Hindman
KY_Cal080 PVD
2019-03-22
14:48:39-04:00



Point ID	KY_CAL081
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Wheelwright

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3641404.770	5799036.115	1279.532

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.044
RMSE Z	0.063
GPS Method	RTN

PHOTOS:



JD082 R033656 2019-03-23
Quad: Wheelwright KY_Cal081 Pavement 17:04:21-04:00



JD082 R033656 2019-03-23
Quad: Wheelwright KY_Cal081 Pavement 17:04:32-04:00



JD082 R033656 2019-03-23
Quad: Wheelwright KY_Cal081 Pavement 17:04:49-04:00



JD082 R033656 2019-03-23
Quad: Wheelwright KY_Cal081 Pavement 17:05:15-04:00



Point ID	KY_CAL082
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Wayland

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3710646.209	5791026.462	686.068

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/24/2019
RMSE Hz	0.066
RMSE Z	0.106
GPS Method	RTN

PHOTOS:



JD083 R033656 Quad: Wayland KY_Cal082 PVD 2019-03-24 14:33:00-04:00



JD083 R033656 Quad: Wayland KY_Cal082 PVD 2019-03-24 14:33:13-04:00



JD083 R033656 Quad: Wayland KY_Cal082 PVD 2019-03-24 14:33:27-04:00



JD083 R033656 Quad: Wayland KY_Cal082 PVD 2019-03-24 14:33:46-04:00



Point ID	KY_CAL083
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	McDowell

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3680712.899	5816915.289	1063.354

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/24/2019
RMSE Hz	0.036
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



JD083 R033656 KY_Cal083 Pavement 2019-03-24 15:57:40-04:00 Quad: McDowell



JD083 R033656 KY_Cal083 Pavement 2019-03-24 15:57:51-04:00 Quad: McDowell



JD083 R033656 KY_Cal083 Pavement 2019-03-24 15:58:10-04:00 Quad: McDowell



JD083 R033656 KY_Cal083 Pavement 2019-03-24 15:58:24-04:00 Quad: McDowell



Point ID	KY_CAL084
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Pikeville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3714575.413	5859492.683	669.224

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/24/2019
RMSE Hz	0.015
RMSE Z	0.028
GPS Method	RTN

PHOTOS:



JD083 R033656 KY_Cal084 Pavement 2019-03-24 18:06:30-04:00 Quad: Pikeville



JD083 R033656 KY_Cal084 Pavement 2019-03-24 18:06:41-04:00 Quad: Pikeville



JD083 R033656 KY_Cal084 Pavement 2019-03-24 18:06:57-04:00 Quad: Pikeville



JD083 R033656 KY_Cal084 Pavement 2019-03-24 18:07:09-04:00 Quad: Pikeville



Point ID	KY_CAL085
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Letcher
Quad	Blackey

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3605926.907	5748058.625	1182.314

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.053
RMSE Z	0.080
GPS Method	RTN

PHOTOS:



JD082 R033656 Quad: Blackey KY_Ca1085 PVD 2019-03-23 15:35:49-04:00



JD082 R033656 Quad: Blackey KY_Ca1085 PVD 2019-03-23 15:35:59-04:00



JD082 R033656 Quad: Blackey KY_Ca1085 PVD 2019-03-23 15:36:09-04:00



JD082 R033656 Quad: Blackey KY_Ca1085 PVD 2019-03-23 15:36:33-04:00



Point ID	KY_CAL086
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Blackey

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3622048.013	5736254.902	1062.750

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.036
RMSE Z	0.053
GPS Method	RTN

PHOTOS:



JD082 R033656 KY_Cal086 PVD 2019-03-23 13:09:28-04:00 Quad: Blackey



JD082 R033656 KY_Cal086 PVD 2019-03-23 13:09:39-04:00 Quad: Blackey



JD082 R033656 KY_Cal086 PVD 2019-03-23 13:09:53-04:00 Quad: Blackey



JD082 R033656 KY_Cal086 PVD 2019-03-23 13:10:04-04:00 Quad: Blackey



Point ID	KY_CAL087
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Lick Creek

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3722753.707	5907440.004	904.385

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/262019
RMSE Hz	0.045
RMSE Z	0.066
GPS Method	RTN

PHOTOS:



JD085 R033656 KY_Cal087 Pavement 2019-03-26 14:16:47-04:00
Quad: Lick Creek



JD085 R033656 KY_Cal087 Pavement 2019-03-26 14:17:00-04:00
Quad: Lick Creek



JD085 R033656 KY_Cal087 Pavement 2019-03-26 14:17:12-04:00
Quad: Lick Creek



JD085 R033656 KY_Cal087 Pavement 2019-03-26 14:17:24-04:00
Quad: Lick Creek



Point ID	KY_CAL088
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Matewan

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3733162.136	5963684.655	842.301

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.051
RMSE Z	0.061
GPS Method	RTN

PHOTOS:



JD086 R033656 KY_Ca1088 PVD 2019-03-27 12:16:11-04:00 Quad: Matewan



JD086 R033656 KY_Ca1088 PVD 2019-03-27 12:16:20-04:00 Quad: Matewan



JD086 R033656 KY_Ca1088 PVD 2019-03-27 12:16:41-04:00 Quad: Matewan



JD086 R033656 KY_Ca1088 PVD 2019-03-27 12:16:56-04:00 Quad: Matewan



Point ID	KY_CAL089
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Pikeville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3691688.321	5857916.925	1113.098

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.021
RMSE Z	0.030
GPS Method	RTN

PHOTOS:



JD085 R033656 KY_Cal089 Pavement 2019-03-26 17:05:14-04:00 Quad: Pikeville



JD085 R033656 KY_Cal089 Pavement 2019-03-26 17:05:26-04:00 Quad: Pikeville



JD085 R033656 KY_Cal089 Pavement 2019-03-26 17:05:36-04:00 Quad: Pikeville



JD085 R033656 KY_Cal089 Pavement 2019-03-26 17:05:49-04:00 Quad: Pikeville



Point ID	KY_CAL090
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Millard

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3697453.171	5889316.970	689.933

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.036
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



JD085 R033656 KY_Cal090 Pavement 2019-03-26 15:41:28-04:00
Quad: Millard



JD085 R033656 KY_Cal090 Pavement 2019-03-26 15:41:43-04:00
Quad: Millard



JD085 R033656 KY_Cal090 Pavement 2019-03-26 15:42:24-04:00
Quad: Millard



JD085 R033656 KY_Cal090 Pavement 2019-03-26 15:42:54-04:00
Quad: Millard



Point ID	KY_CAL091
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Lick Creek

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3699125.248	5931806.345	796.442

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.030
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD085 R033656 KY_Cal091 Pavement 2019-03-26 12:41:59-04:00 Quad: Lick Creek



JD085 R033656 KY_Cal091 Pavement 2019-03-26 12:42:14-04:00 Quad: Lick Creek



JD085 R033656 KY_Cal091 Pavement 2019-03-26 12:42:30-04:00 Quad: Lick Creek



JD085 R033656 KY_Cal091 Pavement 2019-03-26 12:42:44-04:00 Quad: Lick Creek



Point ID	KY_CAL092
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Dorton

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3660489.682	5842432.964	836.626

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/24/2019
RMSE Hz	0.028
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL093
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hellier

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3666253.247	5885165.960	1080.231

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.040
RMSE Z	0.045
GPS Method	RTN

PHOTOS:



JD085 R033656 KY_Cal093 Pavement 2019-03-26 09:37:15-04:00 Quad: Hellier



JD085 R033656 KY_Cal093 Pavement 2019-03-26 09:37:34-04:00 Quad: Hellier



JD085 R033656 KY_Cal093 Pavement 2019-03-26 09:37:56-04:00 Quad: Hellier



JD085 R033656 KY_Cal093 Pavement 2019-03-26 09:38:12-04:00 Quad: Hellier



Point ID	KY_CAL094
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Elkhorn City

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3673972.370	5921414.776	1334.059

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.025
RMSE Z	0.038
GPS Method	RTN

PHOTOS:



JD085 R033656 KY_Cal094 Pavement 2019-03-26
 Quad: Elkhorn City 10:53:44-04:00



JD085 R033656 KY_Cal094 Pavement 2019-03-26
 Quad: Elkhorn City 10:54:01-04:00



JD085 R033656 KY_Cal094 Pavement 2019-03-26
 Quad: Elkhorn City 10:54:16-04:00



JD085 R033656 KY_Cal094 Pavement 2019-03-26
 Quad: Elkhorn City 10:54:39-04:00



Point ID	KY_CAL095
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Knott
Quad	Kite

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3658485.543	5757123.103	979.923

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-21-2019
RMSE Hz	0.063
RMSE Z	0.102
GPS Method	RTN

PHOTOS:



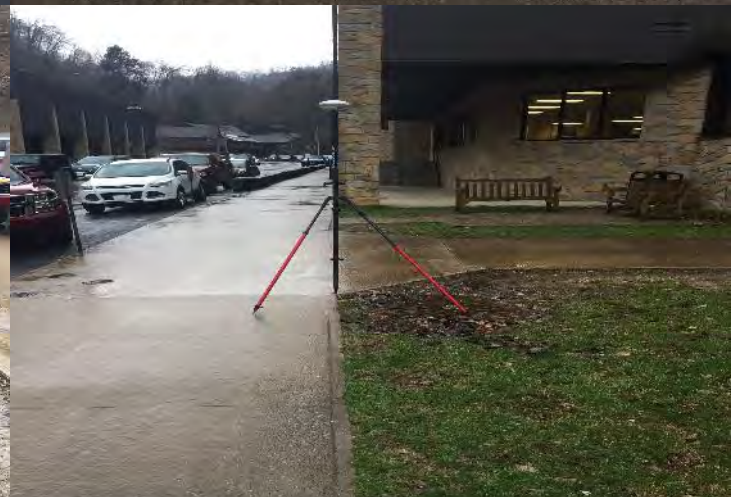
JD080 R033656 KY_CuL095 2019-03-21
 Quad: Kite Concrete 13:41:40-04:00



JD080 R033656 KY_CuL095 2019-03-21
 Quad: Kite Concrete 13:41:55-04:00



JD080 R033656 KY_CuL095 2019-03-21
 Quad: Kite Concrete 13:42:08-04:00



JD080 R033656 KY_CuL095 2019-03-21
 Quad: Kite Concrete 13:42:23-04:00



Point ID	KY_CAL096
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Knott
Quad	Kite

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3636879.429	5767252.899	1234.519

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-21-2019
RMSE Hz	0.045
RMSE Z	0.049
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL097
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Brushart

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4087476.339	5684360.845	737.600

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/09/2019
RMSE Hz	0.013
RMSE Z	0.030
GPS Method	RTN

PHOTOS:



JD099 R033656 KY_Cal097 Pavement 2019-04-09 12:32:05-04:00 Quad: Brushart



JD099 R033656 KY_Cal097 Pavement 2019-04-09 12:32:22-04:00 Quad: Brushart



JD099 R033656 KY_Cal097 Pavement 2019-04-09 12:32:47-04:00 Quad: Brushart



JD099 R033656 KY_Cal097 Pavement 2019-04-09 12:32:58-04:00 Quad: Brushart



Point ID	KY_CAL098
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Stricklett

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4072892.110	5600842.082	713.283

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.019
RMSE Z	0.028
GPS Method	RTN

PHOTOS:



JD100 R033656 KY_Cal098 Pavement 2019-04-10 11:04:54-04:00
Quad: Stricklett



JD100 R033656 KY_Cal098 Pavement 2019-04-10 11:05:06-04:00
Quad: Stricklett



JD100 R033656 KY_Cal098 Pavement 2019-04-10 11:05:19-04:00
Quad: Stricklett



JD100 R033656 KY_Cal098 Pavement 2019-04-10 11:05:33-04:00
Quad: Stricklett



Point ID	KY_CAL099
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Load

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4126431.445	5727440.652	572.505

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.021
RMSE Z	0.030
GPS Method	RTN

PHOTOS:



JD098 R033656 KY_Cal099 Pavement 2019-04-08 09:17:26-04:00 Quad: Load



JD098 R033656 KY_Cal099 Pavement 2019-04-08 09:17:36-04:00 Quad: Load



JD098 R033656 KY_Cal099 Pavement 2019-04-08 09:17:46-04:00 Quad: Load



JD098 R033656 KY_Cal099 Pavement 2019-04-08 09:17:57-04:00 Quad: Load



Point ID	KY_CAL100
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Jenkins East

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3629879.154	5832079.556	1135.490

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.036
RMSE Z	0.068
GPS Method	RTN

PHOTOS:



JD084 R033656 KY_Cal100 Pavement 2019-03-25 13:59:32-04:00
Quad: Jenkins East



JD084 R033656 KY_Cal100 Pavement 2019-03-25 14:00:16-04:00
Quad: Jenkins East



JD084 R033656 KY_Cal100 Pavement 2019-03-25 14:01:09-04:00
Quad: Jenkins East



JD084 R033656 KY_Cal100 Pavement 2019-03-25 14:02:27-04:00
Quad: Jenkins East



Point ID	KY_CAL101
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hellier

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3659101.619	5866283.841	1353.314

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.042
RMSE Z	0.061
GPS Method	RTN

PHOTOS:



JD084 R033656 KY_Cal101 Pavement 2019-03-25 15:32:02-04:00
Quad: Hellier



JD084 R033656 KY_Cal101 Pavement 2019-03-25 15:32:52-04:00
Quad: Hellier



JD084 R033656 KY_Cal101 Pavement 2019-03-25 15:33:07-04:00
Quad: Hellier



JD084 R033656 KY_Cal101 Pavement 2019-03-25 15:34:24-04:00
Quad: Hellier



Point ID	KY_CAL102
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Jenkins East

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3626866.128	5862146.861	1233.705

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.042
RMSE Z	0.059
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL103
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hellier

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3637322.859	5886642.448	1061.753

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.032
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD083 R033656 KY_Cal103 Pavement 2019-03-25 09:42:35-04:00 Quad: Pikeville



JD083 R033656 KY_Cal103 Pavement 2019-03-25 09:42:49-04:00 Quad: Pikeville



JD083 R033656 KY_Cal103 Pavement 2019-03-25 09:42:59-04:00 Quad: Pikeville



JD083 R033656 KY_Cal103 Pavement 2019-03-25 09:43:14-04:00 Quad: Pikeville



Point ID	KY_CAL104
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hurley

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3720584.110	5994120.846	877.341

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.064
RMSE Z	0.108
GPS Method	RTN

PHOTOS:



