



Project Information

Prepared By: DAS
Project Name: G17PD1255: LA_Catahoula_Concordia_2017_D17
Sensor Info: TM90524
Required Nominal Pulse Spacing: 0.35
Vendor Name: Digital Aerial Solutions LLC
Units: Meters
Percent of Extent Tolerance: Extents Not Checked
Date of Aquisition: Start: 1/24/2018 Finish: 12/15/2019

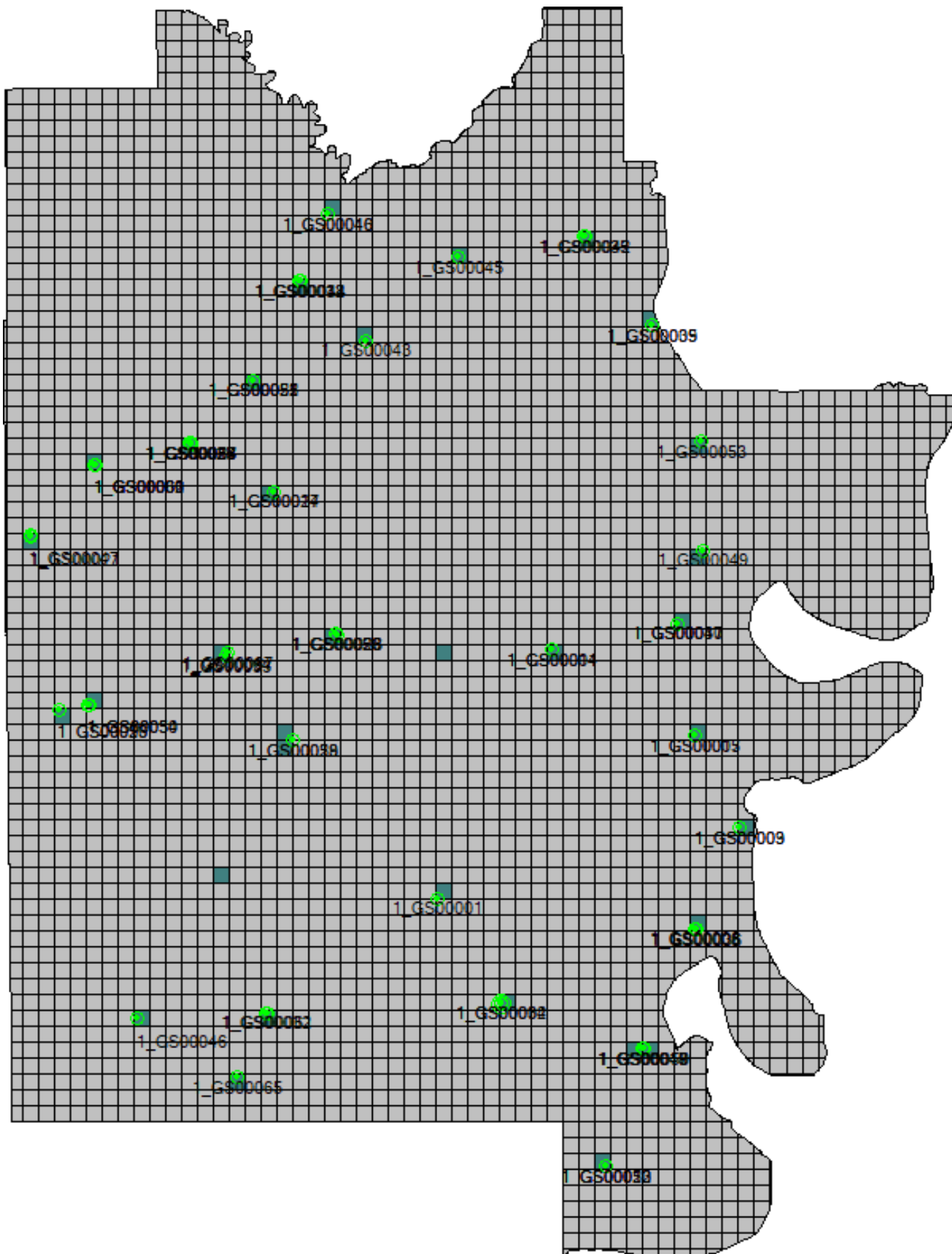
Metadata Information

Tile Index:
Filename: Tile_Index_DAS_Delivery1_Use.shp
Number of Polys: 0
Intensity:
Tile Index Attribute: Not Specified
Data Filename: Not Specified

DEM:
Tile Index Attribute: Name
Data Filename: TIFF

LAS:
Tile Index Attribute: Name
Data Filename: LAS

Tiled-Data Area



LiDAR Accuracy Assessment Summary

LC Type	# Points	NVA	VVA	RMSE Z
LAS		95% Confidence	95 Percentile	
Bare Earth	18	0.163		0.083
High Vegetation	6		0.163	0.087
Low Vegetation	24		0.163	0.093
Med Vegetation	5		0.127	0.100
Urban Terrian	14	0.158		0.081
NVA Total:	32	0.161		0.082
VVA Total:	35		0.163	0.093
Total:	67			0.088
DEM		95% Confidence	95 Percentile	
Bare Earth	18	0.168		0.085
High Vegetation	6		0.161	0.089
Low Vegetation	24		0.186	0.098
Med Vegetation	5		0.130	0.100
Urban Terrian	14	0.158		0.081
NVA Total:	32	0.163		0.083
VVA Total:	35		0.176	0.097
Total:	67			0.088
			Units:	Meters