JD086 R033656 KY_Cal104 Pavement 2019-03-27 10:38:01-04:00 Quad: Hurley



JD086 R033656 KY_Cal104 Pavement 2019-03-27 10:38:11-04:00 Quad: Hurley



JD086 R033656 KY_Cal104 Pavement 2019-03-27 10:38:19-04:00 Quad: Hurley



JD086 R033656 KY_Cal104 Pavement 2019-03-27 10:38:31-04:00 Quad: Hurley



Point ID	KY_CAL105
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Broad Bottom

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3766354.061	5846740.874	687.919

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.040
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



JD087 R033656 KY_Cal105 Pavement 2019-03-28 15:37:29-04:00
Quad: Broad Bottom



JD087 R033656 KY_Cal105 Pavement 2019-03-28 15:37:43-04:00
Quad: Broad Bottom



JD087 R033656 KY_Cal105 Pavement 2019-03-28 15:37:59-04:00
Quad: Broad Bottom



JD087 R033656 KY_Cal105 Pavement 2019-03-28 15:38:08-04:00
Quad: Broad Bottom



Point ID	KY_CAL106
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Tollesboro

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4112092.416	5557657.168	741.468

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.036
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL107
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Argillite

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4074907.279	5767623.592	826.580

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.030
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



JD097 R033656 KY_Cal107 Pavement 2019-04-07 10:46:24-04:00 Quad: Argillite



JD097 R033656 KY_Cal107 Pavement 2019-04-07 10:46:37-04:00 Quad: Argillite



JD097 R033656 KY_Cal107 Pavement 2019-04-07 10:46:51-04:00 Quad: Argillite



JD097 R033656 KY_Cal107 Pavement 2019-04-07 10:47:03-04:00 Quad: Argillite



Point ID	KY_CAL108
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Oldtown

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4052242.980	5721372.101	645.035

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.044
RMSE Z	0.063
GPS Method	RTN

PHOTOS:



JD097 R033656 KY_Cal108 Pavement 2019-04-07 12:41:16-04:00 Quad: Oldtown



JD097 R033656 KY_Cal108 Pavement 2019-04-07 12:41:26-04:00 Quad: Oldtown



JD097 R033656 KY_Cal108 Pavement 2019-04-07 12:41:38-04:00 Quad: Oldtown



JD097 R033656 KY_Cal108 Pavement 2019-04-07 12:41:49-04:00 Quad: Oldtown



Point ID	KY_CAL109
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Switzer

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4013242.098	5204734.383	703.857

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.015
RMSE Z	0.025
GPS Method	FS





Point ID	KY_CAL110
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Henry
Quad	Eminence

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4019000.437	5088444.785	904.237

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-05-2019
RMSE Hz	0.034
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



KY LiDAR KY Cal110 2019-04-05 12:34:05-04:00 KY LiDAR KY Cal110 2019-04-05 12:34:00-04:00



KY LiDAR KY Cal110 2019-04-05 12:33:55-04:00 KY LiDAR KY Cal110 2019-04-05 12:33:51-04:00



Point ID	KY_CAL111
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Oldham
Quad	Crestwood

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3999263.617	5009077.636	679.697

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-04-2019
RMSE Hz	0.038
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



KY LiDAR KY Cal111 2019-04-04 15:18:40-04:00 KY LiDAR KY Cal111 2019-04-04 15:18:45-04:00



KY LiDAR KY Cal111 2019-04-04 15:18:50-04:00 KY LiDAR KY Cal111 2019-04-04 15:18:55-04:00



Point ID	KY_CAL112
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Switzer

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3982280.662	5206675.183	787.042

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-07-2019
RMSE Hz	0.030
RMSE Z	0.042
GPS Method	RTN

PHOTOS:



KY LiDAR KY_Cal112 2019-04-07 14:44:02-04:00



KY LiDAR KY_Cal112 2019-04-07 14:43:58-04:00



KY LiDAR KY_Cal112 2019-04-07 14:43:51-04:00



KY LiDAR KY_Cal112 2019-04-07 14:43:46-04:00



Point ID	KY_CAL113
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Switzer

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3991945.736	5180192.779	718.056

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-07-2019
RMSE Hz	0.028
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



KY LiDAR KY_Cal113 2019-04-07 17:12:46-04:00 KY LiDAR KY_Cal113 2019-04-07 17:12:42-04:00



KY LiDAR KY_Cal113 2019-04-07 17:12:35-04:00 KY LiDAR KY_Cal113 2019-04-07 17:12:30-04:00



Point ID	KY_CAL114
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	North Pleasureville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4002506.507	5103224.361	891.832

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-05-2019
RMSE Hz	0.036
RMSE Z	0.042
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL115
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	Shelbyville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3970954.583	5072193.659	734.349

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.038
RMSE Z	0.047
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL116
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	Ballardsville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3989709.968	5042104.196	814.926

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-04-2019
RMSE Hz	0.038
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



KY LiDAR KY Cal116 2019-04-04 16:22:00-04:00 KY LiDAR KY Cal116 2019-04-04 16:22:05-04:00



KY LiDAR KY Cal116 2019-04-04 16:22:11-04:00 KY LiDAR KY Cal116 2019-04-04 16:22:16-04:00



Point ID	KY_CAL117
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Jefferson
Quad	Fisherville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3972361.027	5018078.998	672.056

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.032
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL118
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	North Pleasureville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3982885.933	5119814.782	894.352

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.036
RMSE Z	0.053
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL119
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Frankfort West

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3960058.597	5167495.944	800.756

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-07-2019
RMSE Hz	0.038
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



KY LiDAR KY Cal119 2019-04-07
13:30:10-04:00

KY LiDAR KY Cal119 2019-04-07
13:30:04-04:00



KY LiDAR KY Cal119 2019-04-07
13:29:59-04:00



KY LiDAR KY Cal119 2019-04-07
13:29:54-04:00



Point ID	KY_CAL120
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Alton Station

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3927021.059	5161635.926	790.238

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.028
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL121
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Spencer
Quad	Taylorville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3897179.172	5061032.570	730.323

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.034
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL122
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	Waddy

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3942641.773	5102082.738	757.321

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.032
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL123
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	Simpsonville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3943454.497	5046432.394	762.357

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.042
RMSE Z	0.063
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL124
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Spencer
Quad	Waterford

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3901304.488	5012572.132	533.532

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.036
RMSE Z	0.049
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL125
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Fairfield

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3877224.295	4995779.812	682.896

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.042
RMSE Z	0.057
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL126
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Bloomfield

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3856074.896	5044468.594	713.437

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.051
RMSE Z	0.070
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL127
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Chaplin

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3861477.772	5091669.652	843.286

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.028
RMSE Z	0.051
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL128
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Fairfield

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3851056.695	5000827.035	699.395

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.030
RMSE Z	0.042
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL129
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Washington
Quad	Maud

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3800409.763	5039636.180	520.396

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.032
RMSE Z	0.049
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL130
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Bardstown

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3810290.765	4997190.643	603.483

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.028
RMSE Z	0.047
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL131
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Bullet
Quad	Lebanon Junction

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3823069.836	4933615.834	457.033

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.027
RMSE Z	0.030
GPS Method	RTN

PHOTOS:





Point ID	KYCAL_132
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Larue
Quad	New Haven

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3775903.847	4959245.980	463.234

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0

Date (MM-DD-YYYY)	03-16-2019
RMSE Hz	0.040
RMSE Z	0.051
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL133
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Marion
Quad	Loretto

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3769143.001	5008943.219	683.988

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.032
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL134
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Howardstown

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3751213.401	4991103.899	570.573

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.042
RMSE Z	0.053
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL135
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Howardstown

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3720383.775	4970109.413	523.099

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-04-2019
RMSE Hz	0.045
RMSE Z	0.068
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL136
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Centerville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3961300.685	5309697.075	956.209

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.036
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL137
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Scott
Quad	Georgetown

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3948743.405	5266329.240	846.409

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.034
RMSE Z	0.047
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL138
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Lexington East

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3928603.918	5316678.451	920.749

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.027
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL139
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Woodford
Quad	Versailles

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3905725.643	5236065.782	900.234

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.030
RMSE Z	0.053
GPS Method	RTN

PHOTOS:



KY LiDAR KY_Cal139 2019-04-08 12:39:05-04:00



KY LiDAR KY_Cal139 2019-04-08 12:39:01-04:00



KY LiDAR KY_Cal139 2019-04-08 12:38:56-04:00



KY LiDAR KY_Cal139 2019-04-08 12:38:52-04:00



Point ID	KY_CAL140
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Lexington East

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3898521.133	5284047.325	1016.681

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.028
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL141
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Madison
Quad	Ford

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3845863.420	5328924.276	925.959

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.028
RMSE Z	0.034
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL142
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Jessamine
Quad	Nicolaville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3854092.220	5264184.009	1009.942

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.032
RMSE Z	0.034
GPS Method	RTN

PHOTOS:





Point ID	KY_CAL143
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Garrard
Quad	Bryantsville

	Aerial Target
X	LiDAR Ground Control
	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3797005.194	5246091.460	831.944

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.028
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





BARE EARTH POINT LOG SHEETS



Point ID	BE001
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Walton

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4178318.195	5273598.556	654.503

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/27/2019
RMSE Hz	0.019
RMSE Z	0.027
GPS Method	RTN

PHOTOS:



JD117 R033656
Quad: Walton
BE001 Gravel
2019-04-27
11:07:19-04:00



JD117 R033656
Quad: Walton
BE001 Gravel
2019-04-27
11:07:31-04:00



JD117 R033656
Quad: Walton
BE001 Gravel
2019-04-27
11:07:42-04:00



JD117 R033656
Quad: Walton
BE001 Gravel
2019-04-27
11:07:53-04:00



Point ID	BE002
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Campbell
Quad	Butler

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4207557.435	5345801.364	607.955

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.027
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD118 R033656
Quad: Butler
BE002 Gravel
2019-04-28
09:57:10-04:00



JD118 R033656
Quad: Butler
BE002 Gravel
2019-04-28
09:57:22-04:00



JD118 R033656
Quad: Butler
BE002 Gravel
2019-04-28
09:57:32-04:00



JD118 R033656
Quad: Butler
BE002 Gravel
2019-04-28
09:57:43-04:00



Point ID	BE003
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Kelat

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4108997.267	5344652.109	585.146

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.030
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD118 R033656 BE003 Gravel 2019-04-28 15:37:53-04:00 Quad: Kelat



JD118 R033656 BE003 Gravel 2019-04-28 15:38:05-04:00 Quad: Kelat



JD118 R033656 BE003 Gravel 2019-04-28 15:38:17-04:00 Quad: Kelat



JD118 R033656 BE003 Gravel 2019-04-28 15:38:27-04:00 Quad: Kelat



Point ID	BE004
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Claysville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4102831.326	5375773.986	628.355

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.059
RMSE Z	0.076
GPS Method	RTN

PHOTOS:



JD118 R033656 BE004 Gravel 2019-04-28 17:45:13-04:00 Quad: Claysville



JD118 R033656 BE004 Gravel 2019-04-28 17:45:25-04:00 Quad: Claysville



JD118 R033656 BE004 Gravel 2019-04-28 17:45:37-04:00 Quad: Claysville



JD118 R033656 BE004 Gravel 2019-04-28 17:45:47-04:00 Quad: Claysville



Point ID	BE005
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Sardis

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4109365.387	5425958.579	859.834

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.032
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	BE006
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Elizaville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4064589.332	5460414.413	915.631

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.034
RMSE Z	0.061
GPS Method	RTN

PHOTOS:



JD116 R033656 BE006 Gravel 2019-04-26 11:35:40-04:00 Quad: Elizaville



JD116 R033656 BE006 Gravel 2019-04-26 11:35:50-04:00 Quad: Elizaville



JD116 R033656 BE006 Gravel 2019-04-26 11:35:58-04:00 Quad: Elizaville



JD116 R033656 BE006 Gravel 2019-04-26 11:36:08-04:00 Quad: Elizaville



Point ID	BE007
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Orangeburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4117976.298	5518873.406	512.040

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.028
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD116 R033656 BE007 Gravel 2019-04-26 17:07:12-04:00 Quad: Orangeburg



JD116 R033656 BE007 Gravel 2019-04-26 17:07:27-04:00 Quad: Orangeburg



JD116 R033656 BE007 Gravel 2019-04-26 17:07:43-04:00 Quad: Orangeburg



JD116 R033656 BE007 Gravel 2019-04-26 17:07:55-04:00 Quad: Orangeburg



Point ID	BE008
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Vanceburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4089136.977	5610210.561	705.268

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.017
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD100 R033656 BE008 Gravel 2019-04-10 09:00:08-04:00 Quad: Vanceburg



JD100 R033656 BE008 Gravel 2019-04-10 09:00:21-04:00 Quad: Vanceburg



JD100 R033656 BE008 Gravel 2019-04-10 09:00:33-04:00 Quad: Vanceburg



JD100 R033656 BE008 Gravel 2019-04-10 09:00:45-04:00 Quad: Vanceburg



Point ID	BE009
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Brushart

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4087419.153	5684334.442	733.834

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/09/2019
RMSE Hz	0.013
RMSE Z	0.025
GPS Method	RTN

PHOTOS:



JD099 R033656 BE009 Gravel 2019-04-09 11:45:13-04:00 Quad: Brushart



JD099 R033656 BE009 Gravel 2019-04-09 11:45:25-04:00 Quad: Brushart



JD099 R033656 BE009 Gravel 2019-04-09 11:45:34-04:00 Quad: Brushart



JD099 R033656 BE009 Gravel 2019-04-09 11:45:45-04:00 Quad: Brushart



Point ID	BE010
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Greenup

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4116755.409	5749523.634	555.278

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.032
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



JD097 R033656 BE010 Gravel 2019-04-07 15:18:56-04:00 Quad: Greenup



JD097 R033656 BE010 Gravel 2019-04-07 15:19:06-04:00 Quad: Greenup



JD097 R033656 BE010 Gravel 2019-04-07 15:19:16-04:00 Quad: Greenup



JD097 R033656 BE010 Gravel 2019-04-07 15:19:28-04:00 Quad: Greenup



Point ID	BE011
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Oldtown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4052224.129	5721397.290	641.104

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.036
RMSE Z	0.049
GPS Method	RTN

PHOTOS:





Point ID	BE012
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Argillite

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4074949.371	5767649.517	824.408

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.019
RMSE Z	0.027
GPS Method	RTN

PHOTOS:





Point ID	BE013
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Burnaugh

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4021347.015	5830232.263	573.027

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.025
RMSE Z	0.030
GPS Method	RTN

PHOTOS:



JD096 R033656 BE013 Gravel 2019-04-06 09:08:22-04:00 Quad: Burnaugh



JD096 R033656 BE013 Gravel 2019-04-06 09:08:33-04:00 Quad: Burnaugh



JD096 R033656 BE013 Gravel 2019-04-06 09:08:45-04:00 Quad: Burnaugh



JD096 R033656 BE013 Gravel 2019-04-06 09:08:55-04:00 Quad: Burnaugh



Point ID	BE014
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Argillite

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4013949.240	5802783.179	700.566

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.036
RMSE Z	0.053
GPS Method	RTN

PHOTOS:



JD096 R033656 BE014 Gravel 2019-04-06 10:46:40-04:00 Quad: Boltsfork



JD096 R033656 BE014 Gravel 2019-04-06 10:46:53-04:00 Quad: Boltsfork



JD096 R033656 BE014 Gravel 2019-04-06 10:47:05-04:00 Quad: Boltsfork



JD096 R033656 BE014 Gravel 2019-04-06 10:47:18-04:00 Quad: Boltsfork



Point ID	BE015
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Prichard

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3970049.578	5823896.370	580.317

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.040
RMSE Z	0.057
GPS Method	RTN

PHOTOS:



JD094 R033656 BE015 Gravel 2019-04-04 11:51:30-04:00 Quad: Prichard



JD094 R033656 BE015 Gravel 2019-04-04 11:51:47-04:00 Quad: Prichard



JD094 R033656 BE015 Gravel 2019-04-04 11:51:58-04:00 Quad: Prichard



JD094 R033656 BE015 Gravel 2019-04-04 11:52:11-04:00 Quad: Prichard



Point ID	BE016
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Webbville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3965895.981	5748186.732	619.372

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.013
RMSE Z	0.025
GPS Method	RTN

PHOTOS:





Point ID	BE017
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Blaine

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3925330.439	5761733.010	672.262

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.028
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD093 R033656 Quad: Blaine BE017 Gravel 2019-04-03 11:32:42-04:00



JD093 R033656 Quad: Blaine BE017 Gravel 2019-04-03 11:32:56-04:00



JD093 R033656 Quad: Blaine BE017 Gravel 2019-04-03 11:33:16-04:00



JD093 R033656 Quad: Blaine BE017 Gravel 2019-04-03 11:33:31-04:00



Point ID	BE018
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Louisa

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3912475.229	5822350.867	585.832

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.047
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



JD093 R033656 BE018 Gravel 2019-04-03 16:06:35-04:00 Quad: Louisa



JD093 R033656 BE018 Gravel 2019-04-03 16:06:46-04:00 Quad: Louisa



JD093 R033656 BE018 Gravel 2019-04-03 16:06:56-04:00 Quad: Louisa



JD093 R033656 BE018 Gravel 2019-04-03 16:07:09-04:00 Quad: Louisa



Point ID	BE019
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Redbush

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3898495.223	5730260.033	705.330

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.025
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD093 R033656 BE019 Gravel 2019-04-03 10:08:23-04:00 Quad: Redbush



JD093 R033656 BE019 Gravel 2019-04-03 10:08:36-04:00 Quad: Redbush



JD093 R033656 BE019 Gravel 2019-04-03 10:08:50-04:00 Quad: Redbush



JD093 R033656 BE019 Gravel 2019-04-03 10:09:01-04:00 Quad: Redbush



Point ID	BE020
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Redbush

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3876177.504	5746886.143	814.890

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.023
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD091 R033656 BE020 Gravel 2019-04-01 17:02:03-04:00
Quad: Redbush



JD091 R033656 BE020 Gravel 2019-04-01 17:02:13-04:00
Quad: Redbush



JD091 R033656 BE020 Gravel 2019-04-01 17:02:34-04:00
Quad: Redbush



JD091 R033656 BE020 Gravel 2019-04-01 17:02:52-04:00
Quad: Redbush



Point ID	BE021
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Offutt

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3846340.401	5810688.773	1127.675

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.038
RMSE Z	0.045
GPS Method	RTN

PHOTOS:



JD092 R033656 BE021 Gravel 2019-04-02 09:11:31-04:00 Quad: Offutt



JD092 R033656 BE021 Gravel 2019-04-02 09:11:43-04:00 Quad: Offutt



JD092 R033656 BE021 Gravel 2019-04-02 09:11:57-04:00 Quad: Offutt



JD092 R033656 BE021 Gravel 2019-04-02 09:12:09-04:00 Quad: Offutt



Point ID	BE022
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Ivyton

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3805053.052	5740224.755	684.070

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.025
RMSE Z	0.028
GPS Method	RTN

PHOTOS:



JD090 R033656 BE022 Gravel 2019-03-31 12:23:06-04:00 Quad: Ivyton



JD090 R033656 BE022 Gravel 2019-03-31 12:23:19-04:00 Quad: Ivyton



JD090 R033656 BE022 Gravel 2019-03-31 12:23:36-04:00 Quad: Ivyton



JD090 R033656 BE022 Gravel 2019-03-31 12:24:01-04:00 Quad: Ivyton



Point ID	BE023
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Ivyton

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3780965.427	5740777.538	732.597

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.025
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD090 R033656 BE023 Gravel 2019-03-31 10:43:12-04:00 Quad: Ivyton



JD090 R033656 BE023 Gravel 2019-03-31 10:43:24-04:00 Quad: Ivyton



JD090 R033656 BE023 Gravel 2019-03-31 10:43:37-04:00 Quad: Ivyton



JD090 R033656 BE023 Gravel 2019-03-31 10:43:48-04:00 Quad: Ivyton



Point ID	BE024
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Martin

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3738733.520	5755701.519	745.130

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.030
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD089 R033656 BE024 Gravel 2019-03-30 12:31:27-04:00 Quad: Martin



JD089 R033656 BE024 Gravel 2019-03-30 12:31:43-04:00 Quad: Martin



JD089 R033656 BE024 Gravel 2019-03-30 12:31:55-04:00 Quad: Martin



JD089 R033656 BE024 Gravel 2019-03-30 12:32:06-04:00 Quad: Martin



Point ID	BE025
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Matewan

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3749737.069	5965919.486	721.075

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.042
RMSE Z	0.063
GPS Method	RTN

PHOTOS:



JD086 R033656
Quad: Matewan BE025 Gravel 2019-03-27
15:10:17-04:00



JD086 R033656
Quad: Matewan BE025 Gravel 2019-03-27
15:10:35-04:00



JD086 R033656
Quad: Matewan BE025 Gravel 2019-03-27
15:10:48-04:00



JD086 R033656
Quad: Matewan BE025 Gravel 2019-03-27
15:11:04-04:00



Point ID	BE026
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Vest

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3716348.684	5692188.081	889.614

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.049
RMSE Z	0.082
GPS Method	RTN

PHOTOS:



JD081 R033656 BE026 Gravel 2019-03-22 10:59:55-04:00 Quad: Vest



JD081 R033656 BE026 Gravel 2019-03-22 11:00:09-04:00 Quad: Vest



JD081 R033656 BE026 Gravel 2019-03-22 11:00:20-04:00 Quad: Vest



JD081 R033656 BE026 Gravel 2019-03-22 11:00:31-04:00 Quad: Vest



Point ID	BE027
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Knott
Quad	Wayland

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3700741.074	5764978.892	707.187

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-21-2019
RMSE Hz	0.047
RMSE Z	0.097
GPS Method	RTN

PHOTOS:



JD080 R033656 BE027 Gravel 2019 03 21 14:48:26-04:00 Quad: Hindman



JD080 R033656 BE027 Gravel 2019 03 21 14:48:38-04:00 Quad: Hindman



JD080 R033656 BE027 Gravel 2019 03 21 14:48:52-04:00 Quad: Hindman



JD080 R033656 BE027 Gravel 2019 03 21 14:49:19-04:00 Quad: Hindman



Point ID	BE028
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Wayland

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3710936.190	5791155.450	689.684

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/24/2019
RMSE Hz	0.044
RMSE Z	0.068
GPS Method	RTN

PHOTOS:



JD083 R033656 BE028 Gravel 2019-03-24 14:19:07-04:00 Quad: Wayland



JD083 R033656 BE028 Gravel 2019-03-24 14:19:19-04:00 Quad: Wayland



JD083 R033656 BE028 Gravel 2019-03-24 14:19:34-04:00 Quad: Wayland



JD083 R033656 BE028 Gravel 2019-03-24 14:19:50-04:00 Quad: Wayland



Point ID	BE029
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Lick Creek

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3722827.161	5907466.357	899.870

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.021
RMSE Z	0.042
GPS Method	RTN

PHOTOS:



JD085 R033656 BE029 Gravel 2019-03-26 14:02:06-04:00
Quad: Lick Creek



JD085 R033656 BE029 Gravel 2019-03-26 14:02:23-04:00
Quad: Lick Creek



JD085 R033656 BE029 Gravel 2019-03-26 14:02:38-04:00
Quad: Lick Creek



JD085 R033656 BE029 Gravel 2019-03-26 14:03:59-04:00
Quad: Lick Creek



Point ID	BE030
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hurley

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3720624.643	5994168.785	877.813

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.053
RMSE Z	0.089
GPS Method	RTN

PHOTOS:





Point ID	BE031
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Lick Creek

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3699056.594	5931730.228	795.546

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.044
RMSE Z	0.057
GPS Method	RTN

PHOTOS:



JD085 R033656 BE031 Pavement 2019-03-26 12:17:57-04:00
Quad: Lick Creek



JD085 R033656 BE031 Pavement 2019-03-26 12:18:08-04:00
Quad: Lick Creek



JD085 R033656 BE031 Pavement 2019-03-26 12:18:19-04:00
Quad: Lick Creek



JD085 R033656 BE031 Pavement 2019-03-26 12:18:39-04:00
Quad: Lick Creek



Point ID	BE032
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Carrie

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3663744.312	5687566.305	1240.296

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.038
RMSE Z	0.049
GPS Method	RTN

PHOTOS:



JD081 R033656 BE032 Gravel 2019-03-22 12:30:15-04:00 Quad: Carrie



JD081 R033656 BE032 Gravel 2019-03-22 12:30:29-04:00 Quad: Carrie



JD081 R033656 BE032 Gravel 2019-03-22 12:30:43-04:00 Quad: Carrie



JD081 R033656 BE032 Gravel 2019-03-22 12:30:54-04:00 Quad: Carrie



Point ID	BE033
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Dorton

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3660606.502	5842711.271	854.493

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/24/2019
RMSE Hz	0.028
RMSE Z	0.038
GPS Method	RTN

PHOTOS:



JD083 R033656 BE033 Gravel 2019-03-24 16:50:51-04:00 Quad: Dorton



JD083 R033656 BE033 Gravel 2019-03-24 16:51:04-04:00 Quad: Dorton



JD083 R033656 BE033 Gravel 2019-03-24 16:51:15-04:00 Quad: Dorton



JD083 R033656 BE033 Gravel 2019-03-24 16:51:29-04:00 Quad: Dorton



Point ID	BE034
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hellier

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3637321.243	5886751.394	1057.668

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.059
RMSE Z	0.063
GPS Method	RTN

PHOTOS:





Point ID	BE035
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Jenkins East

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3629872.773	5832150.624	1135.536

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.038
RMSE Z	0.066
GPS Method	RTN

PHOTOS:



JD084 R033656 BE035 Gravel 2019-03-25 13:41:52-04:00
Quad: Jenkins East



JD084 R033656 BE035 Gravel 2019-03-25 13:42:10-04:00
Quad: Jenkins East



JD084 R033656 BE035 Gravel 2019-03-25 13:42:51-04:00
Quad: Jenkins East



JD084 R033656 BE035 Gravel 2019-03-25 13:43:15-04:00
Quad: Jenkins East



Point ID	BE036
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Letcher
Quad	Blackey

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3605873.996	5748049.261	1180.926

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.063
RMSE Z	0.083
GPS Method	RTN

PHOTOS:



JD082 R033656 BE036 Gravel 2019-03-23 15:23:05-04:00 Quad: Blackey



JD082 R033656 BE036 Gravel 2019-03-23 15:23:27-04:00 Quad: Blackey



JD082 R033656 BE036 Gravel 2019-03-23 15:23:39-04:00 Quad: Blackey



JD082 R033656 BE036 Gravel 2019-03-23 15:23:53-04:00 Quad: Blackey



Point ID	BE037
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Knott
Quad	Vicco

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3615416.399	5705715.308	952.032

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-20-2019
RMSE Hz	0.044
RMSE Z	0.061
GPS Method	RTN

PHOTOS:





Point ID	BE038
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Carrie

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3634704.971	5689941.927	982.331

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.044
RMSE Z	0.057
GPS Method	RTN

PHOTOS:



JD082 R033656 BE038 Gravel 2019-03-23 11:00:37-04:00
Quad: Carrie



JD082 R033656 BE038 Gravel 2019-03-23 11:00:50-04:00
Quad: Carrie



JD082 R033656 BE038 Gravel 2019-03-23 11:01:01-04:00
Quad: Carrie



JD082 R033656 BE038 Gravel 2019-03-23 11:01:15-04:00
Quad: Carrie



Point ID	BE039
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Shelby
Quad	North Pleasureville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4002437.083	5103256.066	894.670

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-05-2019
RMSE Hz	0.030
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



KY LiDAR BE039 2019-04-05 17:10:34-04:00



KY LiDAR BE039 2019-04-05 17:10:29-04:00



KY LiDAR BE039 2019-04-05 17:10:25-04:00



KY LiDAR BE039 2019-04-05 17:10:19-04:00



Point ID	BE040
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Shelby
Quad	Ballardsville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3992105.995	5034875.646	813.115

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-04-2019
RMSE Hz	0.034
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



KY LiDAR BE040 2019-04-04 16:57:29-04:00



KY LiDAR BE040 2019-04-04 16:57:34-04:00



KY LiDAR BE040 2019-04-04 16:57:39-04:00



KY LiDAR BE040 2019-04-04 16:57:44-04:00



Point ID	BE041
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Shelby
Quad	North Pleasureville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3982844.837	5119935.791	888.289

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.038
RMSE Z	0.066
GPS Method	RTN

PHOTOS:



KY LiDAR BE041 2019-04-06 12:55:52-04:00



KY LiDAR BE041 2019-04-06 12:55:47-04:00



KY LiDAR BE041 2019-04-06 12:55:41-04:00



KY LiDAR BE041 2019-04-06 12:55:36-04:00



Point ID	BE042
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Shelby
Quad	Simpsonville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3942854.760	5046578.631	744.411

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.028
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	BE043
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Shelby
Quad	Waddy

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3942635.917	5102154.109	754.392

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.028
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	BE044
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Nelson
Quad	Bloomsfield

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3855986.259	5044866.120	708.539

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.028
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	BE045
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Nelson
Quad	Chaplin

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3861460.084	5091687.215	842.082

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.030
RMSE Z	0.055
GPS Method	RTN

PHOTOS:





Point ID	BE046
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Bullet
Quad	Lebanon Junction

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3824352.760	4931153.310	458.496

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	1.5 US Survey Feet

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.042
RMSE Z	0.055
GPS Method	RTN

PHOTOS:





Point ID	BE047
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Nelson
Quad	Bardstown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3811014.432	4997095.700	585.051

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.036
RMSE Z	0.057
GPS Method	RTN

PHOTOS:





Point ID	BE048
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Washington
Quad	Maud

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3801376.945	5039489.967	515.294

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.030
RMSE Z	0.042
GPS Method	RTN

PHOTOS:





Point ID	BE049
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Nelson
Quad	Howardstown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3751195.923	4991134.779	570.963

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.036
RMSE Z	0.047
GPS Method	RTN

PHOTOS:





Point ID	BE050
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Nelson
Quad	Howardstown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3729278.740	4985818.623	535.688

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-16-2019
RMSE Hz	0.032
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	BE051
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Fayette
Quad	Centerville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3961286.833	5309737.514	955.192

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.025
RMSE Z	0.030
GPS Method	RTN

PHOTOS:



KY LiDAR BE051 2019-04-08 17:37:58-04:00



KY LiDAR BE051 2019-04-08 17:37:54-04:00



KY LiDAR BE051 2019-04-08 17:37:49-04:00



KY LiDAR BE051 2019-04-08 17:37:45-04:00



Point ID	BE052
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Fayette
Quad	Lexington East

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3928718.524	5316749.667	923.633

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.032
RMSE Z	0.053
GPS Method	RTN

PHOTOS:



KY LiDAR BE052 2019-04-09 12:41:47-04:00



KY LiDAR BE052 2019-04-09 12:41:32-04:00



KY LiDAR BE052 2019-04-09 12:41:28-04:00



KY LiDAR BE052 2019-04-09 12:41:23-04:00



Point ID	BE053
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Madison
Quad	Ford

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3845955.458	5328909.287	927.708

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.028
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



KY LiDAR BE053 2019-04-09 15:47:19-04:00

KY LiDAR BE053 2019-04-09 15:47:25-04:00



KY LiDAR BE053 2019-04-09 15:47:32-04:00



KY LiDAR BE053 2019-04-09 15:47:38-04:00



Point ID	BE054
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Garrard
Quad	Bryantsville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3797149.200	5246420.041	830.038

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.036
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



KY LiDAR BE054 2019-04-09 18:16:24-04:00



KY LiDAR BE054 2019-04-09 18:16:19-04:00



KY LiDAR BE054 2019-04-09 18:16:14-04:00



KY LiDAR BE054 2019-04-09 18:16:08-04:00



Point ID	BE055
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Pendleton
Quad	Goforth

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4144995.779	5276876.910	920.307

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-10-2019
RMSE Hz	0.032
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	BE056
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Moscow

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4186556.628	5351627.380	710.569

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.047
RMSE Z	0.072
GPS Method	RTN

PHOTOS:





Point ID	BE057
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Germantown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4130549.556	5430940.817	965.867

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.028
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD119 R033656 2019-04-29
Quad: Germantown BE057 Gravel 09:41:01-04:00



JD119 R033656 2019-04-29
Quad: Germantown BE057 Gravel 09:41:13-04:00



JD119 R033656 2019-04-29
Quad: Germantown BE057 Gravel 09:41:25-04:00



JD119 R033656 2019-04-29
Quad: Germantown BE057 Gravel 09:41:36-04:00



Point ID	BE058
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Maysville-West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4132132.564	5456769.338	941.871

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.028
RMSE Z	0.038
GPS Method	RTN

PHOTOS:



JD119 R033656 BE058 Gravel 2019-04-29 08:19:55-04:00 Quad: Maysville



JD119 R033656 BE058 Gravel 2019-04-29 08:20:06-04:00 Quad: Maysville



JD119 R033656 BE058 Gravel 2019-04-29 08:20:18-04:00 Quad: Maysville



JD119 R033656 BE058 Gravel 2019-04-29 08:20:28-04:00 Quad: Maysville



Point ID	BE059
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Tollesboro

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
4112255.868	5557574.733	735.163

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.027
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD115 R033656
Quad: Tollesboro BE059 Gravel 2019-04-25 13:53:24-04:00



JD115 R033656
Quad: Tollesboro BE059 Gravel 2019-04-25 13:53:50-04:00



JD115 R033656
Quad: Tollesboro BE059 Gravel 2019-04-25 13:54:03-04:00



JD115 R033656
Quad: Tollesboro BE059 Gravel 2019-04-25 13:54:14-04:00



Point ID	BE060
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Stricklett

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4056663.380	5568002.724	833.312

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.015
RMSE Z	0.027
GPS Method	RTN

PHOTOS:



JD115 R033656 BE060 Gravel 2019-04-25 09:07:17-04:00 Quad: Stricklett



JD115 R033656 BE060 Gravel 2019-04-25 09:07:28-04:00 Quad: Stricklett



JD115 R033656 BE060 Gravel 2019-04-25 09:07:40-04:00 Quad: Stricklett



JD115 R033656 BE060 Gravel 2019-04-25 09:07:56-04:00 Quad: Stricklett



Point ID	BE061
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Friendship

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4152575.372	5693796.867	576.505

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.021
RMSE Z	0.025
GPS Method	RTN

PHOTOS:



JD098 R033656 BE061 Gravel 2019-04-08 12:12:40-04:00 Quad: Friendship



JD098 R033656 BE061 Gravel 2019-04-08 12:12:52-04:00 Quad: Friendship



JD098 R033656 BE061 Gravel 2019-04-08 12:13:01-04:00 Quad: Friendship



JD098 R033656 BE061 Gravel 2019-04-08 12:13:14-04:00 Quad: Friendship



Point ID	BE062
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Argillite

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4038558.494	5760542.357	838.814

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.019
RMSE Z	0.027
GPS Method	RTN

PHOTOS:





Point ID	BE063
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Boltsfork

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4034827.777	5796041.217	678.788

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.034
RMSE Z	0.042
GPS Method	RTN

PHOTOS:



JD096 R033656 BE063 Gravel 2019-04-06
 Quad: Boltsfork 12:03:35-04:00



JD096 R033656 BE063 Gravel 2019-04-06
 Quad: Boltsfork 12:03:46-04:00



JD096 R033656 BE063 Gravel 2019-04-06
 Quad: Boltsfork 12:03:59-04:00



JD096 R033656 BE063 Gravel 2019-04-06
 Quad: Boltsfork 12:04:18-04:00



Point ID	BE064
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Adams

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3945097.377	5800282.442	644.533

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.040
RMSE Z	0.057
GPS Method	RTN

PHOTOS:



JD093 R033656
Quad: Adams
BE064 Gravel
2019-04-03
13:34:26-04:00



JD093 R033656
Quad: Adams
BE064 Gravel
2019-04-03
13:34:40-04:00



JD093 R033656
Quad: Adams
BE064 Gravel
2019-04-03
13:34:53-04:00



JD093 R033656
Quad: Adams
BE064 Gravel
2019-04-03
13:35:10-04:00



Point ID	BE065
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Kermit

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3848298.436	5882532.617	629.448

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.034
RMSE Z	0.036
GPS Method	RTN

PHOTOS:



JD092 R033656 BE065 Gravel 2019-04-02 12:07:37-04:00 Quad: Kermit



JD092 R033656 BE065 Gravel 2019-04-02 12:07:51-04:00 Quad: Kermit



JD092 R033656 BE065 Gravel 2019-04-02 12:08:11-04:00 Quad: Kermit



JD092 R033656 BE065 Gravel 2019-04-02 12:08:31-04:00 Quad: Kermit



Point ID	BE066
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Prestonsburg

Aerial Target	
LiDAR Ground Control	
X LiDAR QC Point	
New Control	
Photo ID	
Published Control	

Coordinate System	NAD83(2011)
	Kentucky Single Zone
	NAVD88
	GEOID12B
	US Survey Feet

Northing	Easting	Elevation
3808675.355	5776677.756	622.945

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.025
RMSE Z	0.053
GPS Method	RTN

PHOTOS:



JD090 R033656 BE066 Gravel 2019-03-31 13:54:42-04:00 Quad: Prestonsburg



JD090 R033656 BE066 Gravel 2019-03-31 13:54:59-04:00 Quad: Prestonsburg



JD090 R033656 BE066 Gravel 2019-03-31 13:55:16-04:00 Quad: Prestonsburg



JD090 R033656 BE066 Gravel 2019-03-31 13:55:33-04:00 Quad: Prestonsburg



Point ID	BE067
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Kermit

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3819069.220	5868120.371	1089.207

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.027
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD089 R033656 BE067 Gravel 2019-03-30 15:40:19-04:00 Quad: Martin



JD089 R033656 BE067 Gravel 2019-03-30 15:40:28-04:00 Quad: Martin



JD089 R033656 BE067 Gravel 2019-03-30 15:40:37-04:00 Quad: Martin



JD089 R033656 BE067 Gravel 2019-03-30 15:40:44-04:00 Quad: Martin



Point ID	BE068
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Williamson

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3811703.369	5908573.276	653.995

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/29/2019
RMSE Hz	0.036
RMSE Z	0.066
GPS Method	RTN

PHOTOS:



JD088 R033656 BE068 Gravel 2019-03-29 13:45:34-04:00 Quad: Williamson



JD088 R033656 BE068 Gravel 2019-03-29 13:45:45-04:00 Quad: Williamson



JD088 R033656 BE068 Gravel 2019-03-29 13:45:54-04:00 Quad: Williamson



JD088 R033656 BE068 Gravel 2019-03-29 13:46:05-04:00 Quad: Williamson



Point ID	BE069
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Williamson

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3771010.343	5904199.485	748.332

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.045
RMSE Z	0.066
GPS Method	RTN

PHOTOS:



JD087 R033656 BE069 Pavement 2019-03-28 10:07:28-04:00 Quad: Williamson



JD087 R033656 BE069 Pavement 2019-03-28 10:07:40-04:00 Quad: Williamson



JD087 R033656 BE069 Pavement 2019-03-28 10:07:53-04:00 Quad: Williamson



JD087 R033656 BE069 Pavement 2019-03-28 10:08:06-04:00 Quad: Williamson



Point ID	BE070
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Belfry

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3746881.418	5932506.252	860.103

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.032
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



JD086 R033656
Quad: Belfry BE070 Gravel 2019-03-27
16:39:39-04:00



JD086 R033656
Quad: Belfry BE070 Gravel 2019-03-27
16:39:54-04:00



JD086 R033656
Quad: Belfry BE070 Gravel 2019-03-27
16:40:04-04:00



JD086 R033656
Quad: Belfry BE070 Gravel 2019-03-27
16:40:18-04:00



Point ID	BE071
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Handshoe

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3681505.552	5733143.680	1109.637

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.047
RMSE Z	0.063
GPS Method	RTN

PHOTOS:



JD081 R033656 BE032 Gravel 2019-03-22 12:30:15-04:00 Quad: Carrie



JD081 R033656 BE032 Gravel 2019-03-22 12:30:29-04:00 Quad: Carrie



JD081 R033656 BE032 Gravel 2019-03-22 12:30:43-04:00 Quad: Carrie



JD081 R033656 BE032 Gravel 2019-03-22 12:30:54-04:00 Quad: Carrie



Point ID	BE072
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Pikeville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3691431.893	5857887.544	1096.658

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.038
RMSE Z	0.051
GPS Method	RTN

PHOTOS:





Point ID	BE073
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Offutt

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3815979.456	5816561.999	1214.017

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.019
RMSE Z	0.025
GPS Method	RTN

PHOTOS:



JD090 R033656 BE073 Gravel 2019-03-31 15:37:42-04:00 Quad: Offutt



JD090 R033656 BE073 Gravel 2019-03-31 15:37:54-04:00 Quad: Offutt



JD090 R033656 BE073 Gravel 2019-03-31 15:38:11-04:00 Quad: Offutt



JD090 R033656 BE073 Gravel 2019-03-31 15:38:33-04:00 Quad: Offutt



Point ID	BE074
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Knott
Quad	Blackey

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3621552.170	5736136.199	1032.600

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-21-2019
RMSE Hz	0.061
RMSE Z	0.082
GPS Method	RTN

PHOTOS:





Point ID	BE075
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Knott
Quad	Kite

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3637291.596	5767233.840	1229.145

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-21-2019
RMSE Hz	0.070
RMSE Z	0.108
GPS Method	RTN

PHOTOS:



JD080 R033656 BE075 Gravel 2019 03 21 12:40:59-04:00 Quad: Kite



JD080 R033656 BE075 Gravel 2019 03 21 12:41:09-04:00 Quad: Kite



JD080 R033656 BE075 Gravel 2019 03 21 12:41:20-04:00 Quad: Kite



JD080 R033656 BE075 Gravel 2019 03 21 12:41:31-04:00 Quad: Kite



Point ID	BE076
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Woodford
Quad	Versailles

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3905766.678	5236113.606	898.309

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.032
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	BE077
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Oldham
Quad	Crestwood

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3999320.071	5009082.829	678.693

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-04-2019
RMSE Hz	0.032
RMSE Z	0.038
GPS Method	RTN

PHOTOS:



KY LiDAR TW018 2019-04-04 15:36:05-04:00

KY LiDAR TW018 2019-04-04 15:36:11-04:00



KY LiDAR TW018 2019-04-04 15:36:17-04:00

KY LiDAR TW018 2019-04-04 15:36:23-04:00



Point ID	BE078
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Spencer
Quad	Waterford

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3901263.781	5012613.372	530.691

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.032
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	BE079
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Nelson
Quad	New Haven

Aerial Target	
LiDAR Ground Control	
X LiDAR QC Point	
New Control	
Photo ID	
Published Control	

Coordinate System	NAD83(2011)
	Kentucky Single Zone
	NAVD88
	GEOID12B
	US Survey Feet

Northing	Easting	Elevation
3778779.607	4960031.949	457.538

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0

Date (MM-DD-YYYY)	03-16-2019
RMSE Hz	0.028
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	BE080
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Marion
Quad	Loretto

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3769173.988	5008916.577	684.871

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.036
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	BE081
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Vanceburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4116093.634	5615859.288	526.397