Coordinates and Offsets of Analyzed Locations

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
1)	<input checked="" type="checkbox"/>	1_GS00002					
		625085.067	3475452.375	14.182	14.316	14.314	
				Bare Earth	0.134	0.132	
2)	<input checked="" type="checkbox"/>	1_GS00003					
		640044.118	3486471.016	24.642	24.765	24.765	
				Bare Earth	0.123	0.123	
3)	<input checked="" type="checkbox"/>	1_GS00004					
		628279.633	3497672.884	16.624	16.738	16.738	
				Bare Earth	0.114	0.114	
4)	<input checked="" type="checkbox"/>	1_GS00007					
		637248.915	3492276.021	16.461	16.532	16.532	
				Bare Earth	0.071	0.071	
5)	<input checked="" type="checkbox"/>	1_GS00008					
		637294.59	3480113.842	24.97	25.048	25.038	
				Bare Earth	0.078	0.068	
6)	<input checked="" type="checkbox"/>	1_GS00009					
		640058.895	3486478.4	26.32	26.408	26.396	
				Bare Earth	0.088	0.076	
7)	<input checked="" type="checkbox"/>	1_GS00010					
		636204.663	3499312.685	16.899	16.974	16.972	
				Bare Earth	0.075	0.073	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
8)	<input checked="" type="checkbox"/>	1_GS00013					
		631644.674	3465227.496	13.612	13.641	13.643	
				Bare Earth	0.029	0.031	
9)	<input checked="" type="checkbox"/>	1_GS00017					
		634003.396	3472614.767	15.221	15.22	15.223	
				Bare Earth	-0.001	0.002	
10)	<input checked="" type="checkbox"/>	1_GS00018					
		605560.123	3510671.327	21.367	21.357	21.358	
				Bare Earth	-0.01	-0.009	
11)	<input checked="" type="checkbox"/>	1_GS00020					
		631643.82	3465211.885	13.854	13.847	13.843	
				Bare Earth	-0.007	-0.011	
12)	<input checked="" type="checkbox"/>	1_GS00021					
		595515.297	3504770.325	17.657	17.638	17.634	
				Bare Earth	-0.019	-0.023	
13)	<input checked="" type="checkbox"/>	1_GS00022					
		609481.409	3514627.253	31.193	31.157	31.157	
				Bare Earth	-0.036	-0.036	
14)	<input checked="" type="checkbox"/>	1_GS00024					
		605549.053	3510662.067	21.622	21.562	21.565	
				Bare Earth	-0.06	-0.057	

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
15)	<input checked="" type="checkbox"/>	1_GS00026				
		614720.819	3498682.782	17.413	17.335	17.342
				Bare Earth	-0.078	-0.071
16)	<input checked="" type="checkbox"/>	1_GS00030				
		599165.202	3494219.386	17.128	17.025	17.025
				Bare Earth	-0.103	-0.103
17)	<input checked="" type="checkbox"/>	1_GS00031				
		599544.233	3509339.302	26.57	26.449	26.453
				Bare Earth	-0.121	-0.117
18)	<input checked="" type="checkbox"/>	1_GS00033				
		607809.779	3497279.117	17.238	17.085	17.089
				Bare Earth	-0.153	-0.149
19)	<input checked="" type="checkbox"/>	1_GS00001				
		621026.397	3482034.442	16.477	16.601	16.596
				Urban Terrian	0.124	0.119
20)	<input checked="" type="checkbox"/>	1_GS00005				
		634583.74	3518053.574	19.976	20.081	20.077
				Urban Terrian	0.105	0.101
21)	<input checked="" type="checkbox"/>	1_GS00006				
		637276.974	3480122.289	23.188	23.266	23.278
				Urban Terrian	0.078	0.09

Coordinates and Offsets of Analyzed Locations (Continued)

		ID				
		Survey X	Survey Y	Z1	Z DEM	Z LAS
				LC Type	ΔZ DEM	ΔZ LAS
22)	<input checked="" type="checkbox"/>	1_GS00011				
		628251.504	3497692.465	17.44	17.495	17.497
				Urban Terrian	0.055	0.057
23)	<input checked="" type="checkbox"/>	1_GS00012				
		612385.7	3520862.09	17.643	17.683	17.677
				Urban Terrian	0.04	0.034
24)	<input checked="" type="checkbox"/>	1_GS00015				
		637259.042	3492277.689	16.714	16.735	16.735
				Urban Terrian	0.021	0.021
25)	<input checked="" type="checkbox"/>	1_GS00016				
		614186.442	3525062.401	16.698	16.714	16.711
				Urban Terrian	0.016	0.013
26)	<input checked="" type="checkbox"/>	1_GS00019				
		633982.296	3472618.091	15.921	15.914	15.912
				Urban Terrian	-0.007	-0.009
27)	<input checked="" type="checkbox"/>	1_GS00023				
		597248.794	3493929.788	16.344	16.292	16.293
				Urban Terrian	-0.052	-0.051
28)	<input checked="" type="checkbox"/>	1_GS00025				
		605521.26	3510657.335	22.29	22.235	22.229
				Urban Terrian	-0.055	-0.061

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
							LC Type
29)	<input checked="" type="checkbox"/>	1_GS00027					
		610750.224	3507630.915	19.458	19.375	19.376	
				Urban Terrian	-0.083	-0.082	
30)	<input checked="" type="checkbox"/>	1_GS00028					
		614729.876	3498650.112	17.365	17.268	17.276	
				Urban Terrian	-0.097	-0.089	
31)	<input checked="" type="checkbox"/>	1_GS00029					
		611970.997	3492011.484	17.59	17.481	17.485	
				Urban Terrian	-0.109	-0.105	
32)	<input checked="" type="checkbox"/>	1_GS00032					
		610316.289	3474847.048	18.77	18.632	18.624	
				Urban Terrian	-0.138	-0.146	
33)	<input checked="" type="checkbox"/>	1_GS00034					
		625087.364	3475479.348	14.234	14.41	14.397	
				Low Vegetation	0.176	0.163	
34)	<input checked="" type="checkbox"/>	1_GS00035					
		630290.688	3523686.524	16.926	17.112	17.094	
				Low Vegetation	0.186	0.168	
35)	<input checked="" type="checkbox"/>	1_GS00036					
		637332.888	3480088.59	16.645	16.834	16.799	
				Low Vegetation	0.189	0.154	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
36)	<input checked="" type="checkbox"/>	1_GS00038					
		612413.586	3520881.676	17.325	17.475	17.474	
				Low Vegetation	0.15	0.149	
37)	<input checked="" type="checkbox"/>	1_GS00039					
		634598.564	3518082.613	19.697	19.845	19.852	
				Low Vegetation	0.148	0.155	
38)	<input checked="" type="checkbox"/>	1_GS00041					
		636141.286	3499317.507	16.35	16.49	16.489	
				Low Vegetation	0.14	0.139	
39)	<input checked="" type="checkbox"/>	1_GS00042					
		630351.669	3523643.326	16.418	16.542	16.544	
				Low Vegetation	0.124	0.126	
40)	<input checked="" type="checkbox"/>	1_GS00046					
		602186.752	3474507.917	15.38	15.465	15.456	
				Low Vegetation	0.085	0.076	
41)	<input checked="" type="checkbox"/>	1_GS00047					
		595471.404	3504876.033	17.726	17.79	17.785	
				Low Vegetation	0.064	0.059	
42)	<input checked="" type="checkbox"/>	1_GS00048					
		633938.842	3472612.297	14.454	14.512	14.515	
				Low Vegetation	0.058	0.061	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
43)	<input checked="" type="checkbox"/>	1_GS00049					
		637798.94	3503926.008	17.726	17.762	17.762	
				Low Vegetation	0.036	0.036	
44)	<input checked="" type="checkbox"/>	1_GS00050					
		634046.707	3472600.958	14.954	14.994	14.991	
				Low Vegetation	0.04	0.037	
45)	<input checked="" type="checkbox"/>	1_GS00051					
		609463.448	3514608.815	30.93	30.949	30.953	
				Low Vegetation	0.019	0.023	
46)	<input checked="" type="checkbox"/>	1_GS00052					
		631660.016	3465199.583	13.612	13.631	13.631	
				Low Vegetation	0.019	0.019	
47)	<input checked="" type="checkbox"/>	1_GS00053					
		637666.765	3510772.162	18.24	18.254	18.266	
				Low Vegetation	0.014	0.026	
48)	<input checked="" type="checkbox"/>	1_GS00054					
		599131.332	3494216.271	16.261	16.279	16.27	
				Low Vegetation	0.018	0.009	
49)	<input checked="" type="checkbox"/>	1_GS00055					
		609457.283	3514631.928	30.71	30.707	30.703	
				Low Vegetation	-0.003	-0.007	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
50)	<input checked="" type="checkbox"/>	1_GS00056					
		597238.251	3493955.861	16.314	16.304	16.306	
				Low Vegetation	-0.01	-0.008	
51)	<input checked="" type="checkbox"/>	1_GS00057					
		605534.822	3510655.156	21.832	21.821	21.815	
				Low Vegetation	-0.011	-0.017	
52)	<input checked="" type="checkbox"/>	1_GS00059					
		614705.957	3498689.658	17.396	17.363	17.369	
				Low Vegetation	-0.033	-0.027	
53)	<input checked="" type="checkbox"/>	1_GS00060					
		599505.497	3509314.153	26.194	26.15	26.147	
				Low Vegetation	-0.044	-0.047	
54)	<input checked="" type="checkbox"/>	1_GS00061					
		610328.717	3474859.983	16.028	15.961	15.964	
				Low Vegetation	-0.067	-0.064	
55)	<input checked="" type="checkbox"/>	1_GS00062					
		599491.493	3509318.178	24.44	24.363	24.377	
				Low Vegetation	-0.077	-0.063	
56)	<input checked="" type="checkbox"/>	1_GS00067					
		607831.64	3497462.762	17.207	17.072	17.068	
				Low Vegetation	-0.135	-0.139	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID			Z1	Z DEM	Z LAS	
		Survey X	Survey Y				
			LC Type				ΔZ DEM
57)	<input checked="" type="checkbox"/>	1_GS00040					
		614204.979	3525050.739	16.794	16.924	16.921	
				Med Vegetation	0.13	0.127	
58)	<input checked="" type="checkbox"/>	1_GS00043					
		616580.136	3517120.444	17.457	17.559	17.564	
				Med Vegetation	0.102	0.107	
59)	<input checked="" type="checkbox"/>	1_GS00044					
		612441.09	3520852.796	17.083	17.168	17.179	
				Med Vegetation	0.085	0.096	
60)	<input checked="" type="checkbox"/>	1_GS00045					
		622319.127	3522342.106	20.891	20.973	20.974	
				Med Vegetation	0.082	0.083	
61)	<input checked="" type="checkbox"/>	1_GS00066					
		599527.808	3509328.39	25.938	25.847	25.855	
				Med Vegetation	-0.091	-0.083	
62)	<input checked="" type="checkbox"/>	1_GS00014					
		610731.181	3507640.082	18.559	18.581	18.588	
				High Vegetation	0.022	0.029	
63)	<input checked="" type="checkbox"/>	1_GS00037					
		636119.478	3499320.122	16.251	16.412	16.414	
				High Vegetation	0.161	0.163	