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/09/2019
RMSE Hz	0.034
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



JD099 R033656
Quad: Vanceburg BE081 Gravel 2019-04-09 14:57:39-04:00



JD099 R033656
Quad: Vanceburg BE081 Gravel 2019-04-09 14:57:49-04:00



JD099 R033656
Quad: Vanceburg BE081 Gravel 2019-04-09 14:57:59-04:00



JD099 R033656
Quad: Vanceburg BE081 Gravel 2019-04-09 14:58:08-04:00



Point ID	BE082
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Orangeburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4086776.163	5523408.750	787.498

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.049
RMSE Z	0.057
GPS Method	RTN

PHOTOS:



JD115 R033656 BE082 Gravel 2019-04-25 12:02:16-04:00 Quad: Orangeburg



JD115 R033656 BE082 Gravel 2019-04-25 12:02:26-04:00 Quad: Orangeburg



JD115 R033656 BE082 Gravel 2019-04-25 12:02:34-04:00 Quad: Orangeburg



JD115 R033656 BE082 Gravel 2019-04-25 12:02:43-04:00 Quad: Orangeburg



Point ID	BE083
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Pendleton
Quad	Berry

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4097154.414	5289267.865	840.379

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-10-2019
RMSE Hz	0.030
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



KY LiDAR BE083 2019-04-10 13:10:20-04:00

KY LiDAR BE083 2019-04-10 13:10:15-04:00



KY LiDAR BE083 2019-04-10 13:10:09-04:00



KY LiDAR BE083 2019-04-10 13:10:02-04:00



Point ID	BE084
Project No.	R033656
Project Name	KYSW - LiDAR
State	Kentucky
County	Harrison
Quad	Berry

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4090805.126	5309178.382	688.608

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-10-2019
RMSE Hz	0.032
RMSE Z	0.047
GPS Method	RTN

PHOTOS:



KY LIDAR BE084 2019-04-10 14:22:55-04:00

KY LIDAR BE084 2019-04-10 14:22:50-04:00



KY LIDAR BE084 2019-04-10 14:22:46-04:00

KY LIDAR BE084 2019-04-10 14:22:42-04:00



Point ID	BE085
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Soldier

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4026403.845	5637336.017	797.712

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.034
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





URBAN AREA POINT LOG SHEETS



Point ID	UA001
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Falmouth

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4136812.110	5324340.374	555.045

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.030
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



JD118 R033656 UA001 Pavement 2019-04-28 13:46:11-04:00
Quad: Falmouth



JD118 R033656 UA001 Pavement 2019-04-28 13:46:26-04:00
Quad: Falmouth



JD118 R033656 UA001 Pavement 2019-04-28 13:46:41-04:00
Quad: Falmouth



JD118 R033656 UA001 Pavement 2019-04-28 13:46:55-04:00
Quad: Falmouth



Point ID	UA002
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Brooksville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4158910.208	5391729.266	565.996

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.030
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



JD119 R033656 UA002 Pavement 2019-04-29 13:08:28-04:00 Quad: Brooksville



JD119 R033656 UA002 Pavement 2019-04-29 13:08:40-04:00 Quad: Brooksville



JD119 R033656 UA002 Pavement 2019-04-29 13:08:53-04:00 Quad: Brooksville



JD119 R033656 UA002 Pavement 2019-04-29 13:09:07-04:00 Quad: Brooksville



Point ID	UA003
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Felicity

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4173091.785	5418068.703	518.936

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.027
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD119 R033656 UA003 Pavement 2019-04-29 14:08:10-04:00 Quad: Felicity



JD119 R033656 UA003 Pavement 2019-04-29 14:08:24-04:00 Quad: Felicity



JD119 R033656 UA003 Pavement 2019-04-29 14:08:40-04:00 Quad: Felicity



JD119 R033656 UA003 Pavement 2019-04-29 14:08:51-04:00 Quad: Felicity



Point ID	UA004
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Brooksville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4131235.846	5388742.489	966.701

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.044
RMSE Z	0.070
GPS Method	RTN

PHOTOS:



JD119 R033656 UA004 Pavement 2019-04-29 11:32:53-04:00 Quad: Brooksville



JD119 R033656 UA004 Pavement 2019-04-29 11:33:10-04:00 Quad: Brooksville



JD119 R033656 UA004 Pavement 2019-04-29 11:33:23-04:00 Quad: Brooksville



JD119 R033656 UA004 Pavement 2019-04-29 11:33:36-04:00 Quad: Brooksville



Point ID	UA005
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Higginsport

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4167225.502	5453262.084	548.805

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.023
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD119 R033656 UA005 Pavement 2019-04-29 15:14:49-04:00 Quad: Higginsport



JD119 R033656 UA005 Pavement 2019-04-29 15:15:03-04:00 Quad: Higginsport



JD119 R033656 UA005 Pavement 2019-04-29 15:15:15-04:00 Quad: Higginsport



JD119 R033656 UA005 Pavement 2019-04-29 15:15:27-04:00 Quad: Higginsport



Point ID	UA006
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Maysville-West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4145385.037	5475518.246	556.436

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.028
RMSE Z	0.032
GPS Method	RTN

PHOTOS:



JD119 R033656 UA006 Pavement 2019-04-29 17:54:52-04:00 Quad: Maysville-West



JD119 R033656 UA006 Pavement 2019-04-29 17:55:05-04:00 Quad: Maysville-West



JD119 R033656 UA006 Pavement 2019-04-29 17:55:16-04:00 Quad: Maysville-West



JD119 R033656 UA006 Pavement 2019-04-29 17:55:29-04:00 Quad: Maysville-West



Point ID	UA007
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Brushart

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4119569.730	5675717.895	608.890

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.023
RMSE Z	0.028
GPS Method	RTN

PHOTOS:



JD098 R033656 UA007 Pavement 2019-04-08 14:30:16-04:00 Quad: Brushart



JD098 R033656 UA007 Pavement 2019-04-08 14:30:28-04:00 Quad: Brushart



JD098 R033656 UA007 Pavement 2019-04-08 14:30:40-04:00 Quad: Brushart



JD098 R033656 UA007 Pavement 2019-04-08 14:30:56-04:00 Quad: Brushart



Point ID	UA008
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Ironton

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4084806.189	5799554.763	557.889

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.042
RMSE Z	0.047
GPS Method	RTN

PHOTOS:



JD097 R033656 UA008 Pavement 2019-04-07 09:00:24-04:00 Quad: Ironton



JD097 R033656 UA008 Pavement 2019-04-07 09:00:35-04:00 Quad: Ironton



JD097 R033656 UA008 Pavement 2019-04-07 09:00:51-04:00 Quad: Ironton



JD097 R033656 UA008 Pavement 2019-04-07 09:01:01-04:00 Quad: Ironton



Point ID	UA009
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Catlettsburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4055028.078	5823858.697	545.432

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.032
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



JD096 R033656 UA009 Pavement 2019-04-06 15:52:19-04:00
Quad: Catlettsburg



JD096 R033656 UA009 Pavement 2019-04-06 15:52:28-04:00
Quad: Catlettsburg



JD096 R033656 UA009 Pavement 2019-04-06 15:52:38-04:00
Quad: Catlettsburg



JD096 R033656 UA009 Pavement 2019-04-06 15:52:48-04:00
Quad: Catlettsburg



Point ID	UA010
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Rush

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4007614.072	5776128.712	669.530

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/05/2019
RMSE Hz	0.023
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	UA011
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Rush

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3992628.881	5780065.493	694.382

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.021
RMSE Z	0.118
GPS Method	RTN

PHOTOS:



JD114 R033656 UA011 Pavement 2019-04-24 12:12:18-04:00 Quad: Rush



JD114 R033656 UA011 Pavement 2019-04-24 12:12:29-04:00 Quad: Rush



JD114 R033656 UA011 Pavement 2019-04-24 12:12:39-04:00 Quad: Rush



JD114 R033656 UA011 Pavement 2019-04-24 12:12:50-04:00 Quad: Rush



Point ID	UA012
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Fallsburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3982460.124	5784346.949	697.200

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/05/2019
RMSE Hz	0.015
RMSE Z	0.032
GPS Method	FS PPK

PHOTOS:



JD095 R033656 UA012 Pavement 2019-04-05
 Quad: Fallsburg 12:58:59-04:00



JD095 R033656 UA012 Pavement 2019-04-05
 Quad: Fallsburg 12:59:12-04:00



JD095 R033656 UA012 Pavement 2019-04-05
 Quad: Fallsburg 12:59:23-04:00



JD095 R033656 UA012 Pavement 2019-04-05
 Quad: Fallsburg 12:59:36-04:00



Point ID	UA013
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Paintsville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3837463.668	5765043.878	604.605

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.017
RMSE Z	0.019
GPS Method	RTN

PHOTOS:



JD091 R033656 UA013 Pavement 2019-04-01 09:28:00-04:00 Quad: Paintsville



JD091 R033656 UA013 Pavement 2019-04-01 09:28:11-04:00 Quad: Paintsville



JD091 R033656 UA013 Pavement 2019-04-01 09:28:23-04:00 Quad: Paintsville



JD091 R033656 UA013 Pavement 2019-04-01 09:28:34-04:00 Quad: Paintsville



Point ID	UA014
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Inez

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3848318.194	5847785.442	668.470

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.030
RMSE Z	0.047
GPS Method	RTN

PHOTOS:



JD092 R033656 US014 Pavement 2019-04-02
Quad: Inez 10:39:08-04:00



JD092 R033656 US014 Pavement 2019-04-02
Quad: Inez 10:39:20-04:00



JD092 R033656 US014 Pavement 2019-04-02
Quad: Inez 10:39:40-04:00



JD092 R033656 US014 Pavement 2019-04-02
Quad: Inez 10:39:56-04:00



Point ID	UA015
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Prestonsburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3780825.215	5782606.417	629.448

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.030
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	UA016
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Harold

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3744167.147	5820974.399	657.633

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.030
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



JD089 R033656 UA016 Pavement 2019-03-30 08:17:08-04:00 Quad: Harold



JD089 R033656 UA016 Pavement 2019-03-30 08:17:19-04:00 Quad: Harold



JD089 R033656 UA016 Pavement 2019-03-30 08:22:18-04:00 Quad: Harold



JD089 R033656 UA016 Pavement 2019-03-30 08:22:28-04:00 Quad: Harold



Point ID	UA017
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Broad Bottom

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3766363.682	5846715.892	687.574

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.030
RMSE Z	0.042
GPS Method	RTN

PHOTOS:



JD087 R033656 UA017 Pavement 2019-03-28 15:24:18-04:00 Quad: Broad Bottom



JD087 R033656 UA017 Pavement 2019-03-28 15:24:32-04:00 Quad: Broad Bottom



JD087 R033656 UA017 Pavement 2019-03-28 15:24:46-04:00 Quad: Broad Bottom



JD087 R033656 UA017 Pavement 2019-03-28 15:27:37-04:00 Quad: Broad Bottom



Point ID	UA018
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Meta

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3746121.713	5879138.369	757.823

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.032
RMSE Z	0.042
GPS Method	RTN

PHOTOS:



JD087 R033656 UA018 PVD 2019-03-28 08:25:18-04:00 Quad: Meta



JD087 R033656 UA018 PVD 2019-03-28 08:25:55-04:00 Quad: Meta



JD087 R033656 UA018 PVD 2019-03-28 08:26:05-04:00 Quad: Meta



JD087 R033656 UA018 PVD 2019-03-28 08:26:33-04:00 Quad: Meta



Point ID	UA019
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Matewan

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3733172.287	5963662.322	840.891

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.038
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



JD086 R033656 UA019 PVD 2019-03-27 12:00:53-04:00 Quad: Matewan



JD086 R033656 UA019 PVD 2019-03-27 12:01:05-04:00 Quad: Matewan



JD086 R033656 UA019 PVD 2019-03-27 12:01:18-04:00 Quad: Matewan



JD086 R033656 UA019 PVD 2019-03-27 12:01:33-04:00 Quad: Matewan



Point ID	UA020
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Pikeville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3714567.106	5859513.343	669.018

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/24/2019
RMSE Hz	0.011
RMSE Z	0.021
GPS Method	RTN

PHOTOS:



JD083 R033656 UA020 Pavement 2019-03-24 18:00:35-04:00
Quad: Pikeville



JD083 R033656 UA020 Pavement 2019-03-24 18:00:49-04:00
Quad: Pikeville



JD083 R033656 UA020 Pavement 2019-03-24 18:01:01-04:00
Quad: Pikeville



JD083 R033656 UA020 Pavement 2019-03-24 18:01:16-04:00
Quad: Pikeville



Point ID	UA021
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Millard

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3697469.833	5889292.465	688.293

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.044
RMSE Z	0.061
GPS Method	RTN

PHOTOS:



JD085 R033656 UA021 Pavement 2019-03-26 15:27:35-04:00 Quad: Millard



JD085 R033656 UA021 Pavement 2019-03-26 15:27:44-04:00 Quad: Millard



JD085 R033656 UA021 Pavement 2019-03-26 15:28:04-04:00 Quad: Millard



JD085 R033656 UA021 Pavement 2019-03-26 15:28:24-04:00 Quad: Millard



Point ID	UA022
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Hindman

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3650258.475	5736137.783	1069.663

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.047
RMSE Z	0.080
GPS Method	RTN

PHOTOS:



JD081 R033656 UA022 UA 2019-03-22 14:27:42-04:00
Quad: Hindman



JD081 R033656 UA022 UA 2019-03-22 14:28:18-04:00
Quad: Hindman



JD081 R033656 UA022 UA 2019-03-22 14:28:31-04:00
Quad: Hindman



JD081 R033656 UA022 UA 2019-03-22 14:28:46-04:00
Quad: Hindman



Point ID	UA023
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Knott
Quad	Kite

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
X	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3658470.398	5757130.993	978.646

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-21-2019
RMSE Hz	0.049
RMSE Z	0.074
GPS Method	RTN

PHOTOS:



JD080 R033656 US023 Pavement 2019-03-21 13:26:49-04:00 Quad: Kite



JD080 R033656 US023 Pavement 2019-03-21 13:27:04-04:00 Quad: Kite



JD080 R033656 US023 Pavement 2019-03-21 13:27:27-04:00 Quad: Kite



JD080 R033656 US023 Pavement 2019-03-21 13:27:40-04:00 Quad: Kite



Point ID	UA024
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	McDowell

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3680697.753	5816924.281	1061.714

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/24/2019
RMSE Hz	0.036
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



JD083 R033656 UA024 Pavement 2019-03-24 15:48:45-04:00 Quad: McDowell



JD083 R033656 UA024 Pavement 2019-03-24 15:49:01-04:00 Quad: McDowell



JD083 R033656 UA024 Pavement 2019-03-24 15:49:11-04:00 Quad: McDowell



JD083 R033656 UA024 Pavement 2019-03-24 15:49:23-04:00 Quad: McDowell



Point ID	UA025
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hellier

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3666259.217	5885152.570	1080.277

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.032
RMSE Z	0.038
GPS Method	RTN

PHOTOS:



JD085 R033656 UA025 Pavement 2019-03-26
Quad: Hellier 09:22:35-04:00



JD085 R033656 UA025 Pavement 2019-03-26
Quad: Hellier 09:22:54-04:00



JD085 R033656 UA025 Pavement 2019-03-26
Quad: Hellier 09:23:12-04:00



JD085 R033656 UA025 Pavement 2019-03-26
Quad: Hellier 09:23:30-04:00



Point ID	UA026
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Elkhorn City

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3673963.796	5921437.452	1334.397

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/26/2019
RMSE Hz	0.032
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



JD085 R033656 UA026 Pavement 2019-03-26 10:44:27-04:00
Quad: Elkhorn City



JD085 R033656 UA026 Pavement 2019-03-26 10:44:43-04:00
Quad: Elkhorn City



JD085 R033656 UA026 Pavement 2019-03-26 10:44:58-04:00
Quad: Elkhorn City



JD085 R033656 UA026 Pavement 2019-03-26 10:45:10-04:00
Quad: Elkhorn City



Point ID	UA027
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Wheelwright

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3641372.419	5799058.777	1278.387

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.034
RMSE Z	0.047
GPS Method	RTN

PHOTOS:



JD082 R033656 UA027 PVD 2019-03-23 16:54:51-04:00
Quad: Wheelwright



JD082 R033656 UA027 PVD 2019-03-23 16:55:08-04:00
Quad: Wheelwright



JD082 R033656 UA027 PVD 2019-03-23 16:55:26-04:00
Quad: Wheelwright



JD082 R033656 UA027 PVD 2019-03-23 16:55:40-04:00
Quad: Wheelwright



Point ID	UA028
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Jenkins East

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

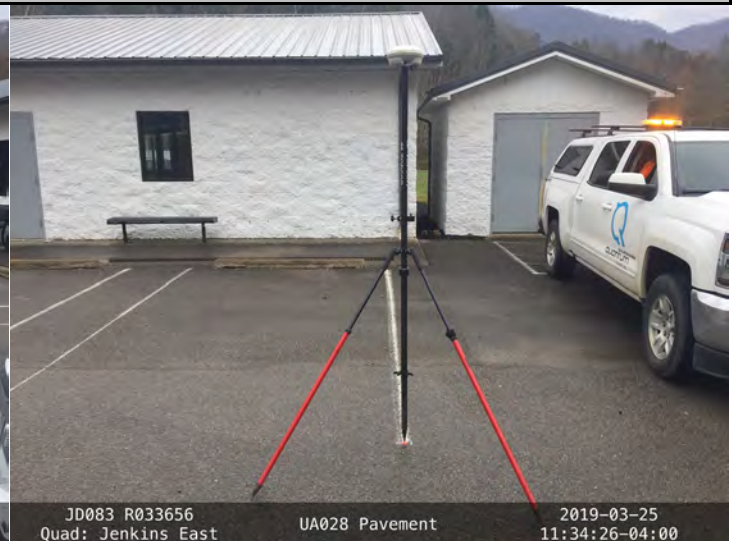
Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3626826.090	5862179.049	1234.023

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.027
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	UA029
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Henry
Quad	Eminence

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4019806.186	5087374.450	912.131

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-05-2019
RMSE Hz	0.030
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



KY LiDAR UA029 2019-04-05 12:53:30-04:00



KY LiDAR UA029 2019-04-05 12:53:25-04:00



KY LiDAR UA029 2019-04-05 12:53:20-04:00



KY LiDAR UA029 2019-04-05 12:53:14-04:00



Point ID	UA030
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Switzer

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3990793.389	5180688.670	773.250

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-07-2019
RMSE Hz	0.040
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



KY LiDAR UA030 2019-04-07 16:13:51-04:00



KY LiDAR UA030 2019-04-07 16:13:47-04:00



KY LiDAR UA030 2019-04-07 16:13:39-04:00



KY LiDAR UA030 2019-04-07 16:13:35-04:00



Point ID	UA031
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Switzer

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3982279.307	5206689.004	787.039

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-07-2019
RMSE Hz	0.032
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



KY LIDAR UA031 2019-04-07 15:01:51-04:00

KY LIDAR UA031 2019-04-07 15:01:45-04:00



KY LIDAR UA031 2019-04-07 15:01:40-04:00



KY LIDAR UA031 2019-04-07 15:01:36-04:00



Point ID	UA032
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Jefferson
Quad	Fisherville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3972356.414	5018099.071	671.439

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.036
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	UA033
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	Shelbyville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3970937.039	5072193.441	734.126

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.025
RMSE Z	0.032
GPS Method	RTN

PHOTOS:





Point ID	UA034
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Frankfort West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3960066.159	5167469.228	799.930

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-07-2019
RMSE Hz	0.028
RMSE Z	0.047
GPS Method	RTN

PHOTOS:



KY LiDAR UA034 2019-04-07 13:54:27-04:00



KY LiDAR UA034 2019-04-07 13:54:21-04:00



KY LiDAR UA034 2019-04-07 13:54:16-04:00



KY LiDAR UA034 2019-04-07 13:54:11-04:00



Point ID	UA035
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Alton Station

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3927015.884	5161662.403	790.304

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.027
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	UA036
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Spencer
Quad	Taylorville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3897210.395	5061038.722	729.677

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.030
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	UA037
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Lexington East

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3898499.171	5284052.287	1016.527

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.027
RMSE Z	0.038
GPS Method	RTN

PHOTOS:



KY LIDAR UA037 2019-04-08 11:20:14-04:00

KY LIDAR UA037 2019-04-08 11:20:09-04:00



KY LIDAR UA037 2019-04-08 11:20:05-04:00

KY LIDAR UA037 2019-04-08 11:20:01-04:00



Point ID	UA038
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Fairfield

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3877427.146	4995376.558	683.089

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.034
RMSE Z	0.049
GPS Method	RTN

PHOTOS:





Point ID	UA039
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Fairfield

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3851470.623	5001225.418	683.637

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.038
RMSE Z	0.047
GPS Method	RTN

PHOTOS:





Point ID	UA040
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Scott
Quad	Georgetown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3948717.764	5266301.673	846.967

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.032
RMSE Z	0.044
GPS Method	RTN

PHOTOS:



KY LiDAR UA040 2019-04-08 16:05:25-04:00



KY LiDAR UA040 2019-04-08 16:05:20-04:00



KY LiDAR UA040 2019-04-08 16:05:16-04:00



KY LiDAR UA040 2019-04-08 16:05:12-04:00



Point ID	UA037
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Lexington West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3917507.591	5276390.940	964.952

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.027
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	UA042
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Jessamine
Quad	Nicollasville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3854082.065	5264214.197	1009.739

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.034
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	UA043
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Jessamine
Quad	Little Hickman

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3840883.122	5259334.346	909.769

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.034
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



KY LiDAR UA043 2019-04-09 18:42:40-04:00



KY LiDAR UA043 2019-04-09 18:42:36-04:00



KY LiDAR UA043 2019-04-09 18:42:31-04:00



KY LiDAR UA043 2019-04-09 18:42:26-04:00



Point ID	UA044
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Lexington East

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3899566.121	5308466.528	978.735

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.027
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	UA045
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Bardstown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3821582.476	5003767.554	657.853

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.028
RMSE Z	0.047
GPS Method	RTN

PHOTOS:





Point ID	UA046
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Maysville-West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4125455.995	5477708.895	860.832

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/30/2019
RMSE Hz	0.045
RMSE Z	0.053
GPS Method	RTN

PHOTOS:





Point ID	UA047
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Carter
Quad	Wesleyville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4060140.948	5648323.962	1106.074

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.038
RMSE Z	0.049
GPS Method	RTN

PHOTOS:



JD100 R033656 UA047 Pavement 2019-04-10 15:20:43-04:00 Quad: Wesleyville



JD100 R033656 UA047 Pavement 2019-04-10 15:20:54-04:00 Quad: Wesleyville



JD100 R033656 UA047 Pavement 2019-04-10 15:21:08-04:00 Quad: Wesleyville



JD100 R033656 UA047 Pavement 2019-04-10 15:21:20-04:00 Quad: Wesleyville



Point ID	UA048
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Load

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4126416.639	5727452.131	572.076

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.045
RMSE Z	0.051
GPS Method	RTN

PHOTOS:



JD098 R033656 UA048 Gravel 2019-04-08 09:09:46-04:00
Quad: Load



JD098 R033656 UA048 Gravel 2019-04-08 09:10:01-04:00
Quad: Load



JD098 R033656 UA048 Gravel 2019-04-08 09:10:11-04:00
Quad: Load



JD098 R033656 UA048 Gravel 2019-04-08 09:10:26-04:00
Quad: Load



Point ID	UA049
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Fallsburg

Aerial Target	
LiDAR Ground Control	
X LiDAR QC Point	
New Control	
Photo ID	
Published Control	

Coordinate System	NAD83(2011)
	Kentucky Single Zone
	NAVD88
	GEOID12B
	US Survey Feet

Northing	Easting	Elevation
3985941.742	5810571.840	608.070

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/05/2019
RMSE Hz	0.023
RMSE Z	0.030
GPS Method	FS PPK

PHOTOS:





Point ID	UA050
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Louisa

Aerial Target	
LiDAR Ground Control	
X LiDAR QC Point	
New Control	
Photo ID	
Published Control	

Coordinate System	NAD83(2011)
	Kentucky Single Zone
	NAVD88
	GEOID12B
	US Survey Feet

Northing	Easting	Elevation
3943449.182	5826285.229	589.963

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.038
RMSE Z	0.053
GPS Method	RTN

PHOTOS:



JD094 R033656
Quad: Louisa
UA050 Pavement
2019-04-04
10:59:46-04:00



JD094 R033656
Quad: Louisa
UA050 Pavement
2019-04-04
10:59:56-04:00



JD094 R033656
Quad: Louisa
UA050 Pavement
2019-04-04
11:00:04-04:00



JD094 R033656
Quad: Louisa
UA050 Pavement
2019-04-04
11:00:14-04:00



Point ID	UA051
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Louisa

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3926140.931	5842449.387	579.648

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.034
RMSE Z	0.040
GPS Method	RTN

PHOTOS:



JD094 R033656 UA051 Pavement 2019-04-04 09:03:33-04:00 Quad: Louisa



JD094 R033656 UA051 Pavement 2019-04-04 09:03:45-04:00 Quad: Louisa



JD094 R033656 UA051 Pavement 2019-04-04 09:03:56-04:00 Quad: Louisa



JD094 R033656 UA051 Pavement 2019-04-04 09:04:06-04:00 Quad: Louisa



Point ID	UA052
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Williamson

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3784211.657	5927419.724	671.908

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.030
RMSE Z	0.042
GPS Method	RTN

PHOTOS:



JD087 R033656 UA025 Pavement 2019-03-28 12:31:27-04:00 Quad: Williamson



JD087 R033656 UA025 Pavement 2019-03-28 12:31:39-04:00 Quad: Williamson



JD087 R033656 UA025 Pavement 2019-03-28 12:31:51-04:00 Quad: Williamson



JD087 R033656 UA025 Pavement 2019-03-28 12:32:05-04:00 Quad: Williamson



Point ID	UA053
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hellier

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3659133.385	5866308.214	1353.065

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.034
RMSE Z	0.049
GPS Method	RTN

PHOTOS:



JD084 R033656
Quad: Hellier UA053 Pavement 2019-03-25
15:22:33-04:00



JD084 R033656
Quad: Hellier UA053 Pavement 2019-03-25
15:22:49-04:00



JD084 R033656
Quad: Hellier UA053 Pavement 2019-03-25
15:23:03-04:00



JD084 R033656
Quad: Hellier UA053 Pavement 2019-03-25
15:23:25-04:00



Point ID	UA054
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Lancer

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3769386.063	5790676.924	667.472

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.023
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD089 R033656
Quad: Lancer UA054 Pavement 2019-03-30 09:52:18-04:00



JD089 R033656
Quad: Lancer UA054 Pavement 2019-03-30 09:52:37-04:00



JD089 R033656
Quad: Lancer UA054 Pavement 2019-03-30 09:52:52-04:00



JD089 R033656
Quad: Lancer UA054 Pavement 2019-03-30 09:53:32-04:00



TALL WEEDS POINT LOG SHEETS



Point ID	TW001
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Walton

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4178183.014	5273405.191	657.541

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/27/2019
RMSE Hz	0.019
RMSE Z	0.034
GPS Method	RTN

PHOTOS:



JD117 R033656 Quad: Walton TW001 Tall Weeds 2019-04-27 11:33:14-04:00



JD117 R033656 Quad: Walton TW001 Tall Weeds 2019-04-27 11:33:26-04:00



JD117 R033656 Quad: Walton TW001 Tall Weeds 2019-04-27 11:33:39-04:00



JD117 R033656 Quad: Walton TW001 Tall Weeds 2019-04-27 11:33:51-04:00



Point ID	TW002
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Campbell
Quad	Butler

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4207651.988	5345801.774	606.029

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.027
RMSE Z	0.038
GPS Method	RTN

PHOTOS:



JD118 R033656 Quad: Butler TW002 Tall Weeds 2019-04-28 10:40:54-04:00



JD118 R033656 Quad: Butler TW002 Tall Weeds 2019-04-28 10:41:07-04:00



JD118 R033656 Quad: Butler TW002 Tall Weeds 2019-04-28 10:41:19-04:00



JD118 R033656 Quad: Butler TW002 Tall Weeds 2019-04-28 10:41:35-04:00



Point ID	TW003
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Pendleton
Quad	Goforth

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4143724.085	5278096.483	916.717

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-10-2019
RMSE Hz	0.036
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	TW004
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Falmouth

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4136882.261	5325061.215	563.477

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.051
RMSE Z	0.059
GPS Method	RTN

PHOTOS:





Point ID	TW005
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Germantown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4130489.014	5430643.846	946.950

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.028
RMSE Z	0.028
GPS Method	RTN

PHOTOS:





Point ID	TW006
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Germantown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4132173.377	5456700.162	942.347

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.027
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	TW007
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Maysville-West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4125463.141	5477637.752	857.531