Coordinates and Offsets of Analyzed Locations (Continued)

	ID						
		Survey X	Survey Y	Z1	Z DEM	Z LAS	
				LC Type	ΔZ DEM	ΔZ LAS	
64)	<input checked="" type="checkbox"/>	1_GS00058					
		611953.852	3491993.991	17.282	17.253	17.249	
				High Vegetation	-0.029	-0.033	
65)	<input checked="" type="checkbox"/>	1_GS00063					
		605537.709	3510638.599	21.644	21.581	21.593	
				High Vegetation	-0.063	-0.051	
66)	<input checked="" type="checkbox"/>	1_GS00064					
		607805.834	3497318.133	17.138	17.047	17.057	
				High Vegetation	-0.091	-0.081	
67)	<input checked="" type="checkbox"/>	1_GS00065					
		608489.192	3470783.796	18.285	18.192	18.196	
				High Vegetation	-0.093	-0.089	

LAS

Nonvegetated Vertical Accuracy

LandCover Type: Bare Earth, Urban Terrian

Minimum DZ: -0.149

Maximum DZ: 0.132

Mean DZ: 0

Mean Magnitude DZ: 0.265

Number Observations: 32

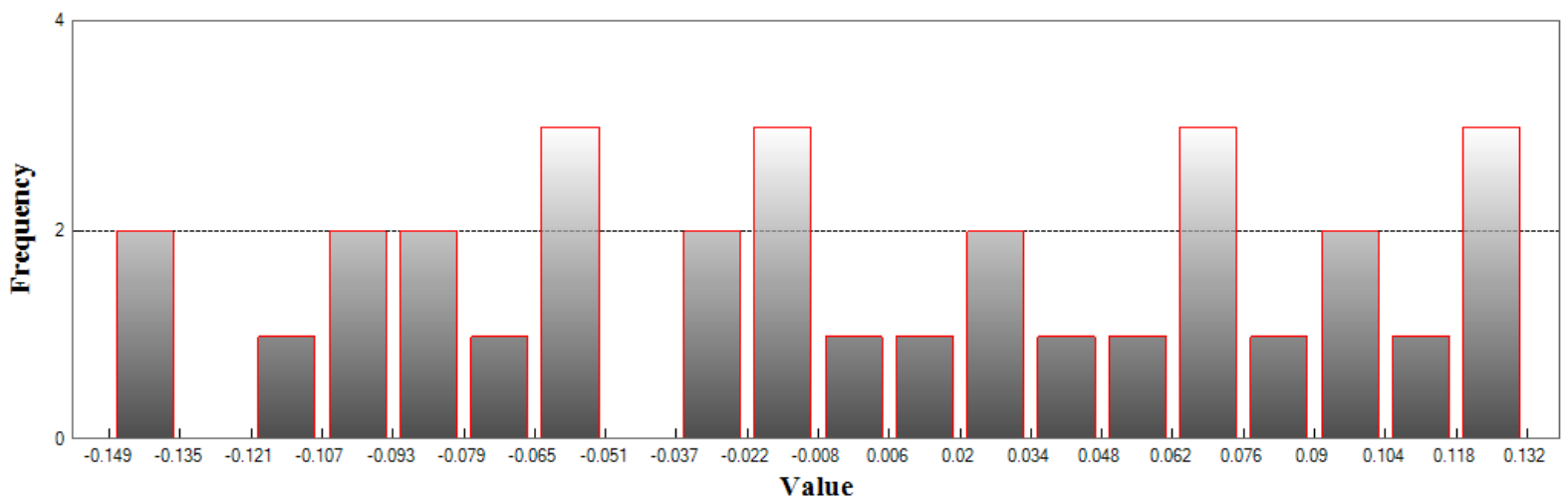
Standard Deviation DZ: 0.083