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/30/2019
RMSE Hz	0.051
RMSE Z	0.063
GPS Method	RTN

PHOTOS:



JD120 R033656
Quad: Maysville-West TW007 Tall Weeds 2019-04-30 08:27:58-04:00

JD120 R033656
Quad: Maysville-West TW007 Tall Weeds 2019-04-30 08:28:10-04:00



JD120 R033656
Quad: Maysville-West TW007 Tall Weeds 2019-04-30 08:28:23-04:00



JD120 R033656
Quad: Maysville-West TW007 Tall Weeds 2019-04-30 08:28:39-04:00



Point ID	TW008
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Elizaville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4064657.910	5460481.781	914.303

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.030
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	TW009
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Orangeburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4086746.810	5523266.652	796.668

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.044
RMSE Z	0.063
GPS Method	RTN

PHOTOS:





Point ID	TW010
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Stricklett

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4056934.282	5568063.142	829.824

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.015
RMSE Z	0.023
GPS Method	RTN

PHOTOS:



JD115 R033656 Quad: Stricklett TW010 Tall Weeds 2019-04-25 10:10:31-04:00



JD115 R033656 Quad: Stricklett TW010 Tall Weeds 2019-04-25 10:10:46-04:00



JD115 R033656 Quad: Stricklett TW010 Tall Weeds 2019-04-25 10:10:58-04:00



JD115 R033656 Quad: Stricklett TW010 Tall Weeds 2019-04-25 10:11:20-04:00



Point ID	TW011
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Stricklett

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4072854.149	5600743.731	707.837

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.045
RMSE Z	0.074
GPS Method	RTN

PHOTOS:





Point ID	TW012
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Richardson

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3872597.399	5793460.965	635.556

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.015
RMSE Z	0.021
GPS Method	RTN

PHOTOS:



JD091 R033656 Quad: Richardson TW012 Tall Weeds 2019-04-01 14:40:27-04:00



JD091 R033656 Quad: Richardson TW012 Tall Weeds 2019-04-01 14:40:38-04:00



JD091 R033656 Quad: Richardson TW012 Tall Weeds 2019-04-01 14:40:56-04:00



JD091 R033656 Quad: Richardson TW012 Tall Weeds 2019-04-01 14:41:09-04:00



Point ID	TW013
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Milo

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3868086.325	5837205.955	886.944

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.030
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	TW014
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Kermit

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3819042.846	5868189.455	1087.573

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.028
RMSE Z	0.034
GPS Method	RTN

PHOTOS:





Point ID	TW015
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Thomas

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3786992.695	5835690.378	660.622

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/29/2019
RMSE Hz	0.044
RMSE Z	0.059
GPS Method	RTN

PHOTOS:





Point ID	TW016
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Carrie

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3663691.939	5687574.833	1239.000

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/22/2019
RMSE Hz	0.036
RMSE Z	0.049
GPS Method	RTN

PHOTOS:





Point ID	TW017
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Henry
Quad	Eminence

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4015774.767	5091652.844	838.529

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-05-2019
RMSE Hz	0.032
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





Point ID	TW018
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Oldham
Quad	Crestwood

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3999285.140	5009057.831	677.633

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-04-2019
RMSE Hz	0.036
RMSE Z	0.047
GPS Method	RTN

PHOTOS:



KY L1DAR TW018 2019-04-04 15:36:05-04:00

KY L1DAR TW018 2019-04-04 15:36:11-04:00



KY L1DAR TW018 2019-04-04 15:36:17-04:00

KY L1DAR TW018 2019-04-04 15:36:23-04:00



Point ID	TW019
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	Ballardsville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3992160.881	5035507.356	805.645

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-04-2019
RMSE Hz	0.040
RMSE Z	0.059
GPS Method	RTN

PHOTOS:





Point ID	TW020
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	North Pleasureville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3982909.546	5123077.695	901.071

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.032
RMSE Z	0.055
GPS Method	RTN

PHOTOS:





Point ID	TW021
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Frankfort West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3936719.720	5162229.491	819.339

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.025
RMSE Z	0.030
GPS Method	RTN

PHOTOS:





Point ID	TW022
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Spencer
Quad	Taylorville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3899452.969	5069260.900	759.054

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.025
RMSE Z	0.032
GPS Method	RTN

PHOTOS:





Point ID	TW023
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Fairfield

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3877077.523	4995657.898	694.375

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-19-2019
RMSE Hz	0.025
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	TW024
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Spencer
Quad	Bloomsfield

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3886242.934	5047819.085	739.201

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.025
RMSE Z	0.034
GPS Method	RTN

PHOTOS:





Point ID	TW025
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Chaplin

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3855738.112	5079568.220	808.886

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.032
RMSE Z	0.053
GPS Method	RTN

PHOTOS:





Point ID	TW026
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	New Haven

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3778079.438	4959923.458	453.411

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0

Date (MM-DD-YYYY)	03-16-2019
RMSE Hz	0.036
RMSE Z	0.047
GPS Method	RTN

PHOTOS:





Point ID	TW027
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Howardstown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3750807.238	4991467.586	577.476

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.034
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	TW028
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Centerville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3952862.170	5306009.640	921.146

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.042
RMSE Z	0.059
GPS Method	RTN

PHOTOS:





Point ID	TW029
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Clintonville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3929291.910	5317269.565	933.640

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.025
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	TW030
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Fayette
Quad	Lexington West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3905000.787	5245494.000	841.117

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-10-2019
RMSE Hz	0.025
RMSE Z	0.034
GPS Method	RTN

PHOTOS:





Point ID	TW031
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Madison
Quad	Ford

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3845855.836	5329028.980	915.690

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.028
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	TW032
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Garrard
Quad	Bryantsville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3796827.350	5246209.581	841.255

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.030
RMSE Z	0.036
GPS Method	RTN

PHOTOS:





Point ID	TW033
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Marion
Quad	Loretto

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3767987.376	5007761.347	657.223

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.038
RMSE Z	0.045
GPS Method	RTN

PHOTOS:





FOREST POINT LOG SHEETS



Point ID	FO001
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Campbell
Quad	Butler

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4207664.554	5345953.773	608.096

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.072
RMSE Z	0.091
GPS Method	RTN

PHOTOS:





Point ID	F002
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Higginsport

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4167085.619	5453201.012	553.457

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/30/2019
RMSE Hz	0.059
RMSE Z	0.070
GPS Method	RTN

PHOTOS:





Point ID	FO003
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Maysville-West

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4145047.302	5475680.247	552.351

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/30/2019
RMSE Hz	0.064
RMSE Z	0.066
GPS Method	RTN

PHOTOS:



JD120 R033656 F0003 Forest 2019-04-30 10:54:10-04:00 Quad: Maysville-West



JD120 R033656 F0003 Forest 2019-04-30 10:54:28-04:00 Quad: Maysville-West



JD120 R033656 F0003 Forest 2019-04-30 10:54:39-04:00 Quad: Maysville-West



JD120 R033656 F0003 Forest 2019-04-30 10:55:02-04:00 Quad: Maysville-West



Point ID	FO004
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Orangeburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4118042.235	5519215.606	496.797

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.025
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



JD116 R033656 Quad: Sardis F0007 Forest 2019-04-26 10:16:52-04:00



JD116 R033656 Quad: Sardis F0007 Forest 2019-04-26 10:17:04-04:00



JD116 R033656 Quad: Sardis F0007 Forest 2019-04-26 10:17:21-04:00



JD116 R033656 Quad: Sardis F0007 Forest 2019-04-26 10:17:30-04:00



Point ID	FO005
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Kelat

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4109165.355	5344613.993	587.154

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/28/2019
RMSE Hz	0.070
RMSE Z	0.087
GPS Method	RTN

PHOTOS:





Point ID	FO006
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Mays Lick

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4101012.797	5471284.551	683.073

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.091
RMSE Z	0.119
GPS Method	RTN

PHOTOS:





Point ID	FO007
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Sardis

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4109470.092	5425909.286	850.425

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.047
RMSE Z	0.061
GPS Method	RTN

PHOTOS:



JD116 R033656 Quad: Sardis F0007 Forest 2019-04-26 10:16:52-04:00



JD116 R033656 Quad: Sardis F0007 Forest 2019-04-26 10:17:04-04:00



JD116 R033656 Quad: Sardis F0007 Forest 2019-04-26 10:17:21-04:00



JD116 R033656 Quad: Sardis F0007 Forest 2019-04-26 10:17:30-04:00



Point ID	FO008
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Tollesboro

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4112160.547	5557674.825	742.446

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.059
RMSE Z	0.066
GPS Method	RTN

PHOTOS:



JD115 R033656 F0008 Forest 2019-04-25
 Quad: Tollesboro 14:45:57-04:00



JD115 R033656 F0008 Forest 2019-04-25
 Quad: Tollesboro 14:46:11-04:00



JD115 R033656 F0008 Forest 2019-04-25
 Quad: Tollesboro 14:46:44-04:00



JD115 R033656 F0008 Forest 2019-04-25
 Quad: Tollesboro 14:47:09-04:00



Point ID	FO009
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Vanceburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4115560.194	5615823.993	504.658

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.085
RMSE Z	0.108
GPS Method	RTN

PHOTOS:





Point ID	FO010
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Friendship

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4152723.817	5694193.560	571.649

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.061
RMSE Z	0.112
GPS Method	RTN

PHOTOS:





Point ID	FO011
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Brushart

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4119275.639	5676025.092	612.853

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.032
RMSE Z	0.051
GPS Method	RTN

PHOTOS:





Point ID	F0012
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Load

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4126262.731	5727563.792	550.363

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.068
RMSE Z	0.083
GPS Method	RTN

PHOTOS:





Point ID	F0013
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Greenup

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4116365.121	5749566.538	523.801

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.093
RMSE Z	0.123
GPS Method	RTN

PHOTOS:





Point ID	FO014
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Berry

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4111340.498	5305673.243	588.965

Operator	Scott Slowinski
Receiver Model	Trimble R8-3
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.040
RMSE Z	0.045
GPS Method	RTN

PHOTOS:

No field photos available.





Point ID	FO014a
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pendleton
Quad	Berry Berry

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4097391.403	5289042.057	799.165

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/27/2019
RMSE Hz	0.053
RMSE Z	0.066
GPS Method	RTN

PHOTOS:



JD117 R033656 Quad: Berry_Berry F0014 Forest 2019-04-27 15:20:43-04:00



JD117 R033656 Quad: Berry_Berry F0014 Forest 2019-04-27 15:20:57-04:00



JD117 R033656 Quad: Berry_Berry F0014 Forest 2019-04-27 15:21:21-04:00



JD117 R033656 Quad: Berry_Berry F0014 Forest 2019-04-27 15:22:04-04:00



Point ID	F0015
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Mason
Quad	Elizaville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4064620.705	5460483.512	910.730

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/26/2019
RMSE Hz	0.102
RMSE Z	0.142
GPS Method	RTN

PHOTOS:



JD116 R033656 F0015 Forest 2019-04-26 12:11:23-04:00 Quad: Elizaville



JD116 R033656 F0015 Forest 2019-04-26 12:11:37-04:00 Quad: Elizaville



JD116 R033656 F0015 Forest 2019-04-26 12:11:51-04:00 Quad: Elizaville



JD116 R033656 F0015 Forest 2019-04-26 12:12:07-04:00 Quad: Elizaville



Point ID	FO016
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Stricklett

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4056374.437	5568278.050	823.046

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/25/2019
RMSE Hz	0.038
RMSE Z	0.047
GPS Method	RTN

PHOTOS:



JD115 R033656 F0016 Forest 2019-04-25 11:10:18-04:00 Quad: Stricklett



JD115 R033656 F0016 Forest 2019-04-25 11:10:50-04:00 Quad: Stricklett



JD115 R033656 F0016 Forest 2019-04-25 11:11:09-04:00 Quad: Stricklett



JD115 R033656 F0016 Forest 2019-04-25 11:11:28-04:00 Quad: Stricklett



Point ID	F0017
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Oldtown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4052333.347	5721534.179	687.741

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.068
RMSE Z	0.099
GPS Method	RTN

PHOTOS:





Point ID	FO018
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Greenup
Quad	Argillite

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4074591.144	5767574.616	839.916

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/07/2019
RMSE Hz	0.063
RMSE Z	0.089
GPS Method	RTN

PHOTOS:





Point ID	F0019
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Argillite

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4038691.208	5760303.061	826.996

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.051
RMSE Z	0.066
GPS Method	RTN

PHOTOS:





Point ID	FO020
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Rush

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4007312.224	5776406.250	668.854

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/24/2019
RMSE Hz	0.063
RMSE Z	0.072
GPS Method	RTN

PHOTOS:



JD114 R033656 Quad: Rush F0020 Forest 2019-04-24 15:16:18-04:00



JD114 R033656 Quad: Rush F0020 Forest 2019-04-24 15:16:41-04:00



JD114 R033656 Quad: Rush F0020 Forest 2019-04-24 15:17:07-04:00



JD114 R033656 Quad: Rush F0020 Forest 2019-04-24 15:17:36-04:00



Point ID	FO021
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Burnaugh

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4021338.143	5830123.817	600.504

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.053
RMSE Z	0.061
GPS Method	RTN

PHOTOS:





Point ID	FO022
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Fallsburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3985862.438	5810647.482	611.328

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/05/2019
RMSE Hz	0.049
RMSE Z	0.064
GPS Method	FS PPK

PHOTOS:





Point ID	FO023
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Rush

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3992780.905	5779943.565	697.512

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/24/2019
RMSE Hz	0.044
RMSE Z	0.138
GPS Method	RTN

PHOTOS:





Point ID	FO024
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Prichard

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3969828.739	5823881.742	579.664

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.053
RMSE Z	0.074
GPS Method	RTN

PHOTOS:





Point ID	FO025
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Adams

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3944718.823	5800001.855	646.147

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.099
RMSE Z	0.116
GPS Method	RTN

PHOTOS:





Point ID	FO026
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Louisa

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3926079.998	5842400.774	577.837

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/04/2019
RMSE Hz	0.080
RMSE Z	0.102
GPS Method	RTN

PHOTOS:





Point ID	FO027
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Redbush

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3898659.194	5730334.624	709.146

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.038
RMSE Z	0.055
GPS Method	RTN

PHOTOS:





Point ID	FO028
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Oil Springs

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3841247.027	5721871.018	920.254

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.034
RMSE Z	0.061
GPS Method	RTN

PHOTOS:





Point ID	FO029
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Paintsville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3837223.783	5765189.299	607.797

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.023
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	FO030
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Offutt

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3846433.623	5810649.628	1145.959