RMSE Z: 0.082

95% Confidence Level Z: 0.161

Units: Meters

Histogram



Min: -0.149
 Max: 0.132
 Number Of Bins: 20
 Bin Interval: 0.014

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: High Vegetation

Minimum DZ: -0.089

Maximum DZ: 0.163

Mean DZ: -0.01

Mean Magnitude DZ: 0.272

Number Observations: 6

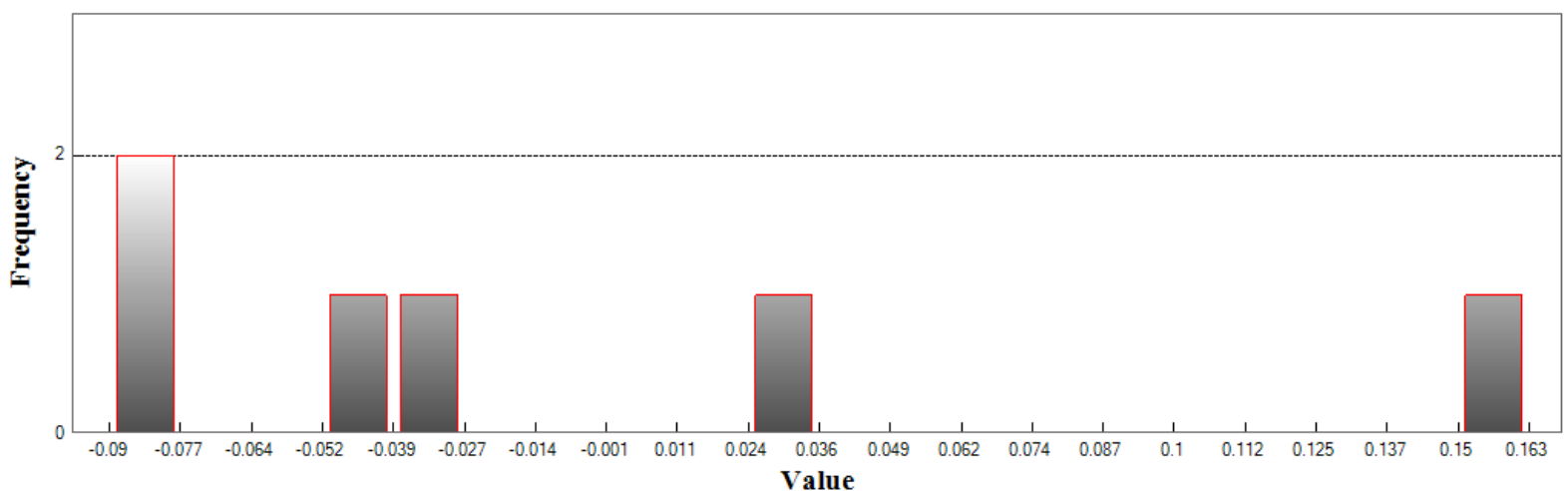
Standard Deviation DZ: 0.095

RMSE Z: 0.087

95th Percentile: 0.163

Units: Meters

Histogram



Min: -0.089

Max: 0.163

Number Of Bins: 20

Bin Interval: 0.013

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: Low Vegetation

Minimum DZ: -0.139

Maximum DZ: 0.168

Mean DZ: 0.043

Mean Magnitude DZ: 0.272

Number Observations: 24

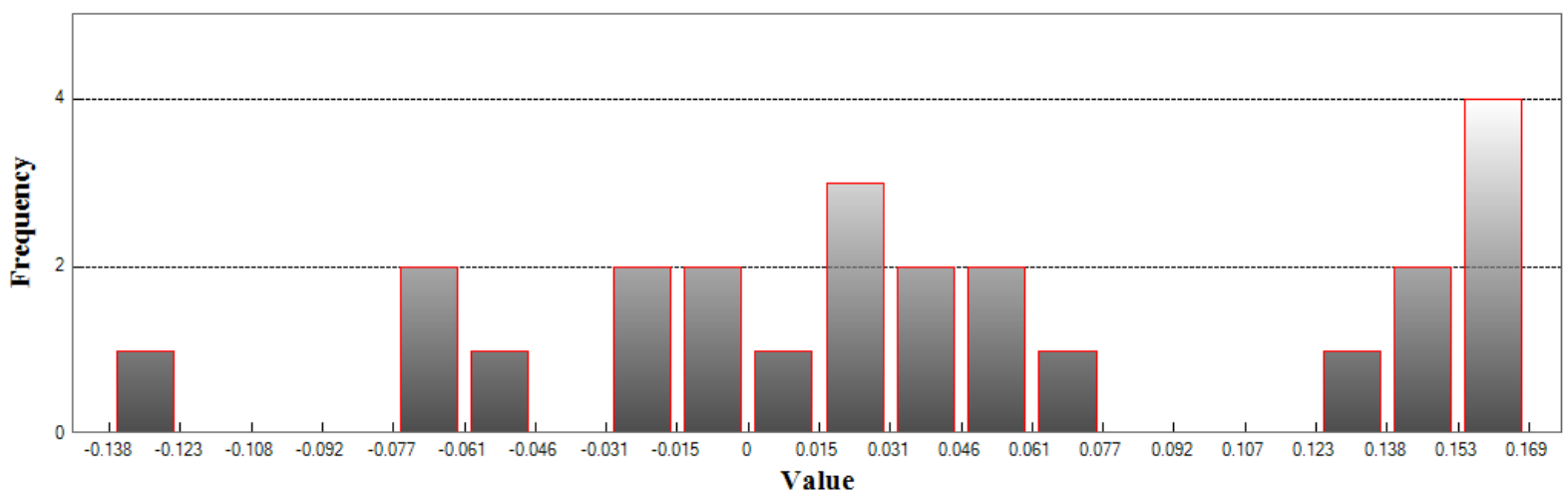
Standard Deviation DZ: 0.084

RMSE Z: 0.093

95th Percentile: 0.163

Units: Meters

Histogram



Min: -0.139

Max: 0.168

Number Of Bins: 20

Bin Interval: 0.015

LAS (Continued)

Vegetated Vertical Accuracy

LandCover Type: Med Vegetation

Minimum DZ: -0.083

Maximum DZ: 0.127

Mean DZ: 0.066

Mean Magnitude DZ: 0.315

Number Observations: 5

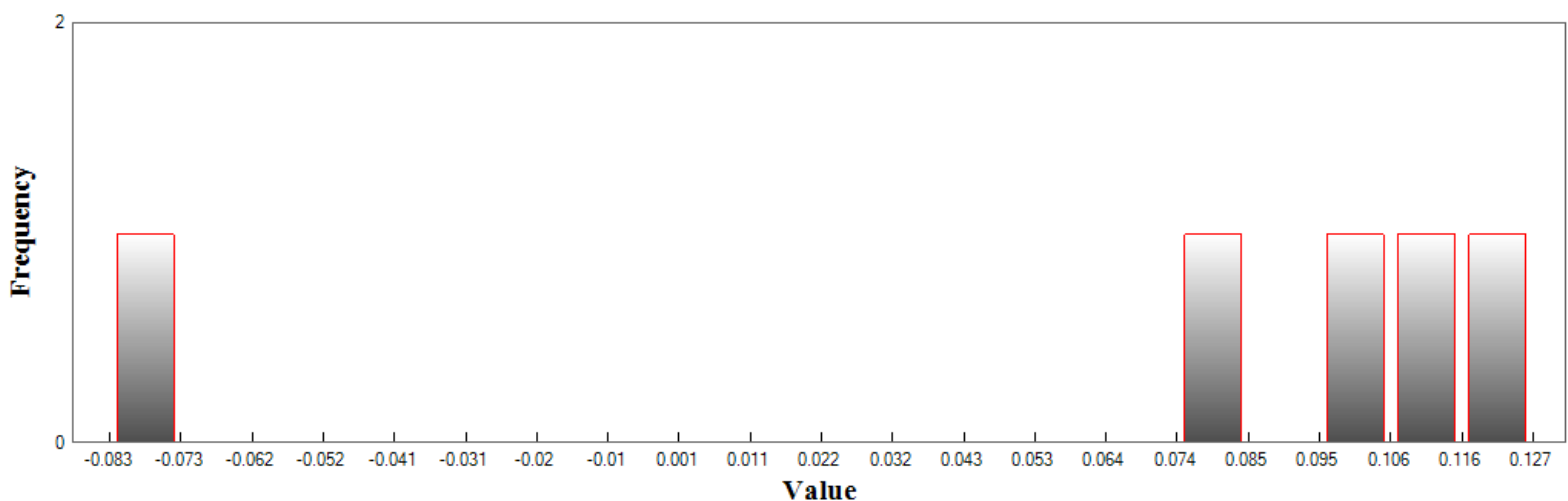
Standard Deviation DZ: 0.085

RMSE Z: 0.1

95th Percentile: 0.127

Units: Meters

Histogram



Min: -0.083

Max: 0.127

Number Of Bins: 20

Bin Interval: 0.01

DEM

Nonvegetated Vertical Accuracy

LandCover Type: Bare Earth, Urban Terrian

Minimum DZ: -0.153

Maximum DZ: 0.134

Mean DZ: 0.001

Mean Magnitude DZ: 0.267

Number Observations: 32

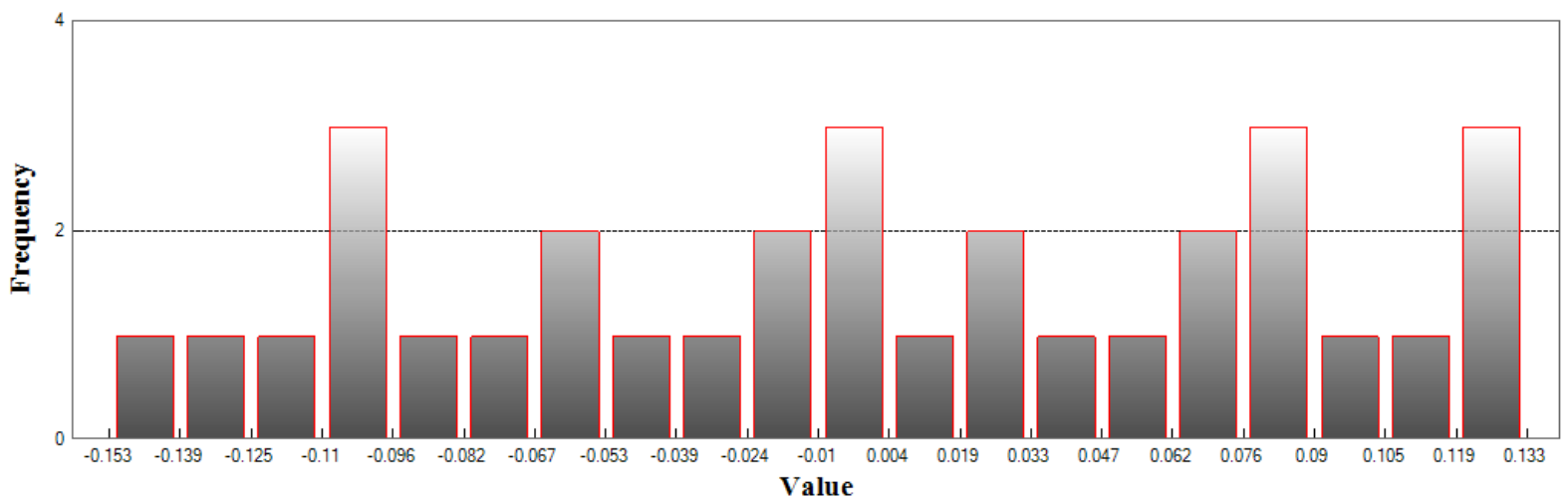
Standard Deviation DZ: 0.085

RMSE Z: 0.083

95% Confidence Level Z: 0.163

Units: Meters

Histogram



Min: -0.153
 Max: 0.134
 Number Of Bins: 20
 Bin Interval: 0.014

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: High Vegetation

Minimum DZ: -0.093

Maximum DZ: 0.161

Mean DZ: -0.015

Mean Magnitude DZ: 0.276

Number Observations: 6

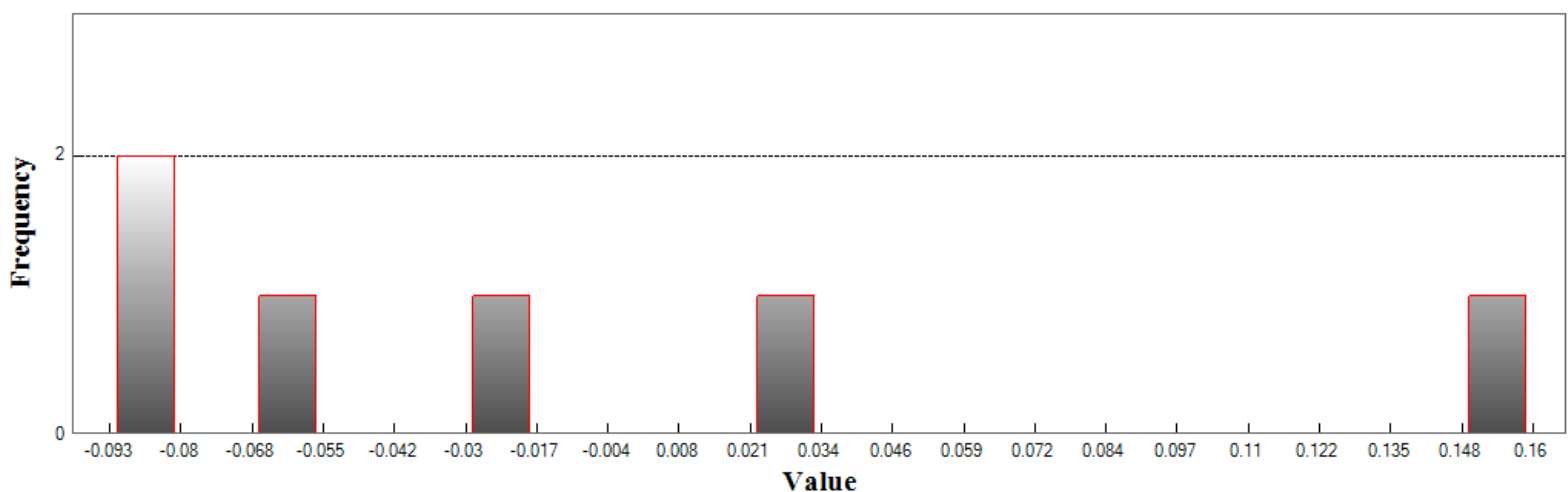
Standard Deviation DZ: 0.096

RMSE Z: 0.089

95th Percentile: 0.161

Units: Meters

Histogram



Min: -0.093

Max: 0.161

Number Of Bins: 20

Bin Interval: 0.013

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: Low Vegetation

Minimum DZ: -0.135

Maximum DZ: 0.189

Mean DZ: 0.045

Mean Magnitude DZ: 0.277

Number Observations: 24

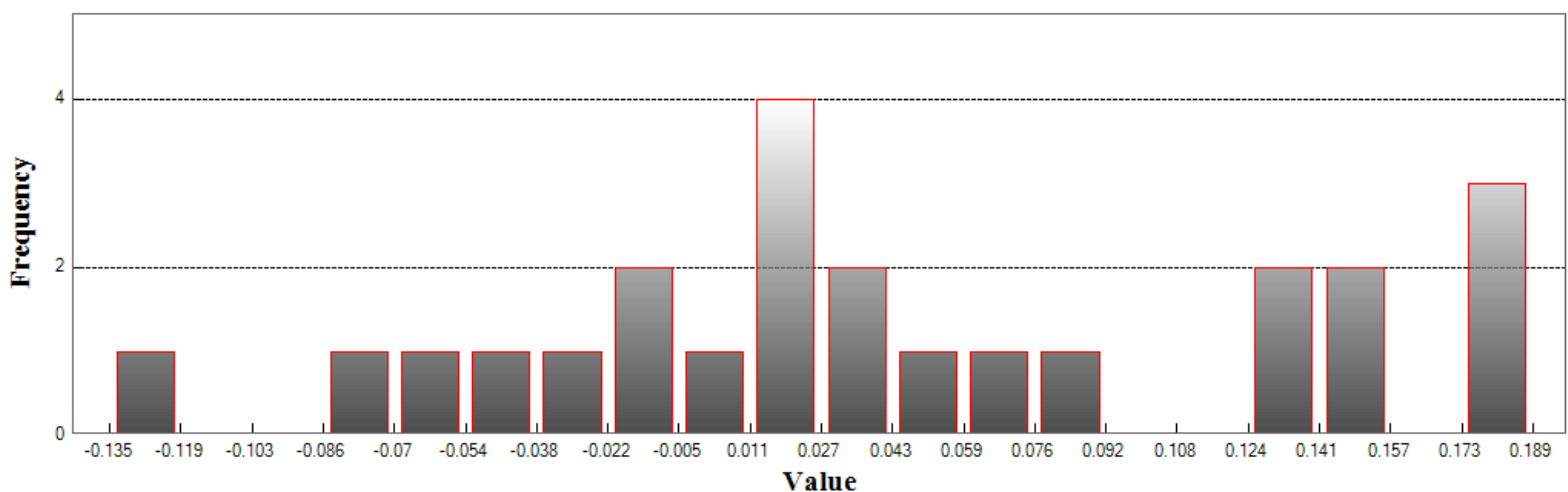
Standard Deviation DZ: 0.089

RMSE Z: 0.098

95th Percentile: 0.186

Units: Meters

Histogram



Min: -0.135

Max: 0.189

Number Of Bins: 20

Bin Interval: 0.016

DEM (Continued)

Vegetated Vertical Accuracy

LandCover Type: Med Vegetation

Minimum DZ: -0.091

Maximum DZ: 0.13

Mean DZ: 0.062

Mean Magnitude DZ: 0.313

Number Observations: 5

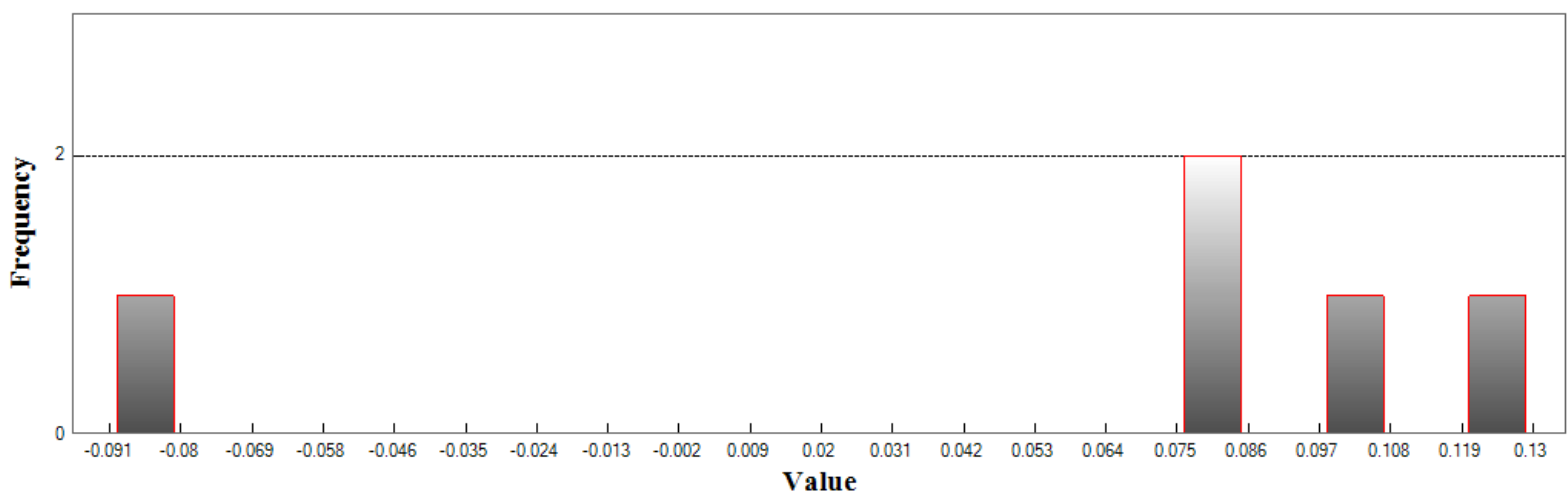
Standard Deviation DZ: 0.087

RMSE Z: 0.1

95th Percentile: 0.13

Units: Meters

Histogram



Min: -0.091

Max: 0.13

Number Of Bins: 20

Bin Interval: 0.011