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.045
RMSE Z	0.057
GPS Method	RTN

PHOTOS:



J0092 R033656 Quad: Offutt F0030 Forest 2019-04-02 09:56:54-04:00



J0092 R033656 Quad: Offutt F0030 Forest 2019-04-02 09:57:32-04:00



J0092 R033656 Quad: Offutt F0030 Forest 2019-04-02 09:57:50-04:00



J0092 R033656 Quad: Offutt F0030 Forest 2019-04-02 09:58:12-04:00



Point ID	FO031
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Inez

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3848268.233	5847631.992	669.933

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.028
RMSE Z	0.042
GPS Method	RTN

PHOTOS:





Point ID	FO032
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Kermit

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3848056.217	5882883.803	622.407

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/02/2019
RMSE Hz	0.036
RMSE Z	0.053
GPS Method	RTN

PHOTOS:





Point ID	FO033
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Oil Springs

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3822759.081	5731614.502	863.663

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/01/2019
RMSE Hz	0.038
RMSE Z	0.040
GPS Method	RTN

PHOTOS:





Point ID	FO034
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Ivyton

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3804974.028	5740306.255	681.334

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.059
RMSE Z	0.082
GPS Method	RTN

PHOTOS:



JD090 R033656 Quad: Ivyton F0034 Forest 2019-03-31 12:46:00-04:00



JD090 R033656 Quad: Ivyton F0034 Forest 2019-03-31 12:46:22-04:00



JD090 R033656 Quad: Ivyton F0034 Forest 2019-03-31 12:46:44-04:00



JD090 R033656 Quad: Ivyton F0034 Forest 2019-03-31 12:47:05-04:00



Point ID	FO035
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Johnson
Quad	Prestonsburg

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3808712.586	5776574.891	622.591

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.051
RMSE Z	0.076
GPS Method	RTN

PHOTOS:





Point ID	FO036
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Offutt

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3815945.163	5815990.705	1218.813

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.027
RMSE Z	0.034
GPS Method	RTN

PHOTOS:





Point ID	FO037
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Kermit

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3818999.521	5868268.188	1088.584

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.030
RMSE Z	0.034
GPS Method	RTN

PHOTOS:





Point ID	FO038
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Martin
Quad	Williamson

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3811602.692	5908637.416	635.481

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/29/2019
RMSE Hz	0.083
RMSE Z	0.144
GPS Method	RTN

PHOTOS:





Point ID	FO039
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Ivyton

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3781014.565	5740564.668	740.500

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/31/2019
RMSE Hz	0.047
RMSE Z	0.072
GPS Method	RTN

PHOTOS:



JD090 R033656 2019-03-31
 Quad: Ivyton F0039 Forest 11:21:29-04:00



JD090 R033656 2019-03-31
 Quad: Ivyton F0039 Forest 11:21:37-04:00



JD090 R033656 2019-03-31
 Quad: Ivyton F0039 Forest 11:22:15-04:00



JD090 R033656 2019-03-31
 Quad: Ivyton F0039 Forest 11:22:29-04:00



Point ID	FO040
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Martin

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3738604.426	5755795.223	742.023

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.047
RMSE Z	0.072
GPS Method	RTN

PHOTOS:



JD089 R033656 Quad: Martin F0040 Forest 2019-03-30 12:59:28-04:00



JD089 R033656 Quad: Martin F0040 Forest 2019-03-30 12:59:41-04:00



JD089 R033656 Quad: Martin F0040 Forest 2019-03-30 12:59:51-04:00



JD089 R033656 Quad: Martin F0040 Forest 2019-03-30 13:00:08-04:00



Point ID	FO041
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Floyd
Quad	Harold

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3744261.058	5820781.860	649.277

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/30/2019
RMSE Hz	0.038
RMSE Z	0.042
GPS Method	RTN

PHOTOS:





Point ID	F0042
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Belfry

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3746950.421	5932634.543	871.950

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.053
RMSE Z	0.072
GPS Method	RTN

PHOTOS:





Point ID	F0043
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hurley

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3720463.316	5994036.102	863.784

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/27/2019
RMSE Hz	0.093
RMSE Z	0.152
GPS Method	RTN

PHOTOS:





Point ID	FO044
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Carrie

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3634975.550	5689790.745	980.461

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.061
RMSE Z	0.076
GPS Method	RTN

PHOTOS:





Point ID	FO045
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Knott
Quad	Blackey

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3621585.647	5736101.817	1033.787

Operator	Glenn C. Cornett
Receiver Model	Trimble R8
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03-21-2019
RMSE Hz	0.061
RMSE Z	0.082
GPS Method	RTN

PHOTOS:



JD080 R033656 F0045 Forest 2019 03 21 10:43:59-04:00
 Quad: Blackey



JD080 R033656 F0045 Forest 2019 03 21 10:44:12-04:00
 Quad: Blackey



JD080 R033656 F0045 Forest 2019 03 21 10:44:28-04:00
 Quad: Blackey



JD080 R033656 F0045 Forest 2019 03 21 10:44:41-04:00
 Quad: Blackey



Point ID	FO046
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Jenkins East

Aerial Target	
LiDAR Ground Control	
X LiDAR QC Point	
New Control	
Photo ID	
Published Control	

Coordinate System	NAD83(2011)
	Kentucky Single Zone
	NAVD88
	GEOID12B
	US Survey Feet

Northing	Easting	Elevation
3629793.129	5831992.922	1121.491

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.070
RMSE Z	0.108
GPS Method	RTN

PHOTOS:





Point ID	F0047
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hellier

Aerial Target	
LiDAR Ground Control	
X LiDAR QC Point	
New Control	
Photo ID	
Published Control	

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3659019.486	5866147.633	1370.998

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.070
RMSE Z	0.112
GPS Method	RTN

PHOTOS:





Point ID	FO048
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Jenkins East

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3626851.053	5862431.915	1230.509

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.089
RMSE Z	0.106
GPS Method	RTN

PHOTOS:





Point ID	FO049
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Hellier

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3637462.651	5886777.487	1056.035

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/25/2019
RMSE Hz	0.074
RMSE Z	0.087
GPS Method	RTN

PHOTOS:



JD083 R033656 Quad: Pikeville F0049 Forest 2019-03-25 10:07:13-04:00



JD083 R033656 Quad: Pikeville F0049 Forest 2019-03-25 10:07:33-04:00



JD083 R033656 Quad: Pikeville F0049 Forest 2019-03-25 10:07:46-04:00



JD083 R033656 Quad: Pikeville F0049 Forest 2019-03-25 10:07:57-04:00



Point ID	FO050
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Henry
Quad	Eminence

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4019835.203	5087329.907	907.856

Operator	Scott Slowinski
Receiver Model	Trimble M3
Receiver S/N	C601502
Antenna Height	1.5 US Survey Feet

Date (MM-DD-YYYY)	04-05-2019
RMSE Hz	0.053
RMSE Z	0.072
GPS Method	Total Station

PHOTOS:





Point ID	FO051
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	North Pleasureville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4005561.157	5135564.497	855.307

Operator	Scott Slowinski
Receiver Model	Trimble M3
Receiver S/N	C601502
Antenna Height	1.5 US Survey Feet

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.059
RMSE Z	0.072
GPS Method	Total Station

PHOTOS:





Point ID	FO052
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Franklin
Quad	Switzer

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3988163.717	5180012.644	745.878

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-07-2019
RMSE Hz	0.044
RMSE Z	0.055
GPS Method	RTN

PHOTOS:





Point ID	FO53
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Shelby
Quad	Waddy

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3942732.888	5102027.839	760.776

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-06-2019
RMSE Hz	0.038
RMSE Z	0.055
GPS Method	RTN

PHOTOS:





Point ID	FO054
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Spencer
Quad	Waterford

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3902116.071	5011706.649	471.948

Operator	Daniel Cassell
Receiver Model	Trimble M3
Receiver S/N	C601502
Antenna Height	1.51 US Survey Feet

Date (MM-DD-YYYY)	03-18-2019
RMSE Hz	0.057
RMSE Z	0.068
GPS Method	Total Station

PHOTOS:



Note: 03/18/2019
FO054
FOREST



Note: 03/18/2019
FO054
FOREST



Note: 03/18/2019
FO054
FOREST



Note: 03/18/2019
FO054
FOREST



Point ID	FO055
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Bullet
Quad	Lebanon Junction

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System
NAD83(2011)
Kentucky Single Zone
NAVD88
GEOID12B
US Survey Feet

Northing	Easting	Elevation
3824401.409	4931121.391	460.603

Operator	Daniel Cassell
Receiver Model	Trimble M3
Receiver S/N	C601502
Antenna Height	1.5 US Survey Feet

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.064
RMSE Z	0.074
GPS Method	RTN

PHOTOS:





Point ID	FO056
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	Howardstown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3729302.822	4985832.922	537.364

Operator	Daniel Cassell
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.155 US Survey Feet

Date (MM-DD-YYYY)	03-16-2019
RMSE Hz	0.080
RMSE Z	0.089
GPS Method	RTN

PHOTOS:



Note: 03/16/2019
FO056
FOREST



Note: 03/16/2019
FO056
FOREST



Note: 03/16/2019
FO056
FOREST



Note: 03/16/2019
FO056
FOREST



Point ID	FO057
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Madison
Quad	Ford

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3845762.471	5328862.988	925.746

Operator	Scott Slowinski
Receiver Model	Trimble M3
Receiver S/N	C601502
Antenna Height	1.5 US Survey Feet

Date (MM-DD-YYYY)	04-09-2019
RMSE Hz	0.061
RMSE Z	0.070
GPS Method	Total Station

PHOTOS:



KY LIDAR BE053 2019-04-09 15:47:19-04:00

KY LIDAR BE053 2019-04-09 15:47:25-04:00



KY LIDAR BE053 2019-04-09 15:47:32-04:00



KY LIDAR BE053 2019-04-09 15:47:38-04:00



Point ID	FO058
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Bracken
Quad	Brooksville

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4131312.238	5388886.018	950.326

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/29/2019
RMSE Hz	0.070
RMSE Z	0.106
GPS Method	RTN

PHOTOS:



JD119 R033656 Quad: Brooksville F0058 Forest 2019-04-29 12:30:40-04:00



JD119 R033656 Quad: Brooksville F0058 Forest 2019-04-29 12:30:58-04:00



JD119 R033656 Quad: Brooksville F0058 Forest 2019-04-29 12:31:25-04:00



JD119 R033656 Quad: Brooksville F0058 Forest 2019-04-29 12:32:14-04:00



Point ID	F0059A
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Stricklett

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4072659.470	5600942.586	707.754

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/10/2019
RMSE Hz	0.021
RMSE Z	0.038
GPS Method	RTN

PHOTOS:





Point ID	FO060
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Boyd
Quad	Boltsfork

Aerial Target	
LiDAR Ground Control	
X LiDAR QC Point	
New Control	
Photo ID	
Published Control	

Coordinate System	NAD83(2011)
	Kentucky Single Zone
	NAVD88
	GEOID12B
	US Survey Feet

Northing	Easting	Elevation
4014264.242	5802968.070	702.663

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/06/2019
RMSE Hz	0.034
RMSE Z	0.044
GPS Method	RTN

PHOTOS:





Point ID	FO061
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Blaine

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3925112.830	5761921.006	654.871

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.044
RMSE Z	0.059
GPS Method	RTN

PHOTOS:





Point ID	FO062
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lawrence
Quad	Louisa

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3912424.762	5822486.817	582.909

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/03/2019
RMSE Hz	0.064
RMSE Z	0.072
GPS Method	RTN

PHOTOS:



JD093 R033656
Quad: Louisa F0062 Forest 2019-04-03
17:05:56-04:00



JD093 R033656
Quad: Louisa F0062 Forest 2019-04-03
17:06:07-04:00



JD093 R033656
Quad: Louisa F0062 Forest 2019-04-03
17:06:17-04:00



JD093 R033656
Quad: Louisa F0062 Forest 2019-04-03
17:06:29-04:00



Point ID	FO063
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Knott
Quad	Hindman

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3650068.990	5736052.053	1064.949

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/23/2019
RMSE Hz	0.064
RMSE Z	0.063
GPS Method	RTN

PHOTOS:





Point ID	FO064
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Meta

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3746493.924	5879023.363	773.634

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.045
RMSE Z	0.055
GPS Method	RTN

PHOTOS:



JD087 R033656 Quad: Meta F0064 Forest 2019-03-28 09:01:41-04:00



JD087 R033656 Quad: Meta F0064 Forest 2019-03-28 09:02:01-04:00



JD087 R033656 Quad: Meta F0064 Forest 2019-03-28 09:02:35-04:00



JD087 R033656 Quad: Meta F0064 Forest 2019-03-28 09:02:57-04:00



Point ID	FO065
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Pike
Quad	Williamson

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3770815.507	5904089.260	736.563

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	03/28/2019
RMSE Hz	0.064
RMSE Z	0.104
GPS Method	RTN

PHOTOS:





Point ID	FO066
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Scott
Quad	Georgetown

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3946274.715	5266712.389	858.059

Operator	Scott Slowinski
Receiver Model	Trimble R8
Receiver S/N	4744140649
Antenna Height	2.0m

Date (MM-DD-YYYY)	04-08-2019
RMSE Hz	0.045
RMSE Z	0.061
GPS Method	RTN

PHOTOS:





Point ID	FO067
Project No.	R033656
Project Name	KYSW-LIDAR
State	Kentucky
County	Nelson
Quad	New Haven

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
3754909.216	4991200.860	484.845

Operator	Daniel Cassell
Receiver Model	Trimble M3
Receiver S/N	C601502
Antenna Height	1.5 US Survey Feet

Date (MM-DD-YYYY)	03-17-2019
RMSE Hz	0.064
RMSE Z	0.066
GPS Method	RTN

PHOTOS:





BRUSHLAND POINT LOG SHEETS



Point ID	SH001
Project No.	R033656
Project Name	KYSW – LiDAR
State	Kentucky
County	Lewis
Quad	Friendship

	Aerial Target
	LiDAR Ground Control
X	LiDAR QC Point
	New Control
	Photo ID
	Published Control

Coordinate System	
NAD83(2011)	
Kentucky Single Zone	
NAVD88	
GEOID12B	
US Survey Feet	

Northing	Easting	Elevation
4152485.261	5693810.664	577.348

Operator	Glenn Cornett
Receiver Model	Trimble R8-3
Receiver S/N	5106461161
Antenna Height	2.0m

Date (MM-DD-YYYY)	04/08/2019
RMSE Hz	0.006
RMSE Z	0.009
GPS Method	RTN

PHOTOS:

