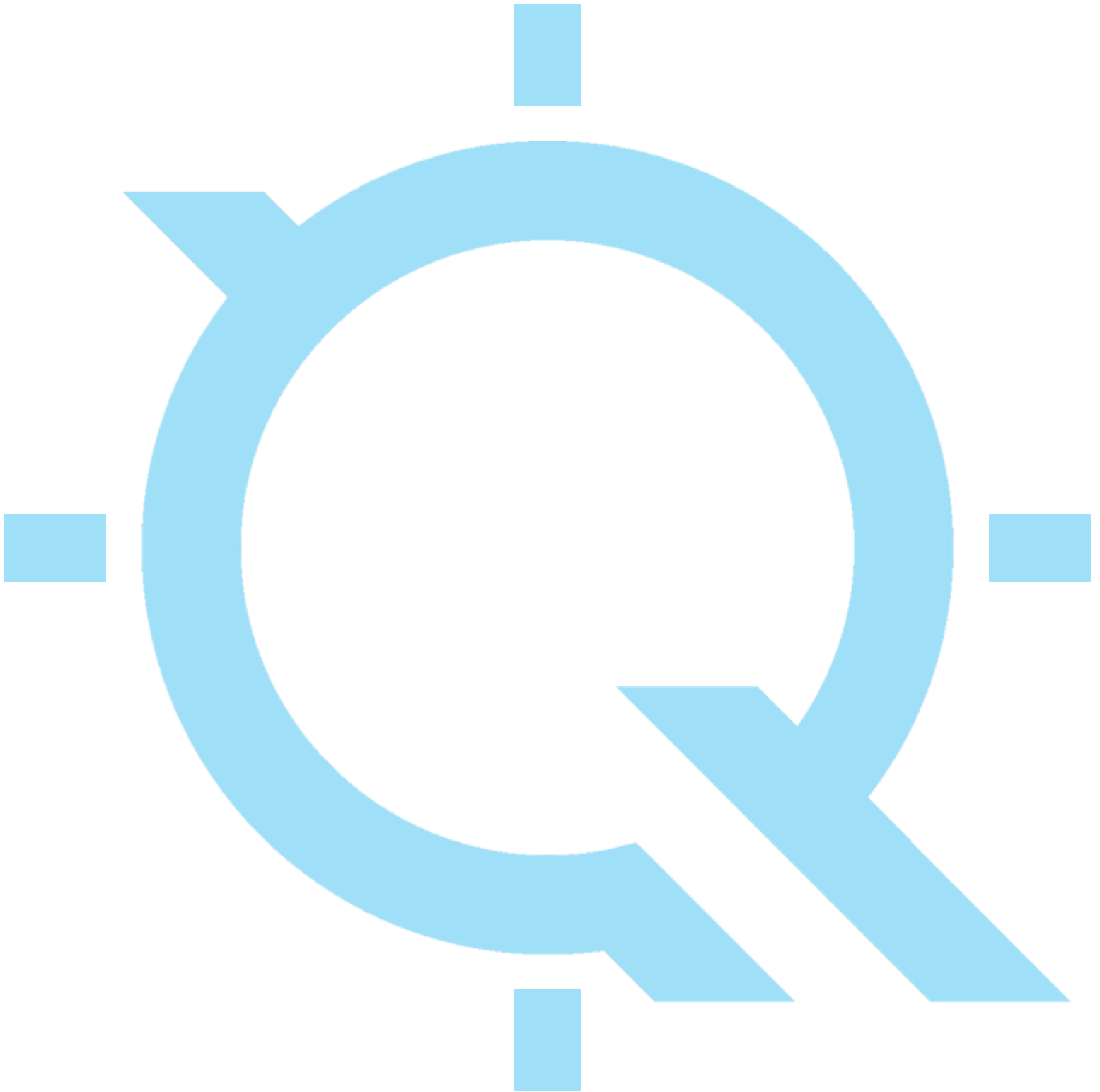


FOCUS on Accuracy



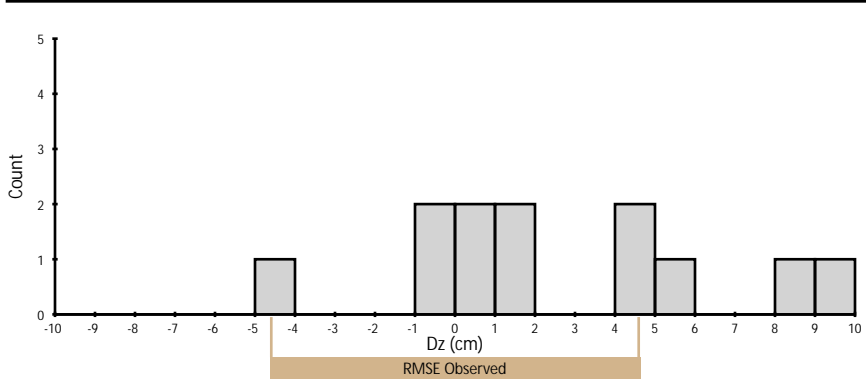
#140G0219F0026_Lot7_Sheboygan
LiDAR Accuracy Assessment

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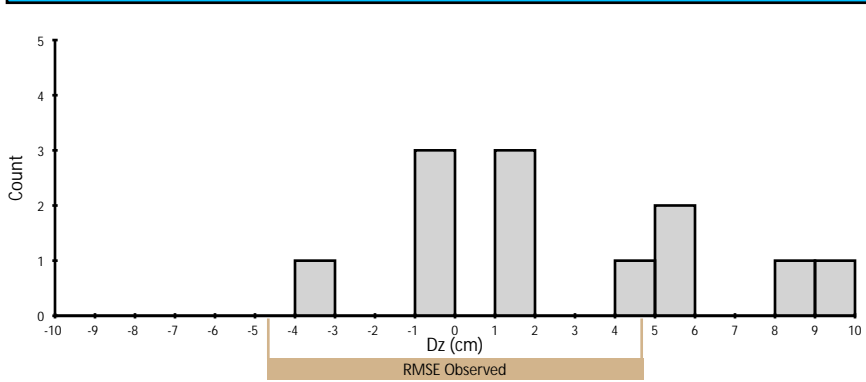
Project Summary

Nonvegetated Vertical Accuracy (Point Cloud)



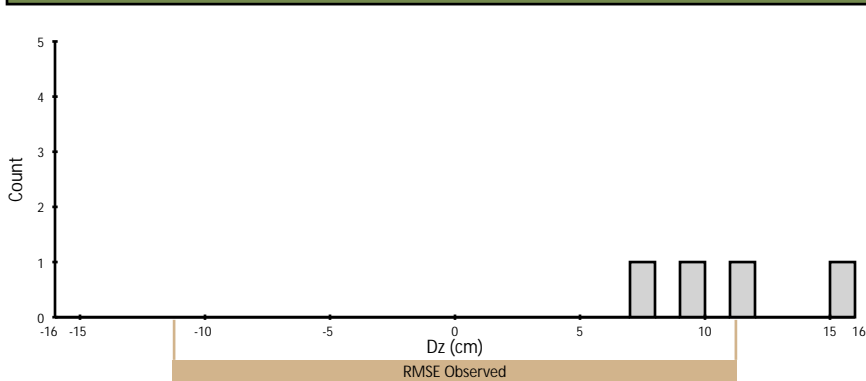
	Observed	Required
RMSE	4.63 cm	10.00 cm
95% Confidence Level	9.07 cm	19.60 cm
Mean	2.55 cm	N/A
Count	12	N/A

Nonvegetated Vertical Accuracy (DEM)



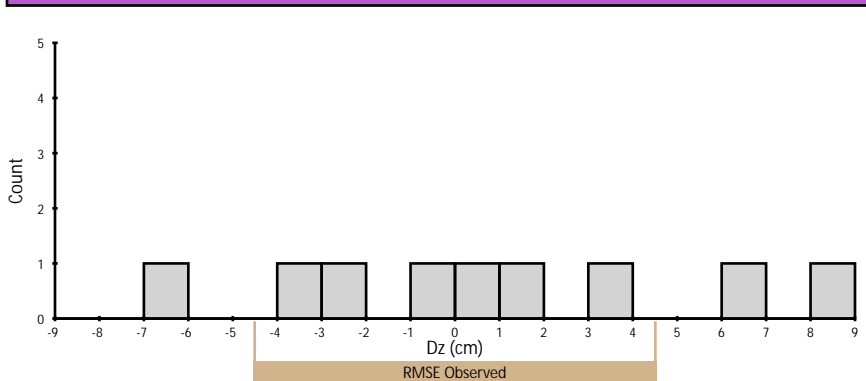
	Observed	Required
RMSE	4.70 cm	N/A
95% Confidence Level	9.21 cm	19.60 cm
Mean	2.72 cm	N/A
Count	12	N/A

Vegetated Vertical Accuracy (DEM)



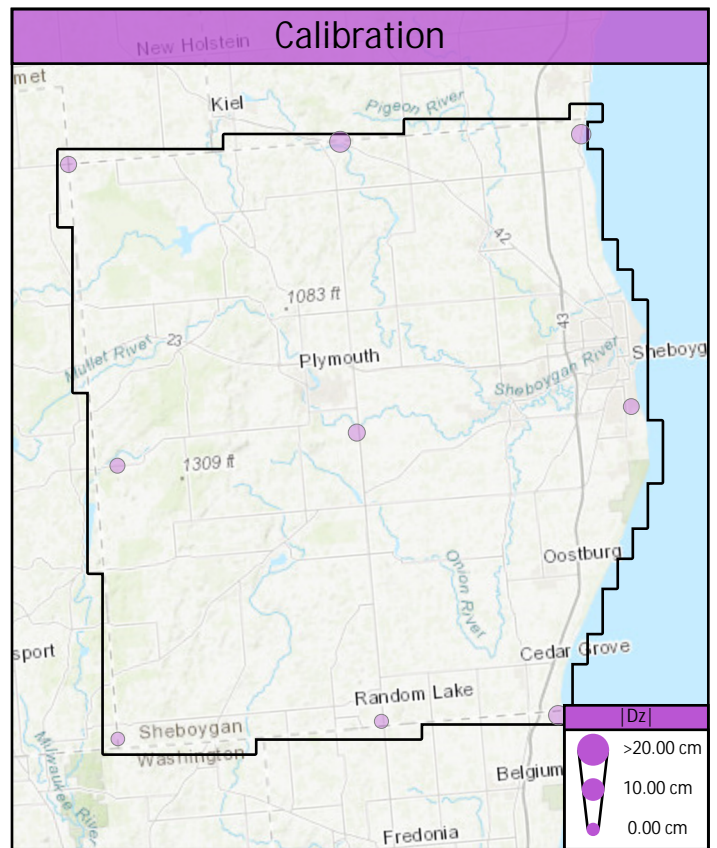
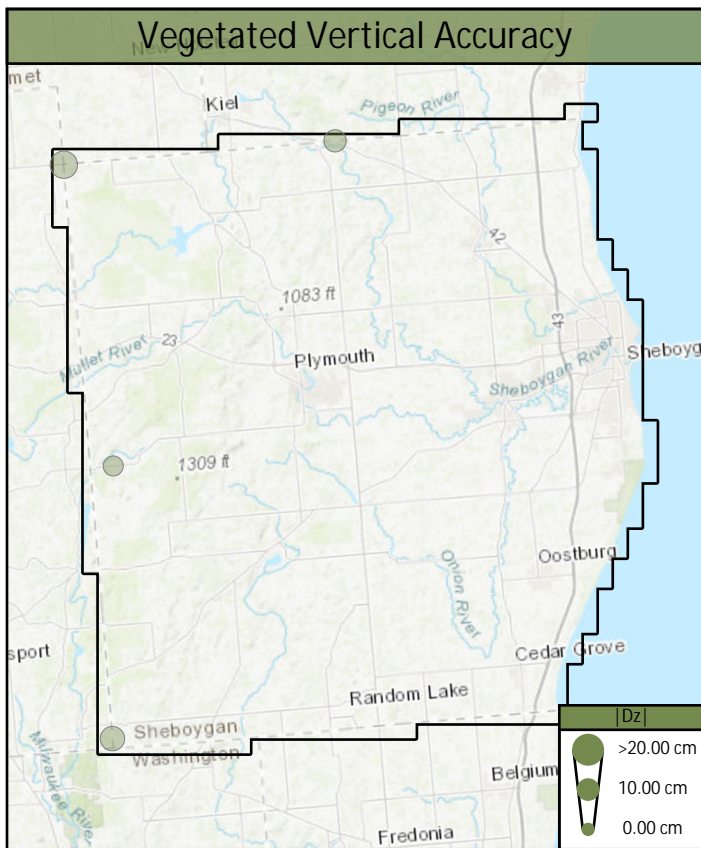
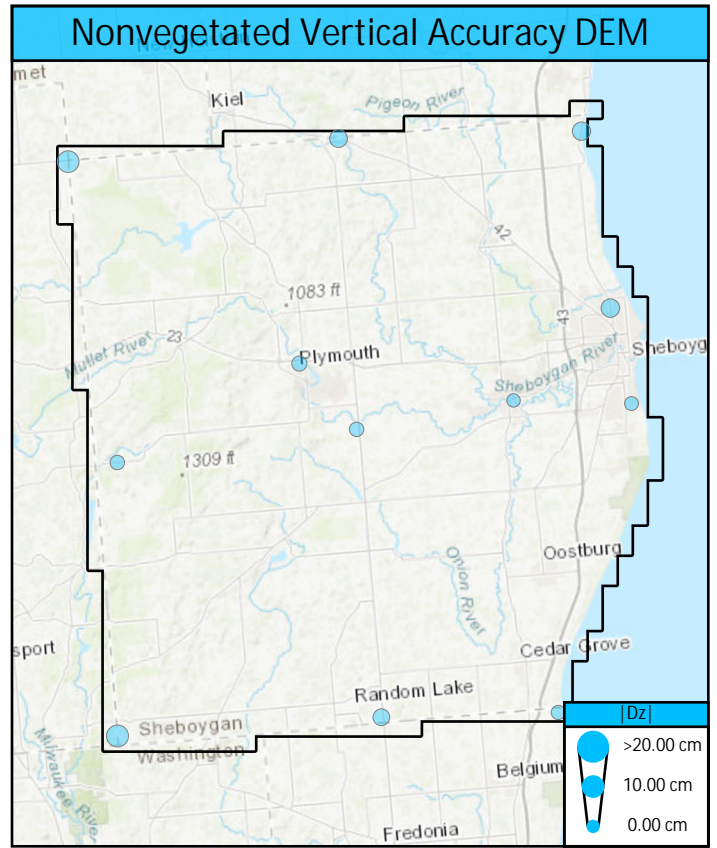
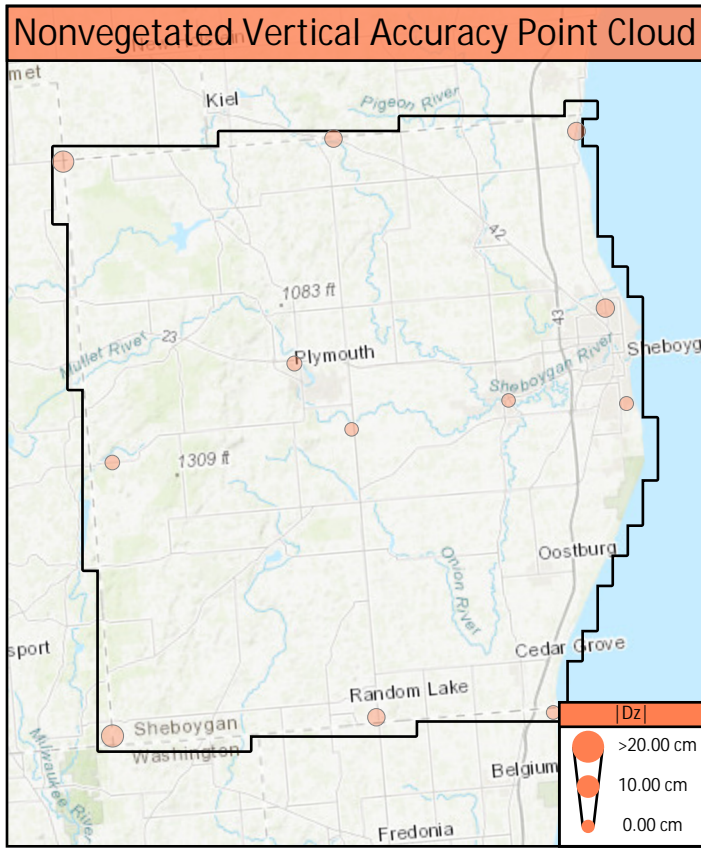
	Observed	Required
RMSE	11.29 cm	N/A
95th Percentile	14.54 cm	29.40 cm
Mean	10.91 cm	N/A
Count	4	N/A

Calibration (Point Cloud)



	Observed	Required
RMSE	4.54 cm	N/A
Mean	0.78 cm	N/A
Count	9	N/A

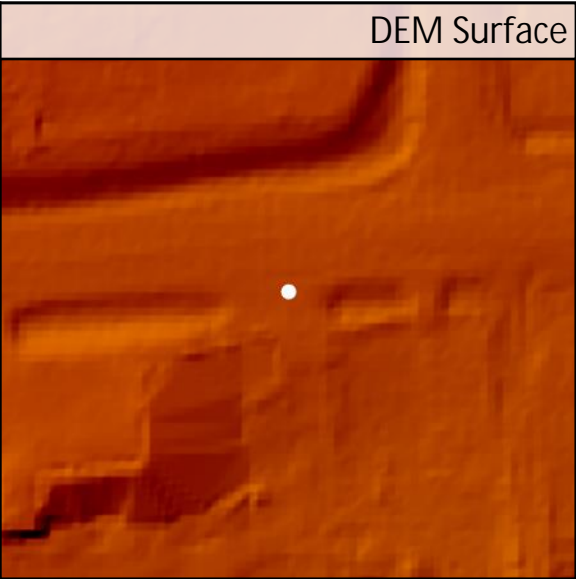
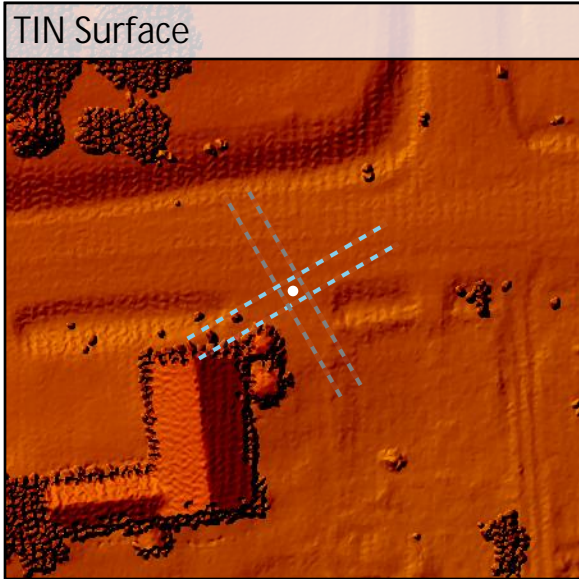
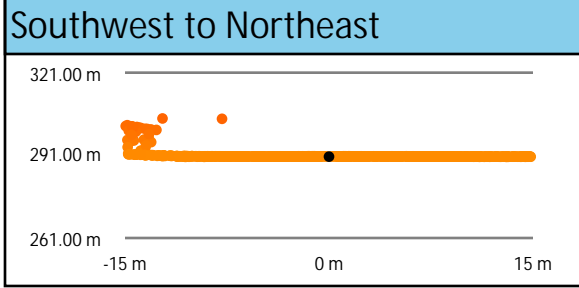
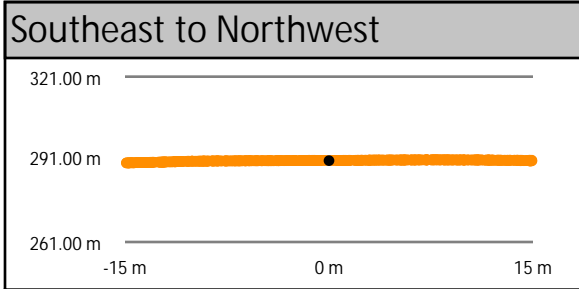
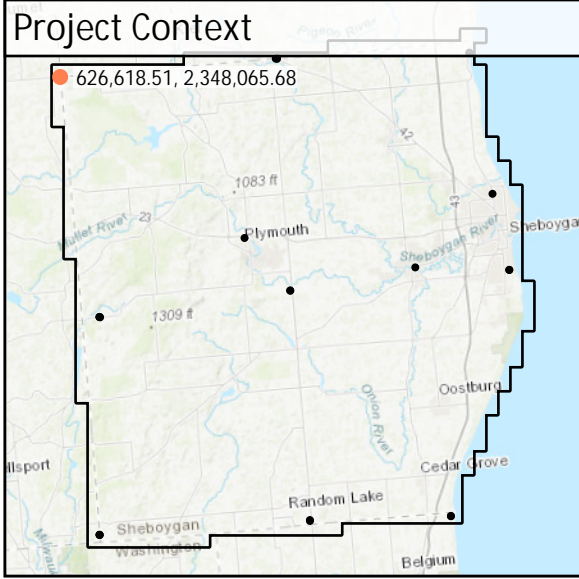
Control Point Locations



Control Point Breakdown

Point	Type	All Points TIN Dz	DEM Dz	Ground Density	Nearest Ground	Slope
BE68	NVA	8.44 cm	8.86 cm	5.87 ppsm	0.16 m	1.77°
BE69	NVA	4.53 cm	4.73 cm	4.99 ppsm	0.43 m	1.53°
BE70	NVA	4.80 cm	5.29 cm	5.45 ppsm	0.30 m	1.58°
BE71	NVA	1.38 cm	1.18 cm	5.76 ppsm	0.32 m	2.47°
BE72	NVA	0.27 cm	1.21 cm	5.13 ppsm	0.18 m	0.67°
BE73	NVA	-0.70 cm	-0.59 cm	4.81 ppsm	0.15 m	1.72°
BE74	NVA	9.40 cm	9.21 cm	2.69 ppsm	0.28 m	1.59°
BE75	NVA	-0.48 cm	-0.92 cm	2.72 ppsm	0.25 m	1.23°
UA39	NVA	-4.39 cm	-3.67 cm	4.56 ppsm	0.18 m	1.80°
UA40	NVA	5.34 cm	5.49 cm	3.47 ppsm	0.25 m	1.75°
UA41	NVA	0.25 cm	-0.07 cm	5.06 ppsm	0.14 m	0.60°
UA42	NVA	1.77 cm	1.99 cm	2.69 ppsm	0.27 m	0.71°
FO37	VVA	N/A	9.58 cm	11.92 ppsm	0.32 m	2.52°
FO38	VVA	N/A	7.16 cm	10.29 ppsm	0.37 m	0.37°
TW48	VVA	N/A	15.01 cm	6.15 ppsm	0.45 m	2.68°
TW49	VVA	N/A	11.89 cm	2.65 ppsm	0.05 m	0.46°
CA105	CAL	3.02 cm	3.55 cm	5.69 ppsm	0.30 m	0.87°
CA106	CAL	8.18 cm	7.93 cm	5.13 ppsm	0.23 m	2.04°
CA107	CAL	6.50 cm	5.74 cm	5.34 ppsm	0.08 m	0.55°
CA108	CAL	1.78 cm	1.09 cm	5.41 ppsm	0.16 m	0.57°
CA109	CAL	-3.97 cm	-4.39 cm	4.92 ppsm	0.13 m	0.35°
CA110	CAL	-2.70 cm	-2.07 cm	5.06 ppsm	0.13 m	0.16°
CA111	CAL	-0.30 cm	-0.51 cm	2.51 ppsm	0.15 m	0.37°
CA112	CAL	0.82 cm	1.76 cm	4.92 ppsm	0.37 m	0.73°
CA113	CAL	-6.33 cm	-5.82 cm	2.86 ppsm	0.04 m	0.97°

BE68	Known Z	290.53 m	Point Density	5.87 ppsm
	DEM Dz	0.09 m	Ground Density	5.87 ppsm
	All Points TIN Dz	0.08 m	Slope	1.77 °

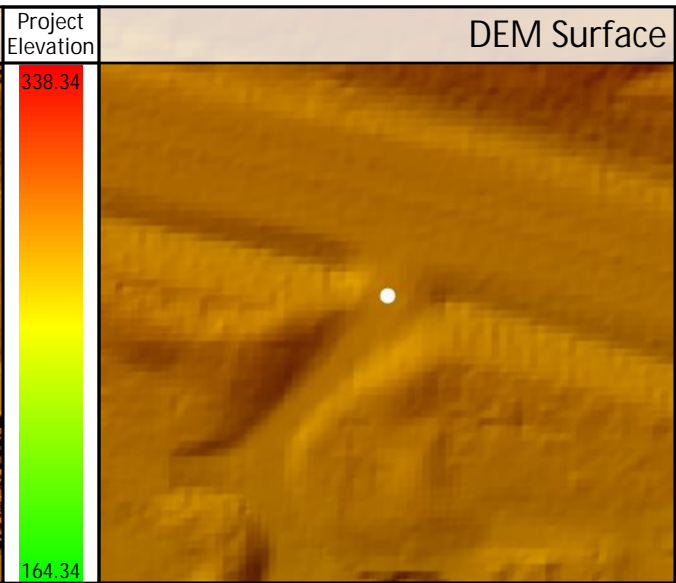
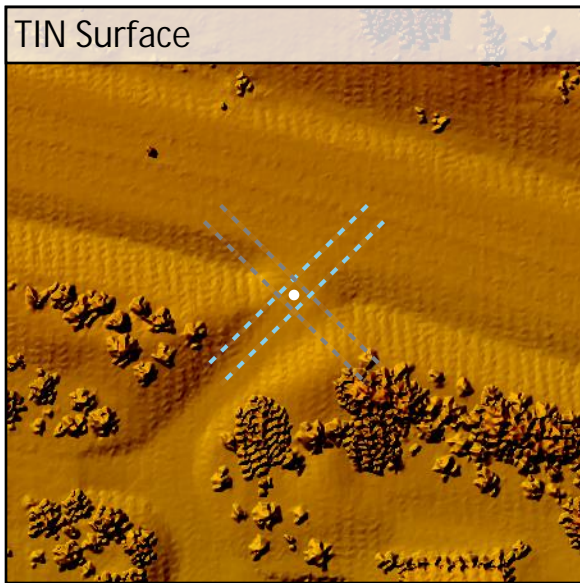
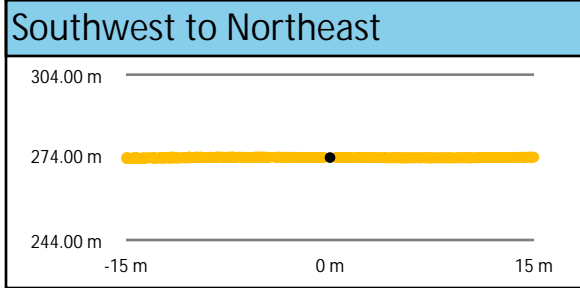
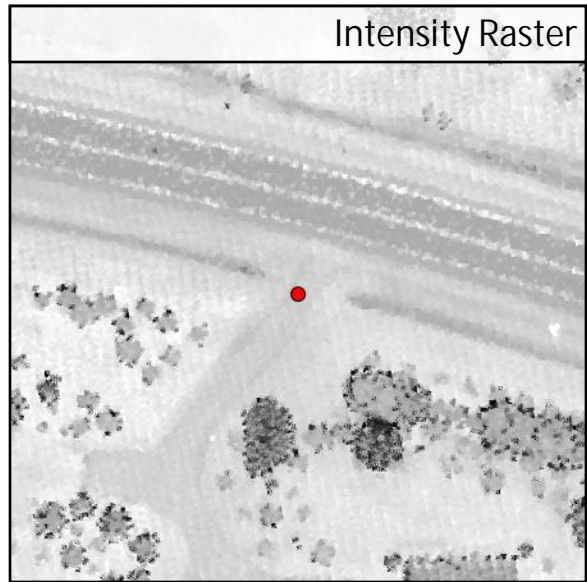
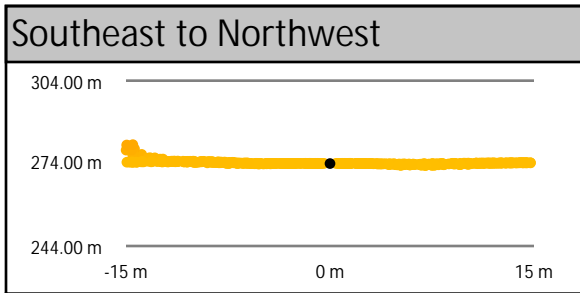
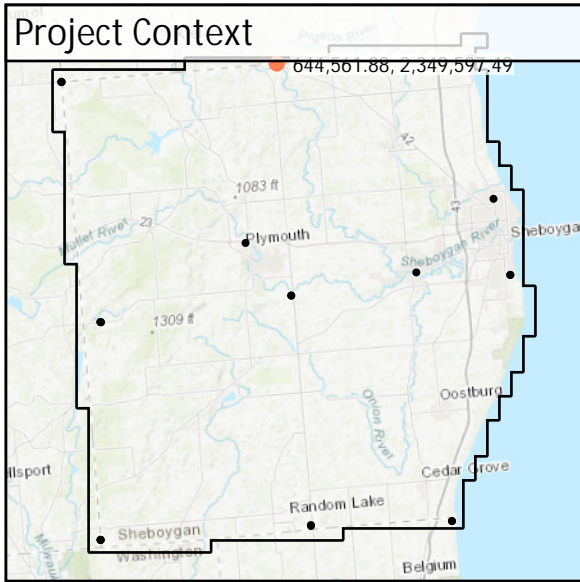


DEM Dz +0.09 m

NVA - BE68

All Points TIN Dz +0.08 m

BE69	Known Z	273.92 m	Point Density	4.99 ppsm
	DEM Dz	0.05 m	Ground Density	4.99 ppsm
	All Points TIN Dz	0.05 m	Slope	1.53 °

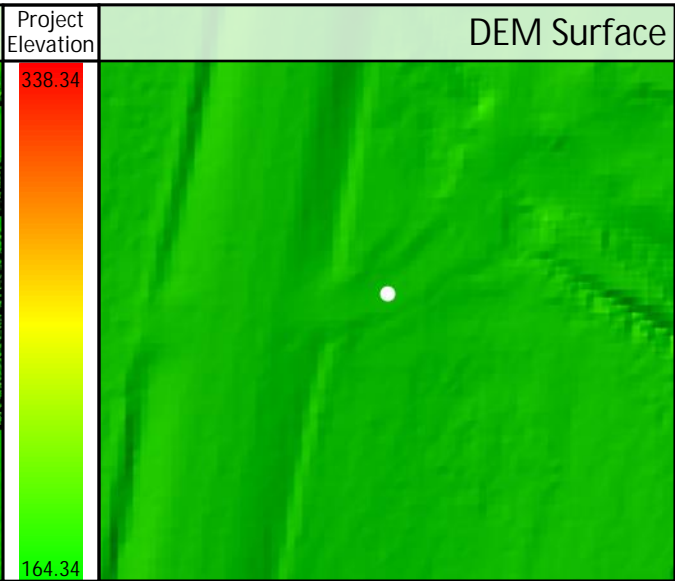
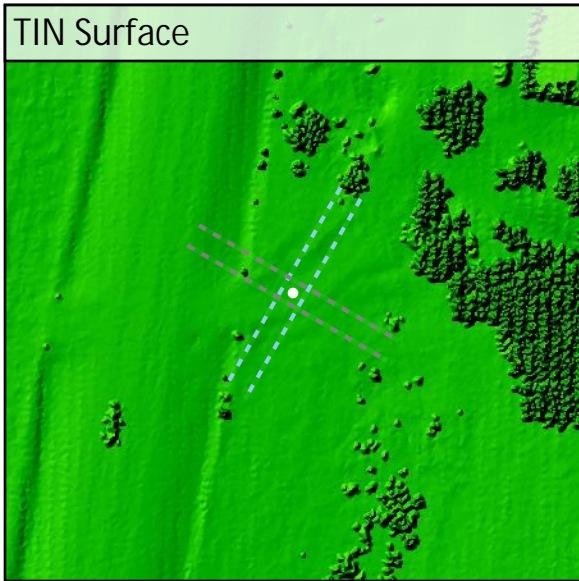
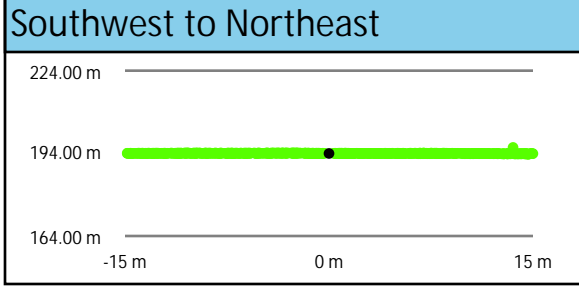
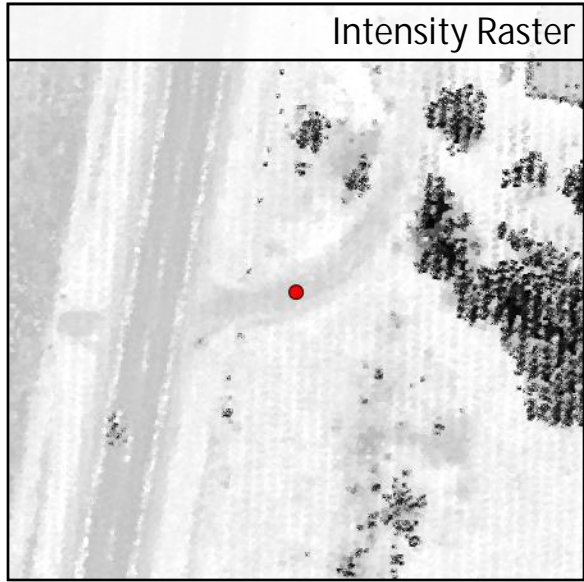
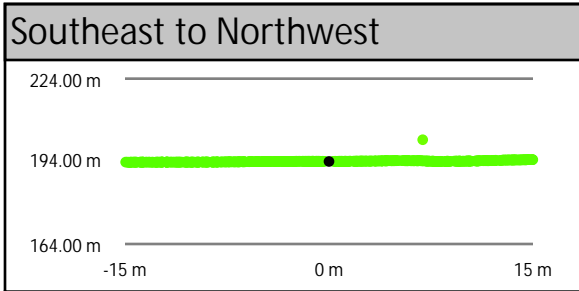
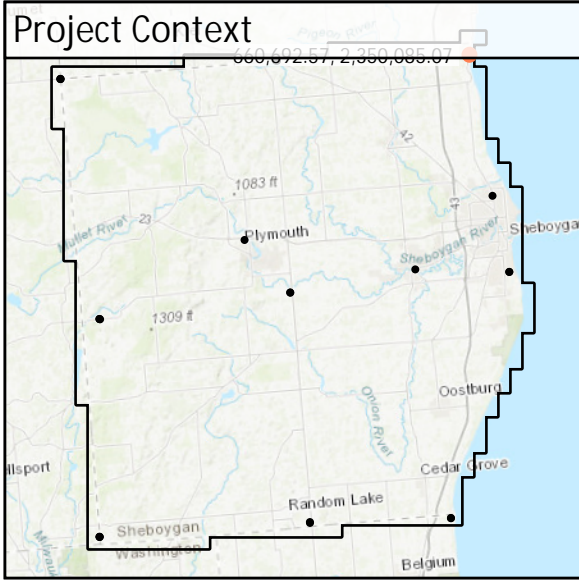


DEM Dz +0.05 m

NVA - BE69

All Points TIN Dz +0.05 m

BE70	Known Z	193.95 m	Point Density	5.45 ppsm
	DEM Dz	0.05 m	Ground Density	5.45 ppsm
	All Points TIN Dz	0.05 m	Slope	1.58 °

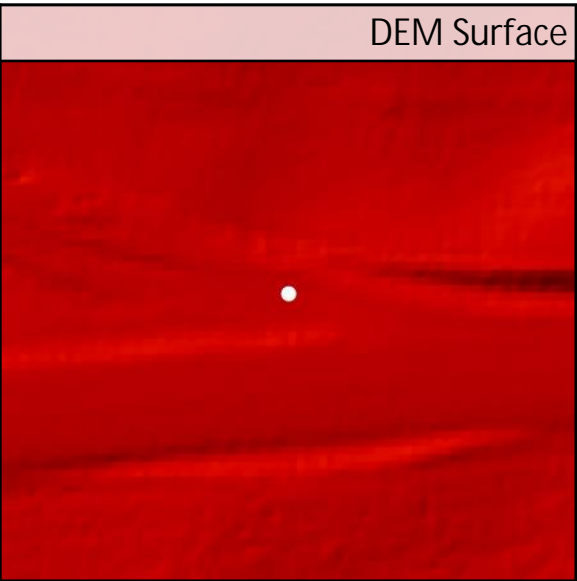
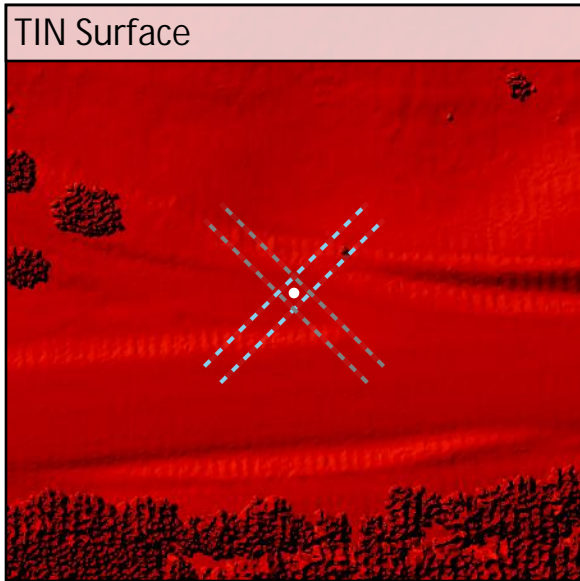
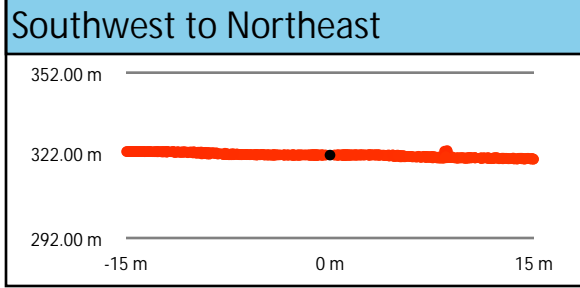
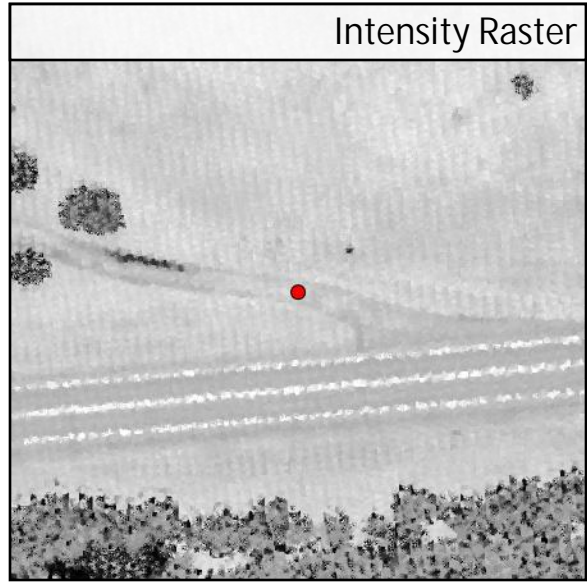
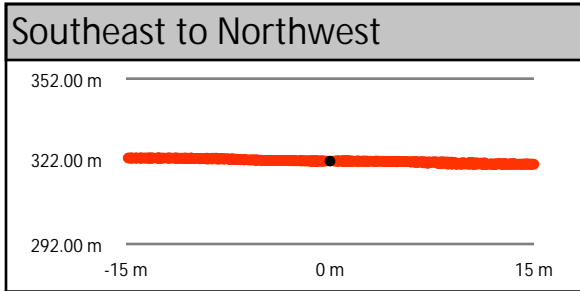
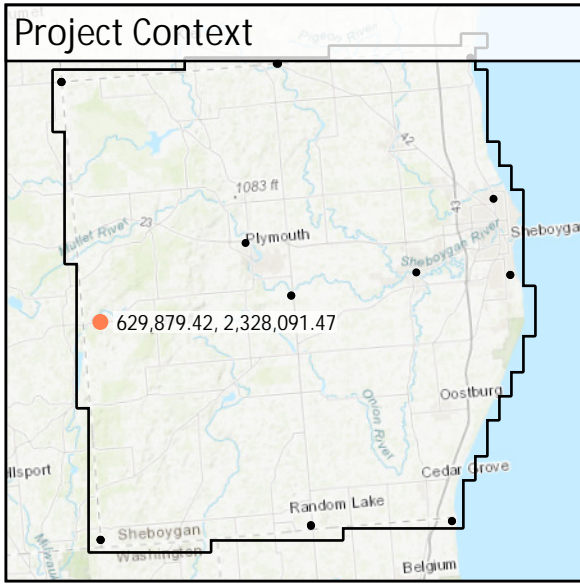


DEM Dz +0.05 m

NVA - BE70

All Points TIN Dz +0.05 m

BE71	Known Z	322.09 m	Point Density	5.76 ppsm
	DEM Dz	0.01 m	Ground Density	5.76 ppsm
	All Points TIN Dz	0.01 m	Slope	2.47 °

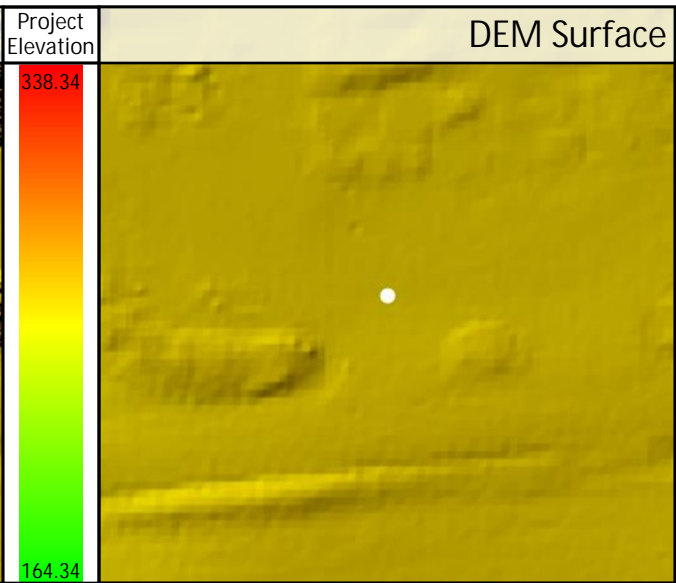
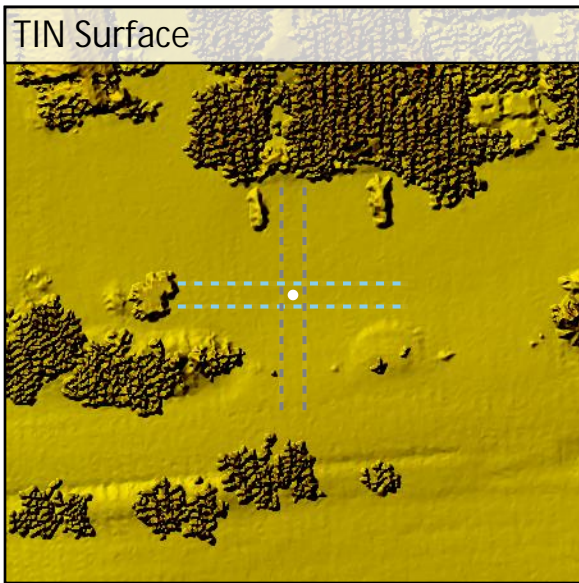
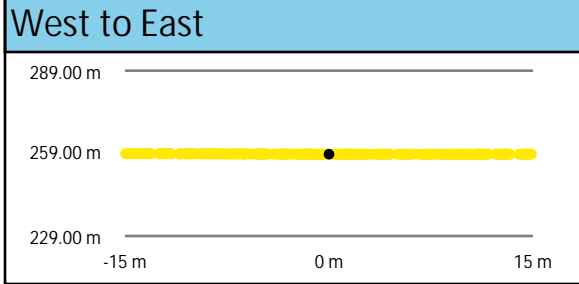
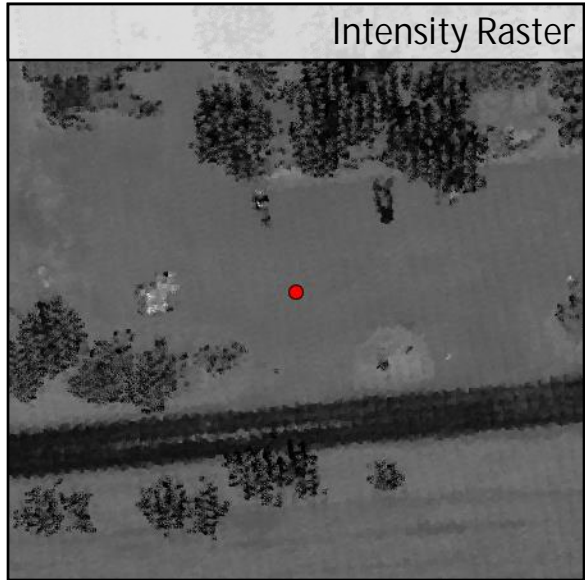
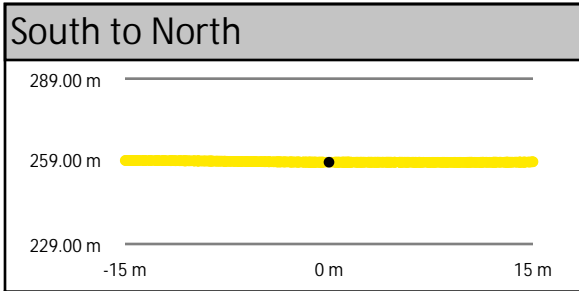
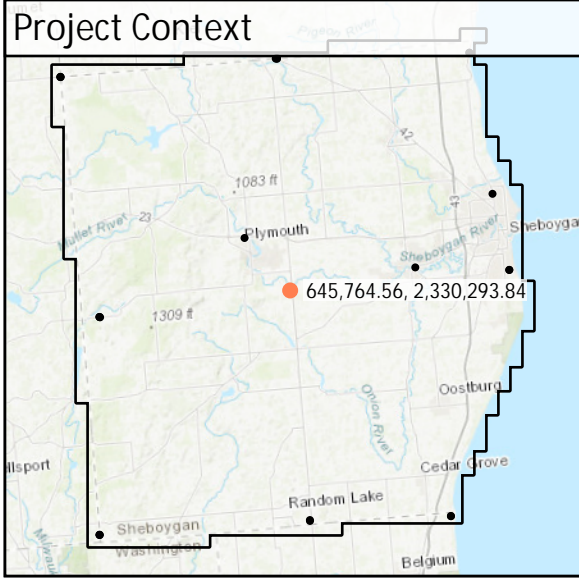


DEM Dz +0.01 m

NVA - BE71

All Points TIN Dz +0.01 m

BE72	Known Z	258.68 m	Point Density	5.13 ppsm
	DEM Dz	0.01 m	Ground Density	5.13 ppsm
	All Points TIN Dz	0.00 m	Slope	0.67 °

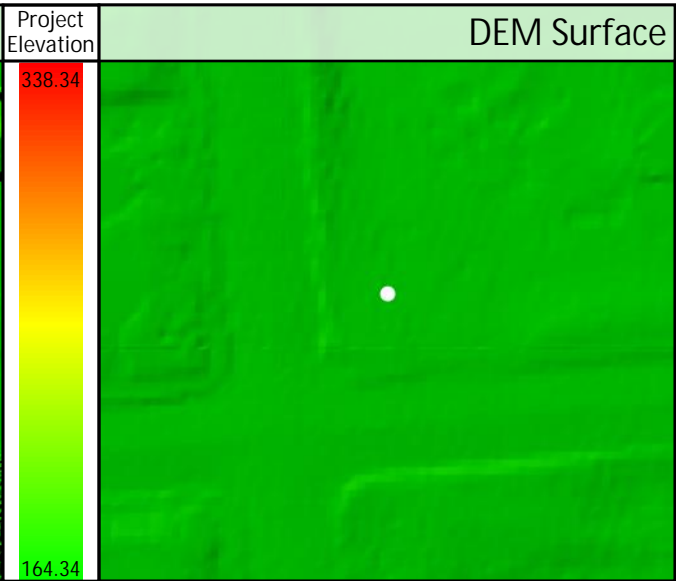
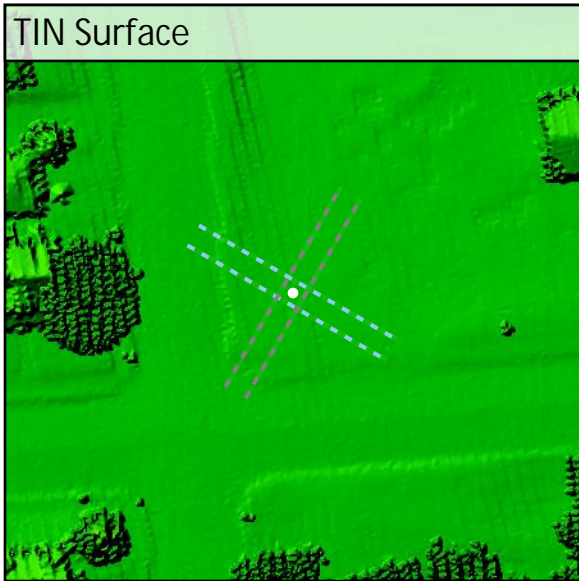
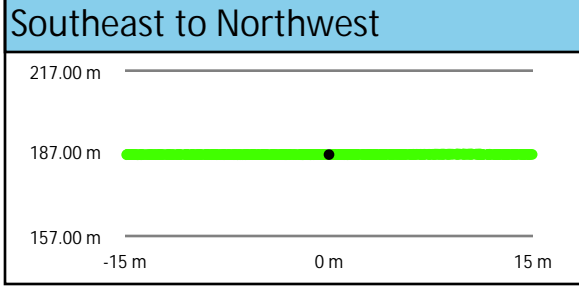
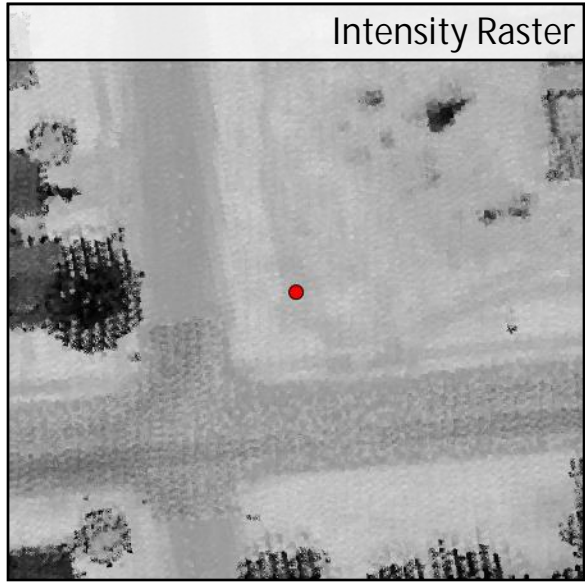
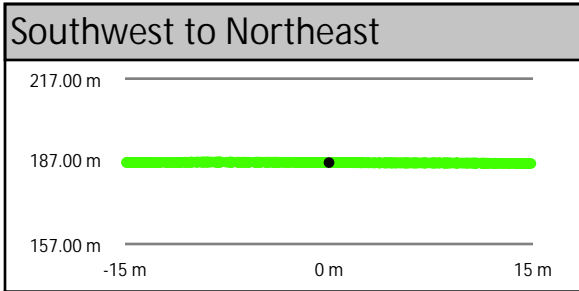
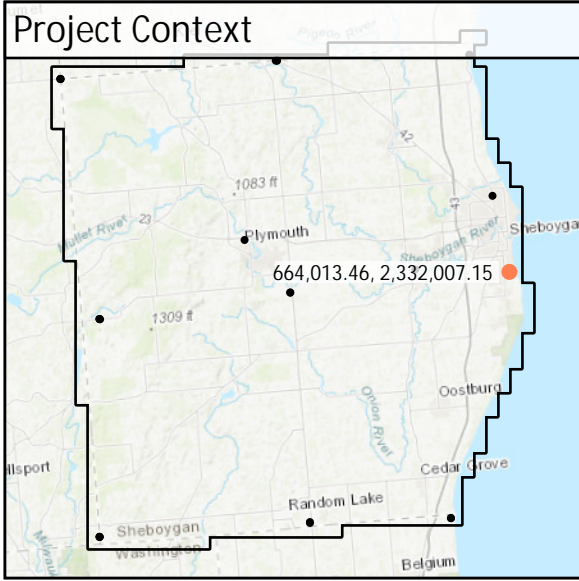


DEM Dz +0.01 m

NVA - BE72

All Points TIN Dz +0.00 m

BE73	Known Z	186.55 m	Point Density	4.81 ppsm
	DEM Dz	-0.01 m	Ground Density	4.81 ppsm
	All Points TIN Dz	-0.01 m	Slope	1.72 °

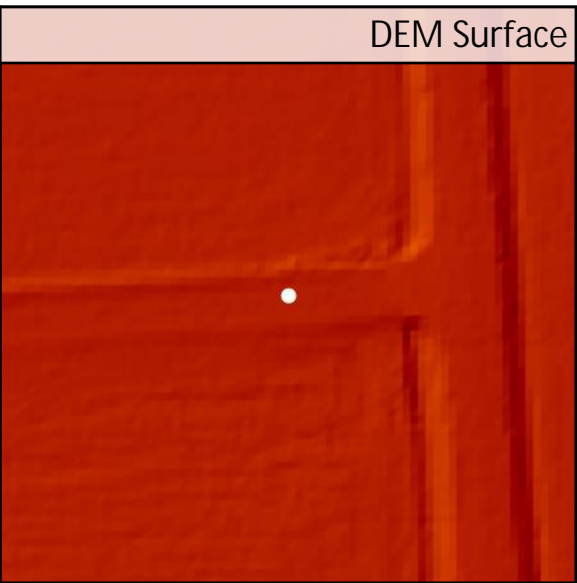
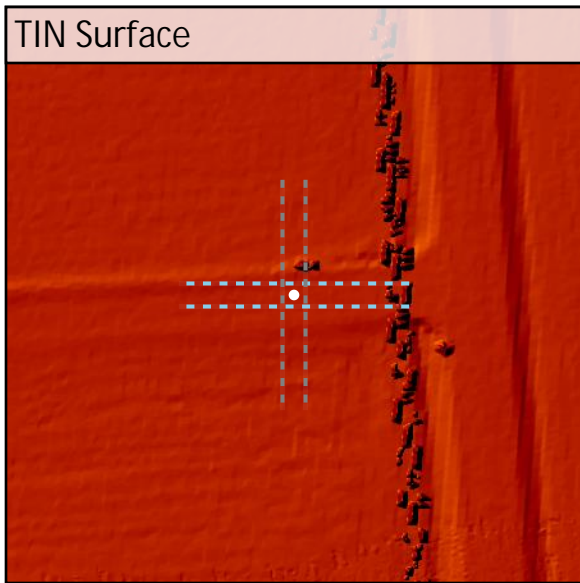
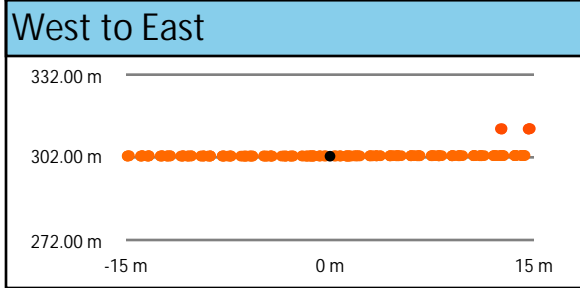
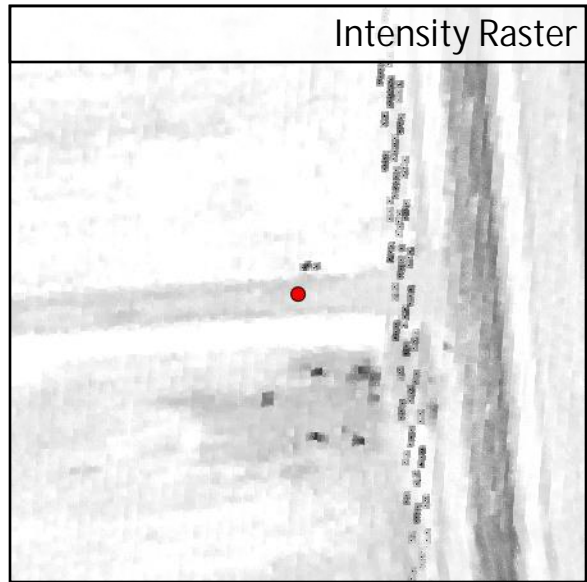
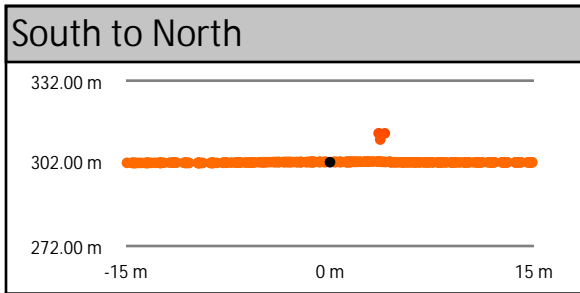
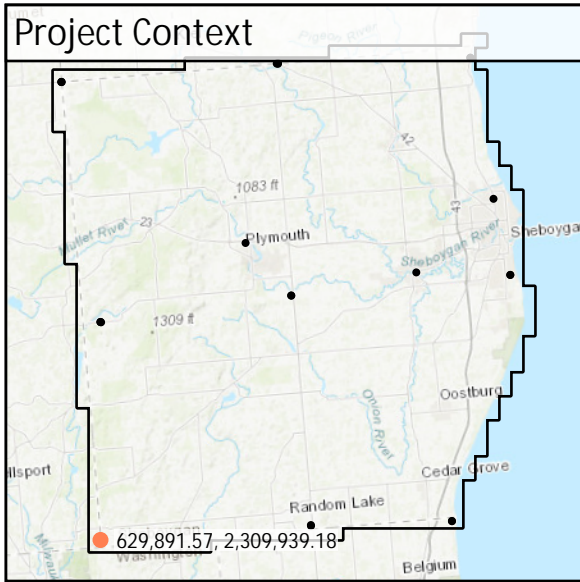


DEM Dz -0.01 m

NVA - BE73

All Points TIN Dz -0.01 m

BE74	Known Z	302.41 m	Point Density	2.69 ppsm
	DEM Dz	0.09 m	Ground Density	2.69 ppsm
	All Points TIN Dz	0.09 m	Slope	1.59 °

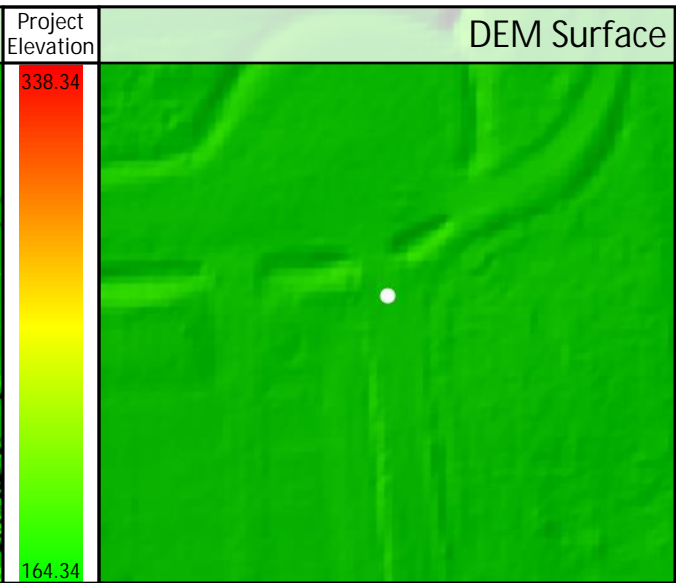
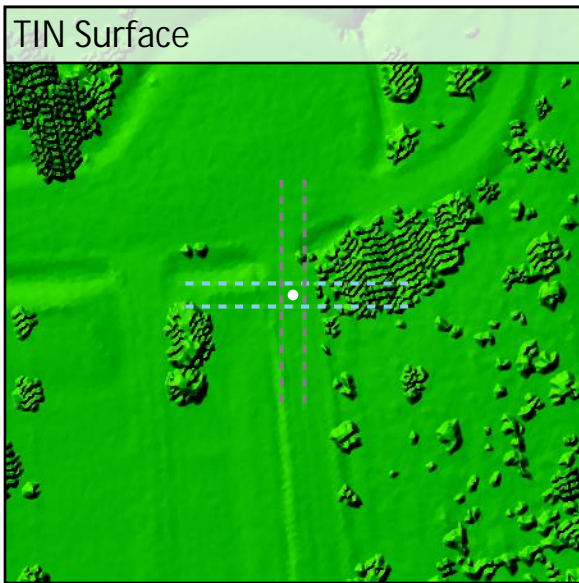
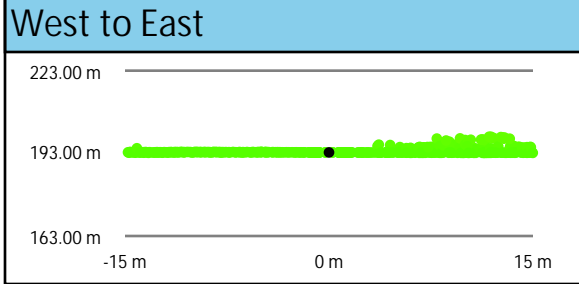
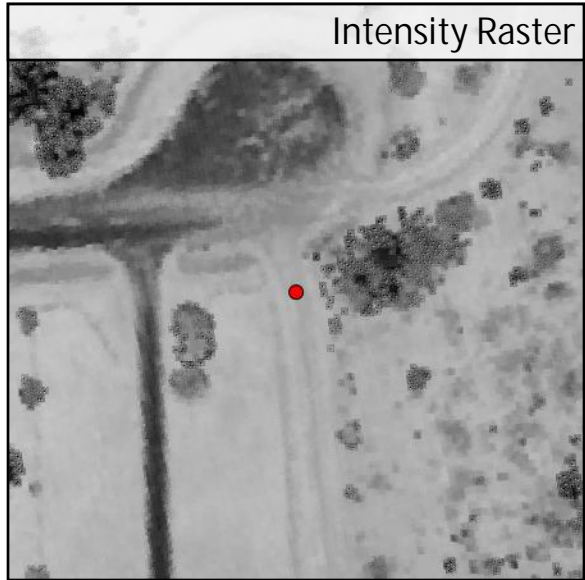
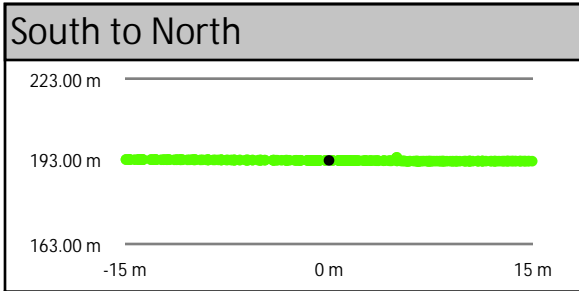
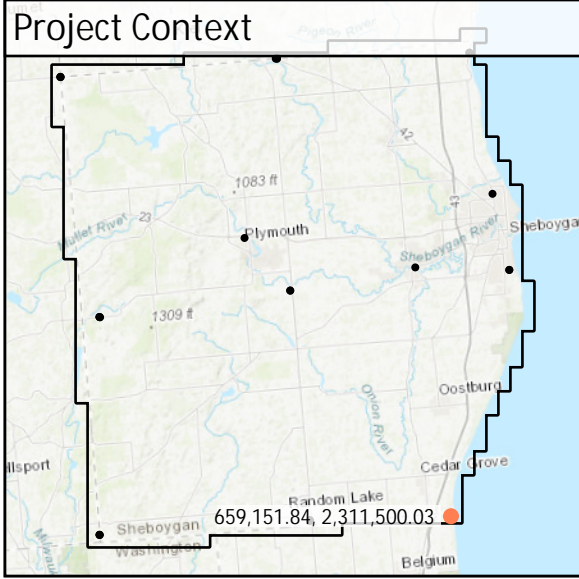


DEM Dz +0.09 m

NVA - BE74

All Points TIN Dz +0.09 m

BE75	Known Z	193.33 m	Point Density	2.72 ppsm
	DEM Dz	-0.01 m	Ground Density	2.72 ppsm
	All Points TIN Dz	0.00 m	Slope	1.23 °

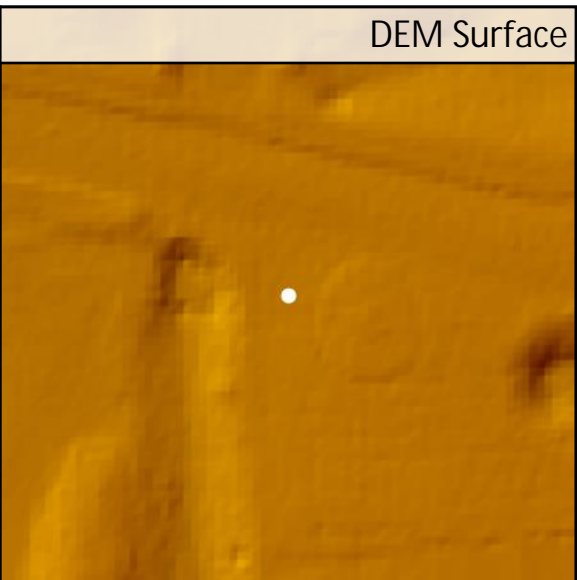
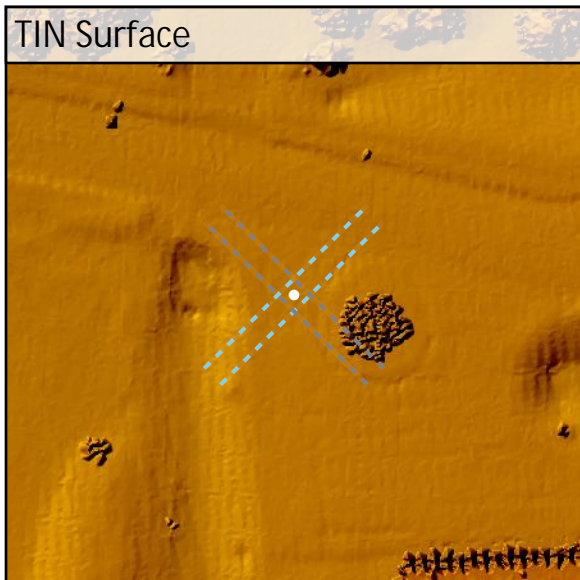
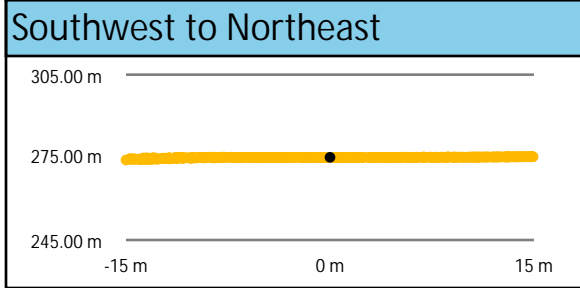
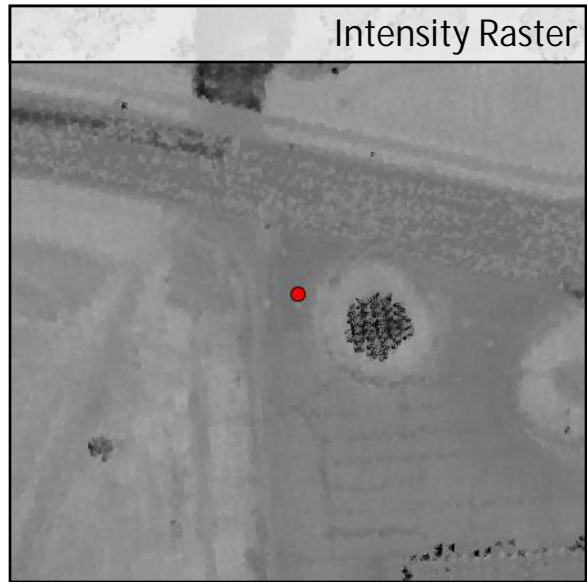
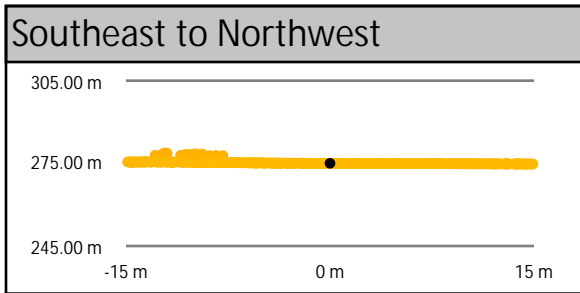
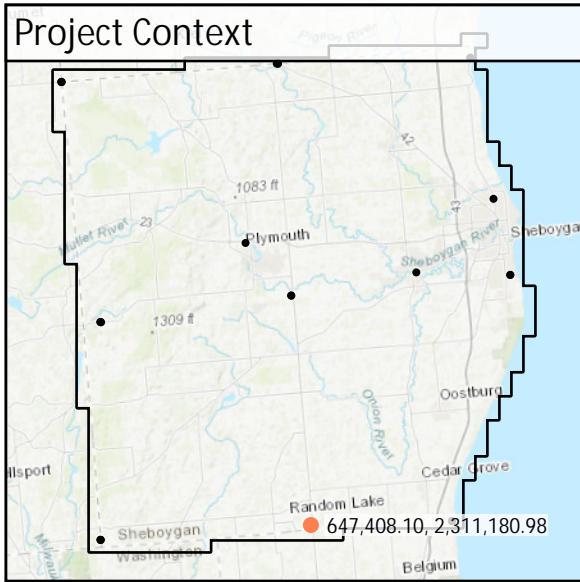


DEM Dz -0.01 m

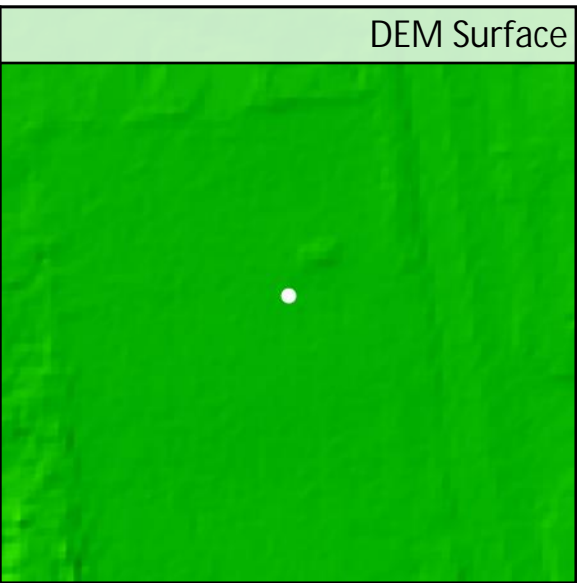
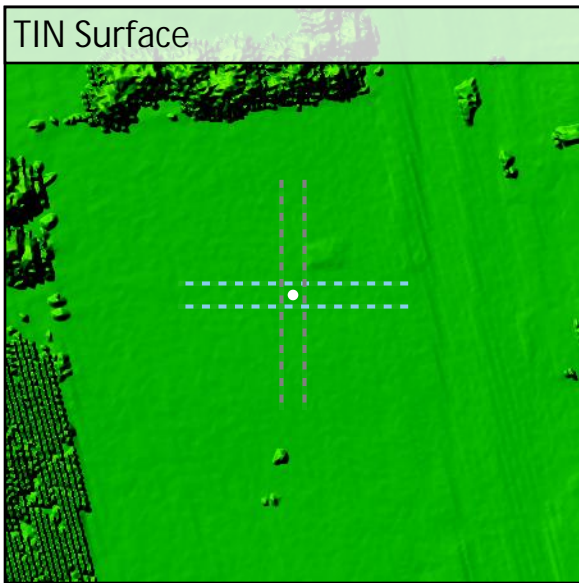
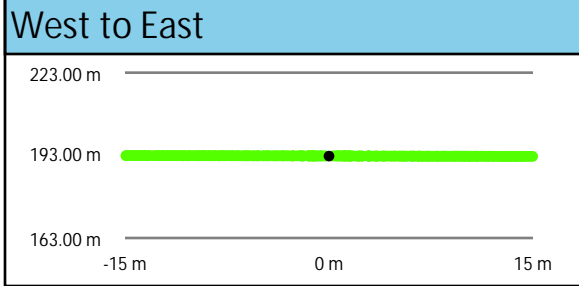
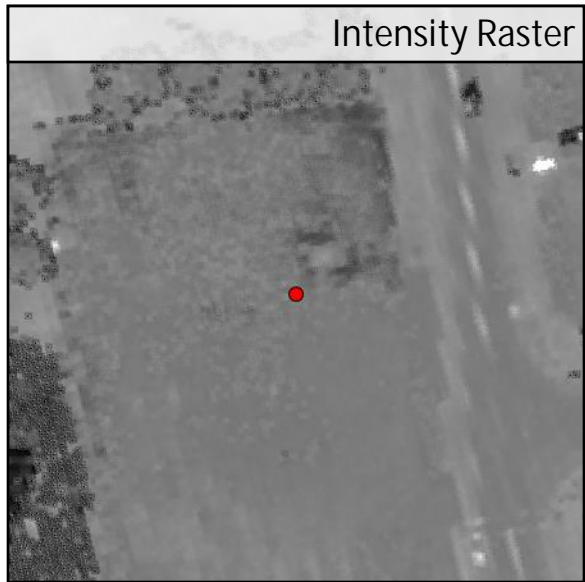
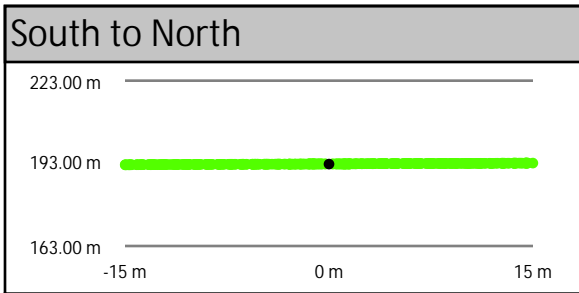
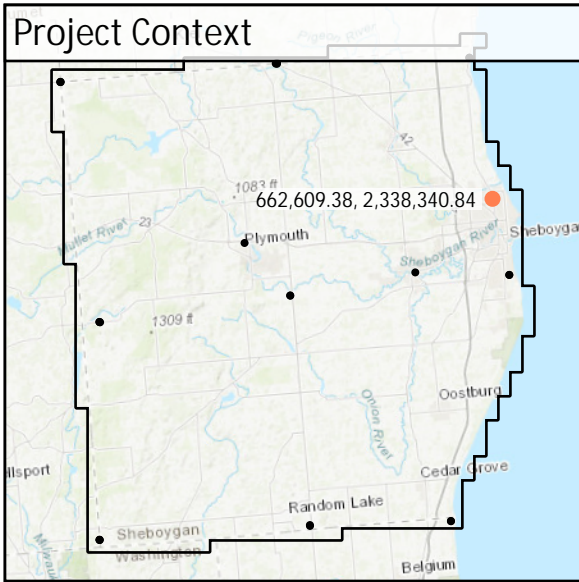
NVA - BE75

All Points TIN Dz 0.00 m

UA39	Known Z	275.00 m	Point Density	4.56 ppsm
	DEM Dz	-0.04 m	Ground Density	4.56 ppsm
	All Points TIN Dz	-0.04 m	Slope	1.80 °



UA40	Known Z	192.72 m	Point Density	3.47 ppsm
	DEM Dz	0.05 m	Ground Density	3.47 ppsm
	All Points TIN Dz	0.05 m	Slope	1.75 °



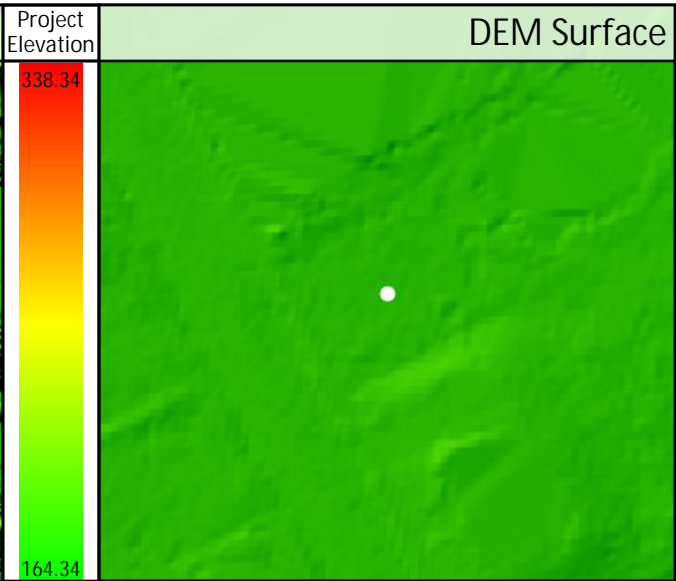
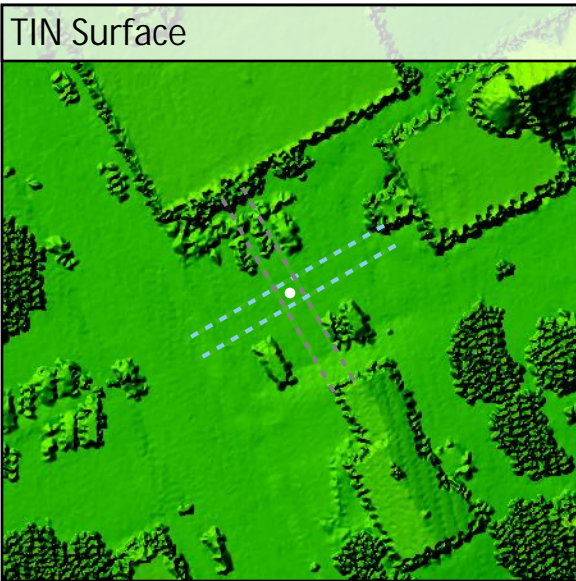
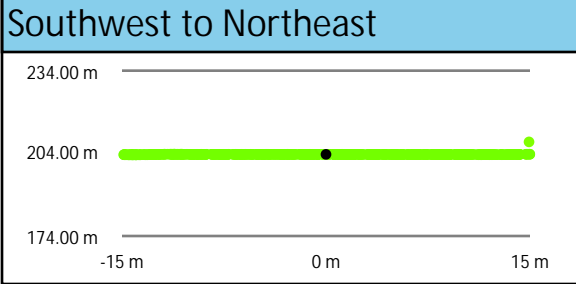
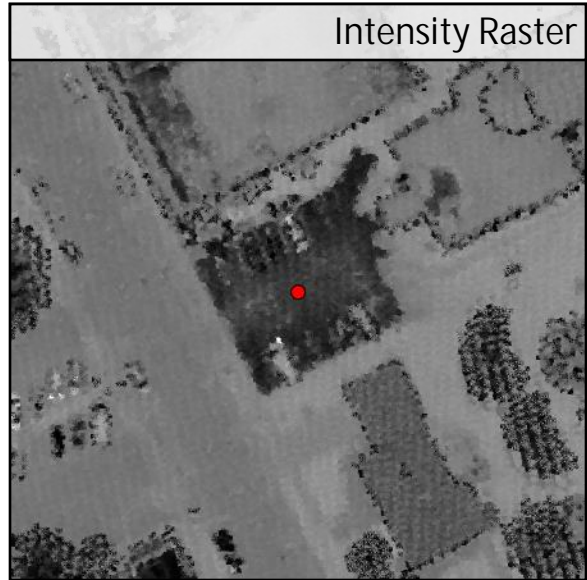
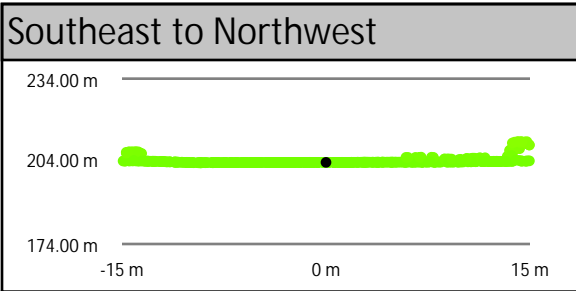
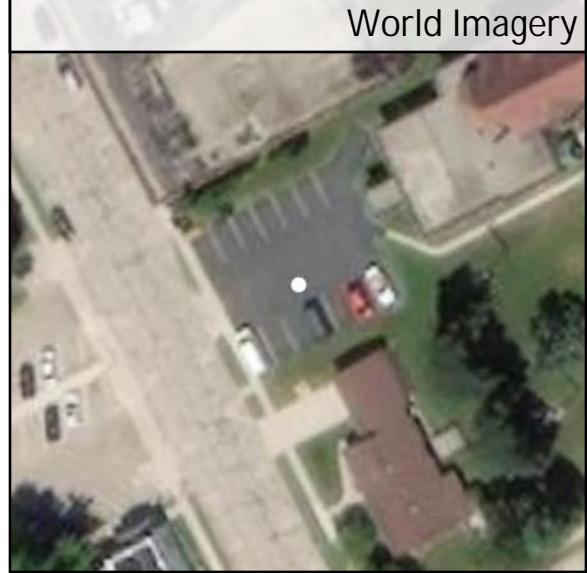
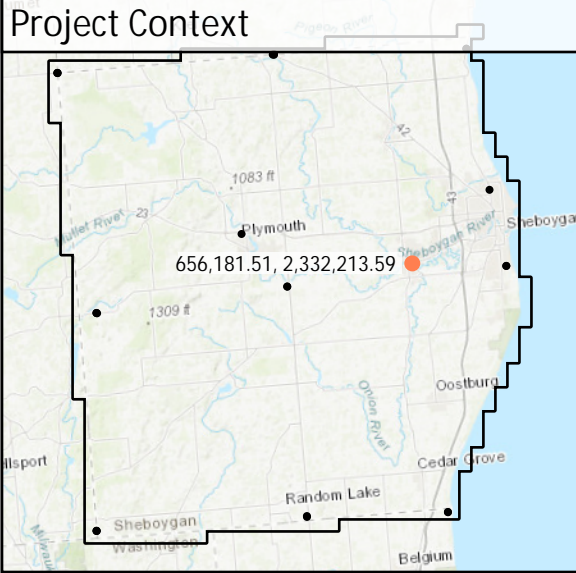
DEM Dz +0.05 m

NVA - UA40

All Points TIN Dz +0.05 m

UA41

Known Z	203.62 m	Point Density	5.06 ppsm
DEM Dz	0.00 m	Ground Density	5.06 ppsm
All Points TIN Dz	0.00 m	Slope	0.60 °

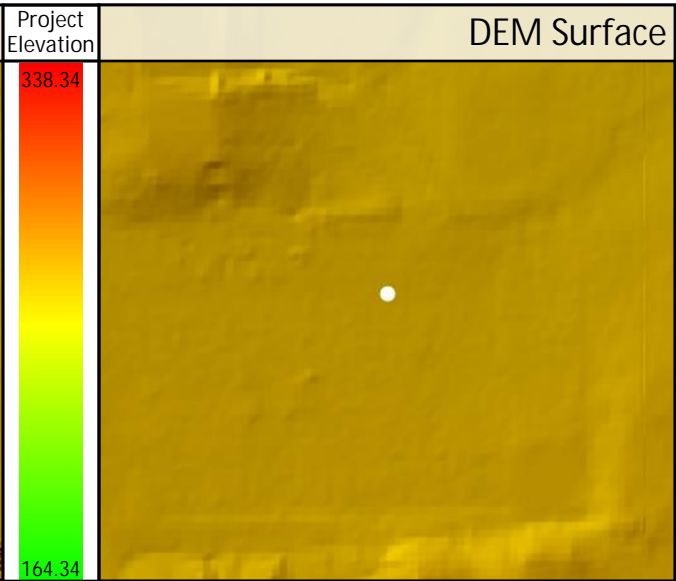
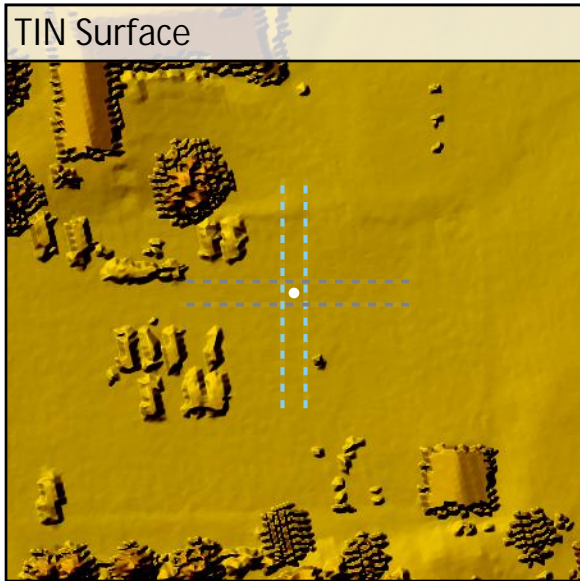
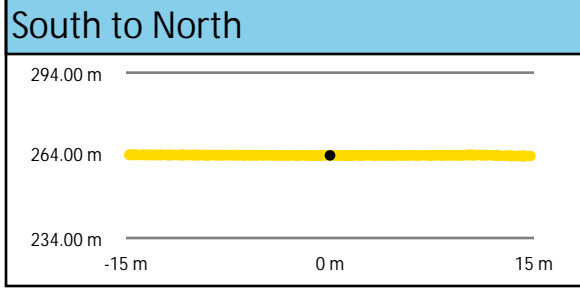
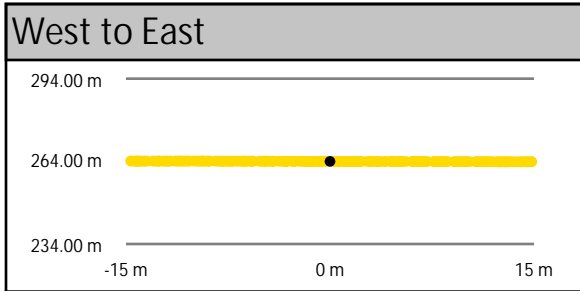
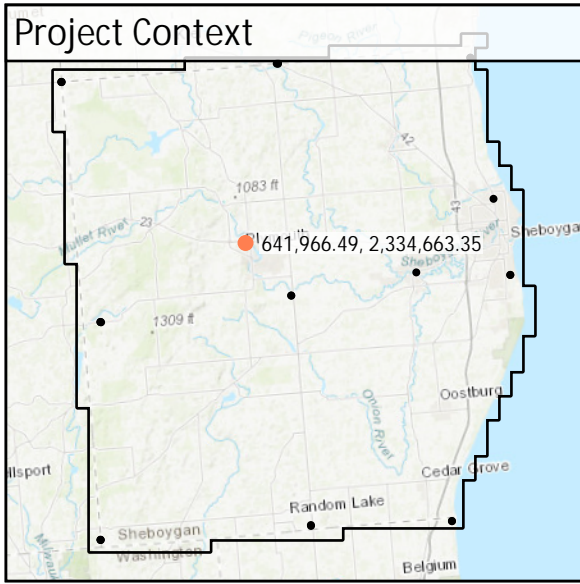


DEM Dz 0.00 m

NVA - UA41

All Points TIN Dz +0.00 m

UA42	Known Z	263.98 m	Point Density	2.69 ppsm
	DEM Dz	0.02 m	Ground Density	2.69 ppsm
	All Points TIN Dz	0.02 m	Slope	0.71 °

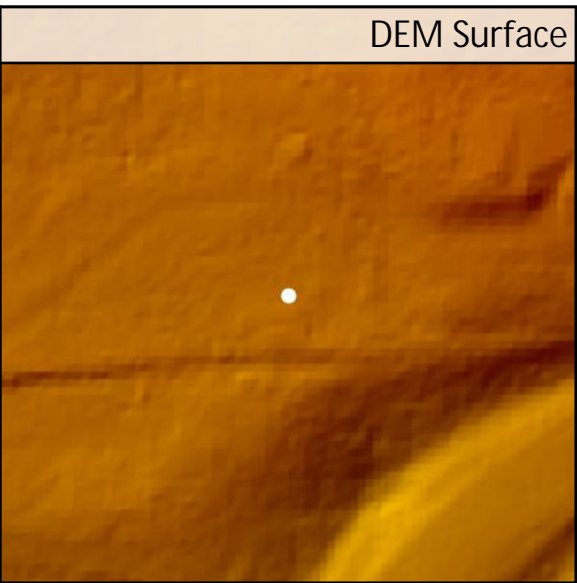
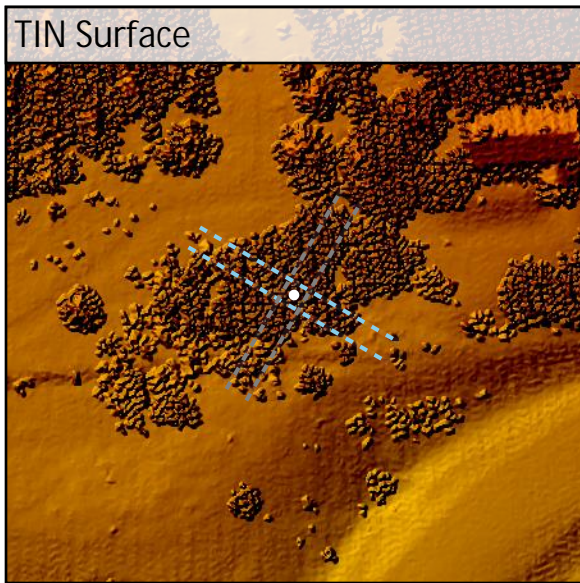
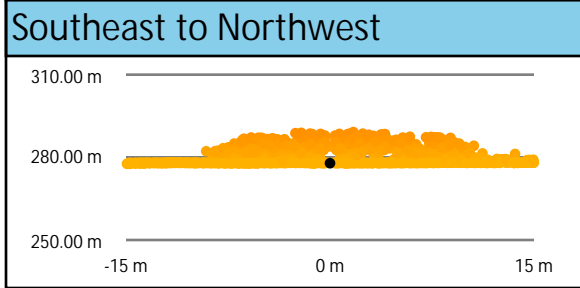
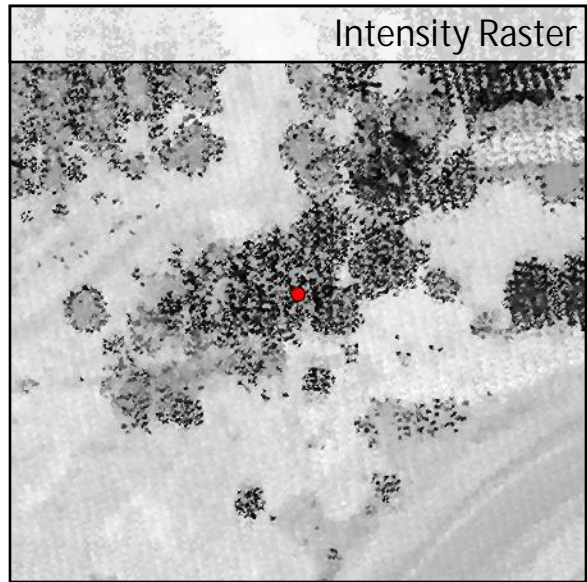
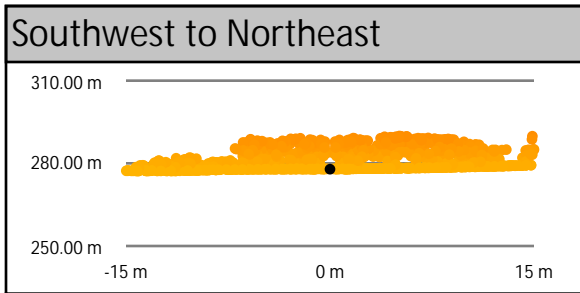
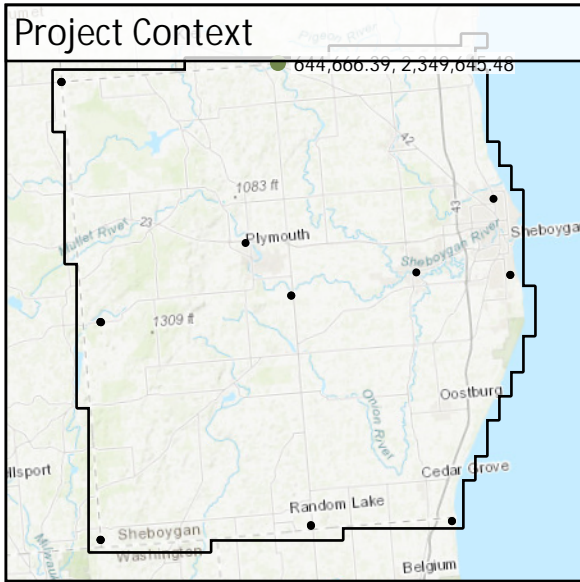


DEM Dz +0.02 m

NVA - UA42

All Points TIN Dz +0.02 m

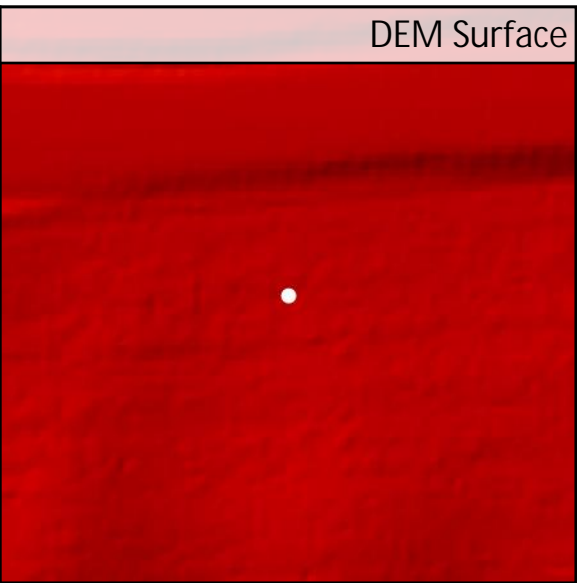
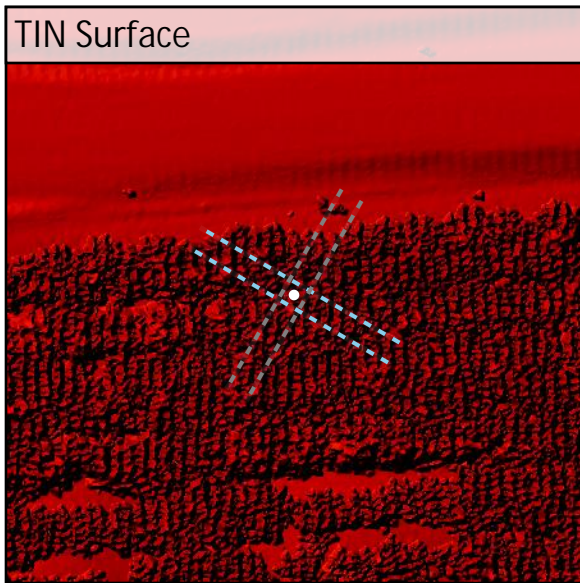
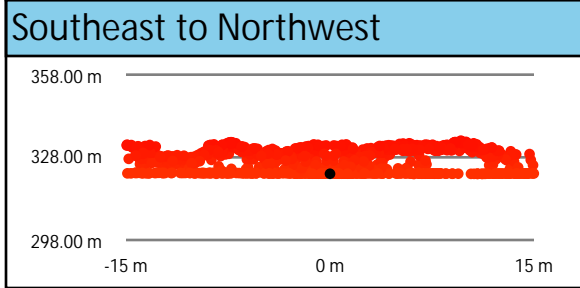
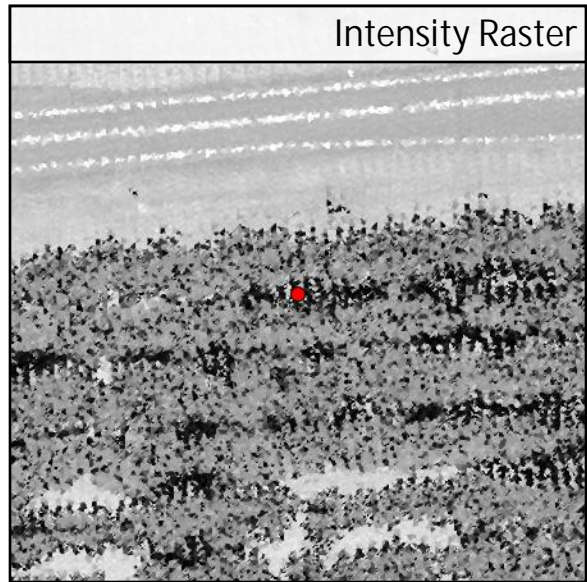
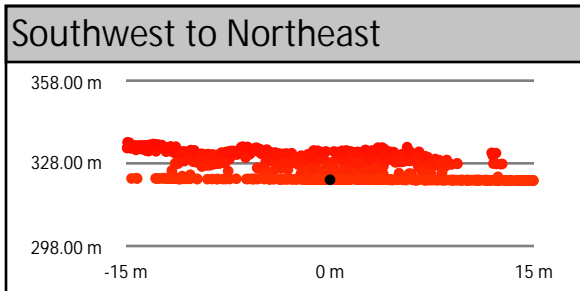
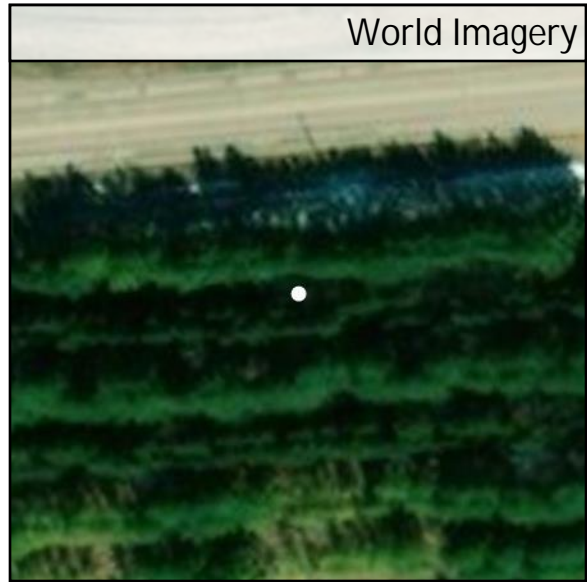
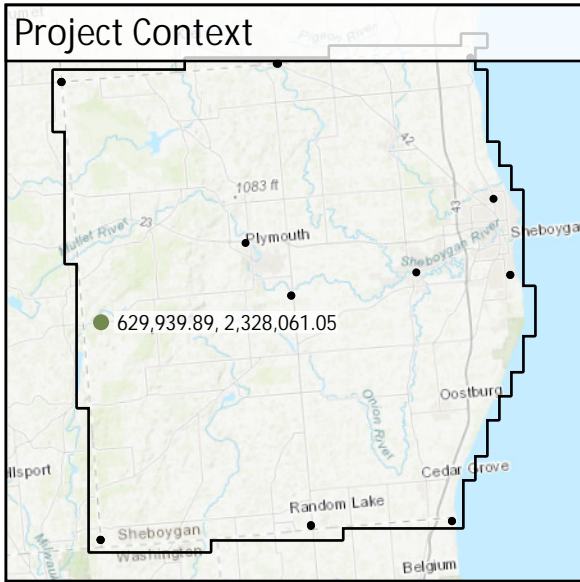
FO37	Known Z	277.87 m	Point Density	8.56 ppsm
	DEM Dz	0.10 m	Ground Density	11.92 ppsm
	All Points TIN Dz	N/A	Slope	2.52 °



DEM Dz +0.10 m

VVA - FO37

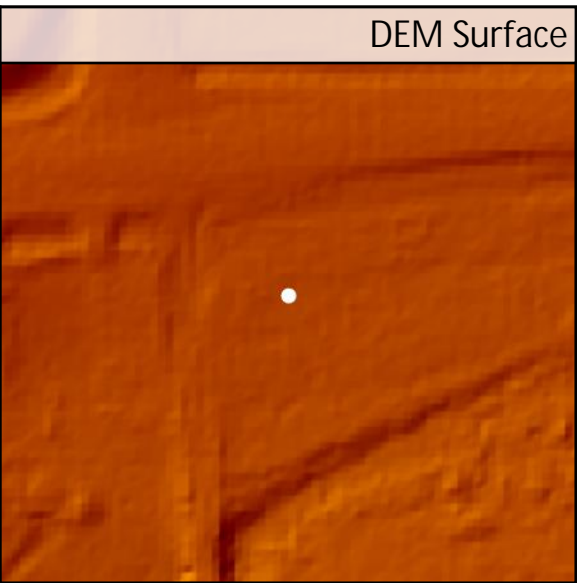
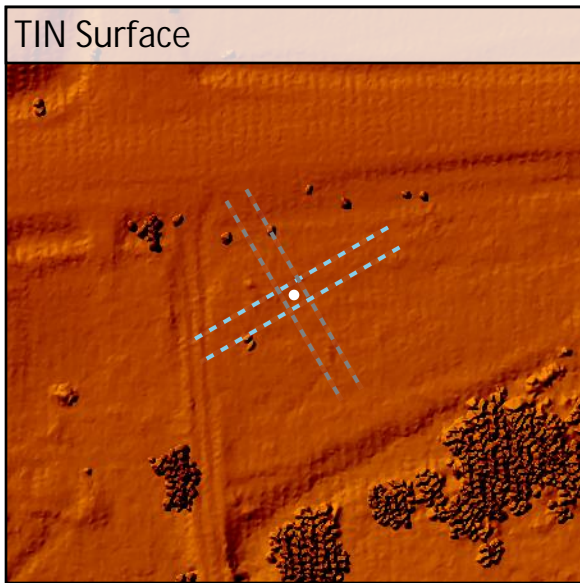
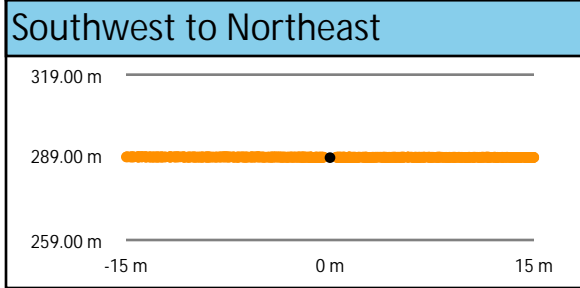
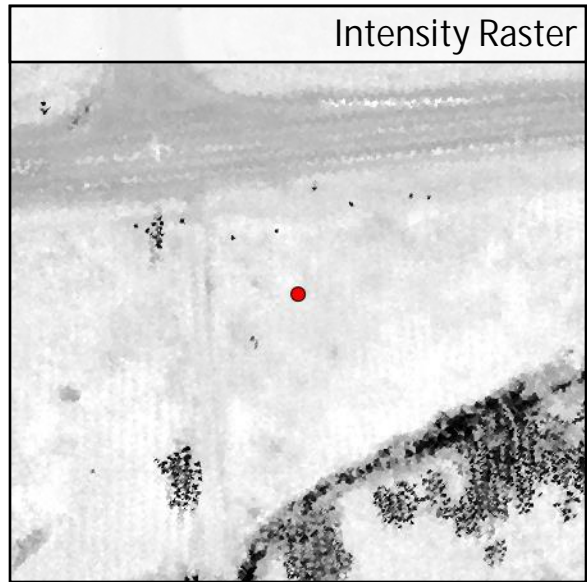
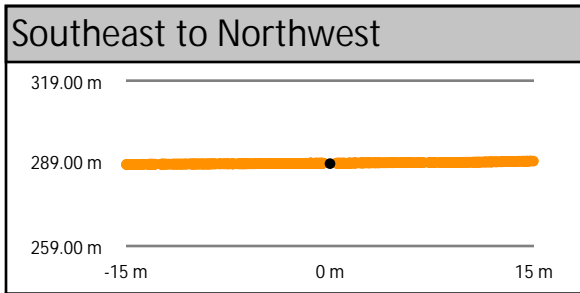
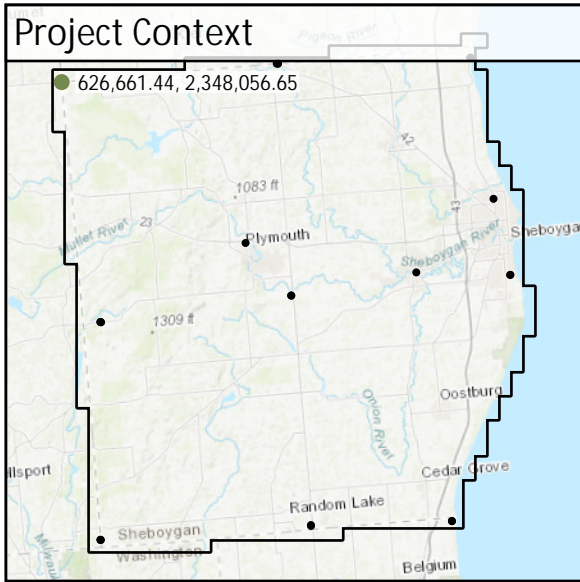
FO38	Known Z	322.03 m	Point Density	7.46 ppsm
	DEM Dz	0.07 m	Ground Density	10.29 ppsm
	All Points TIN Dz	N/A	Slope	0.37 °



DEM Dz +0.07 m

VVA - FO38

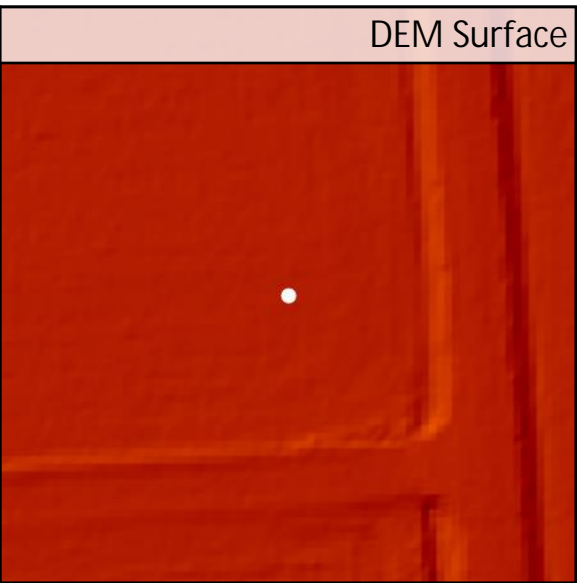
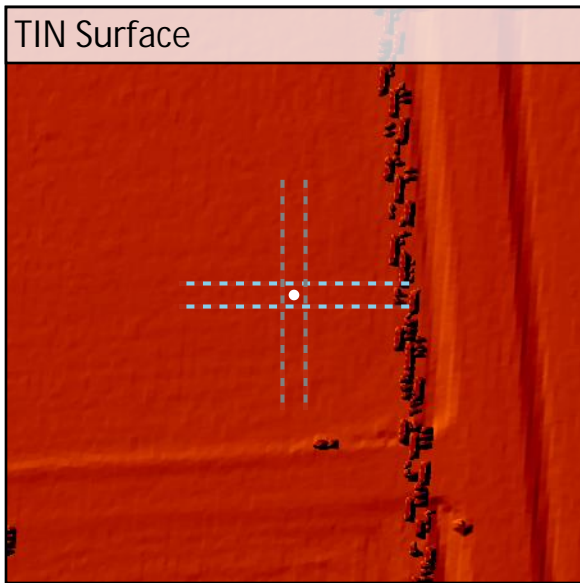
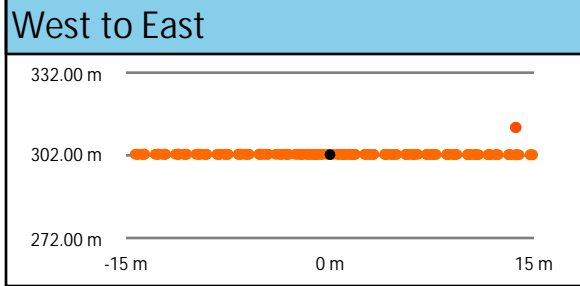
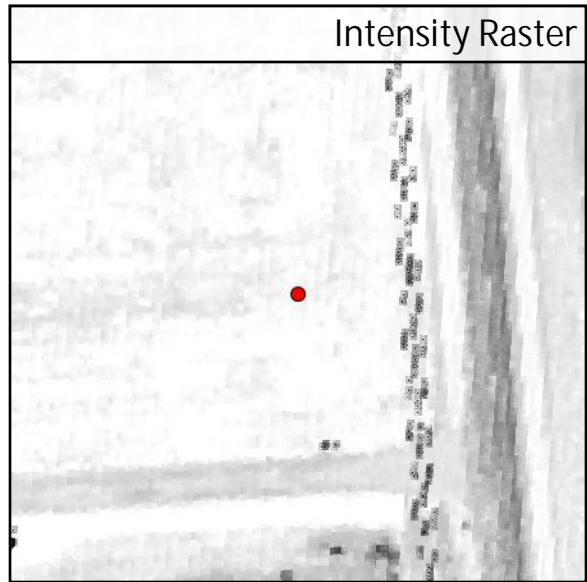
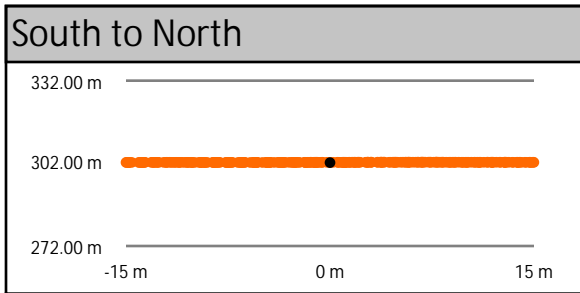
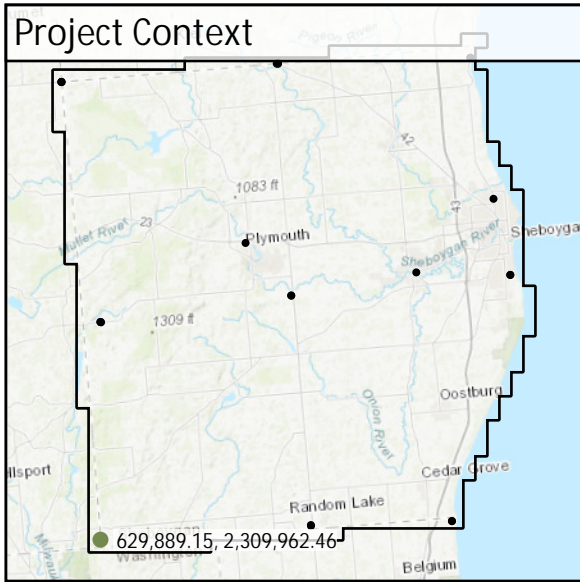
TW48	Known Z	288.89 m	Point Density	6.15 ppsm
	DEM Dz	0.15 m	Ground Density	6.15 ppsm
	All Points TIN Dz	N/A	Slope	2.68 °



DEM Dz +0.15 m

VWA - TW48

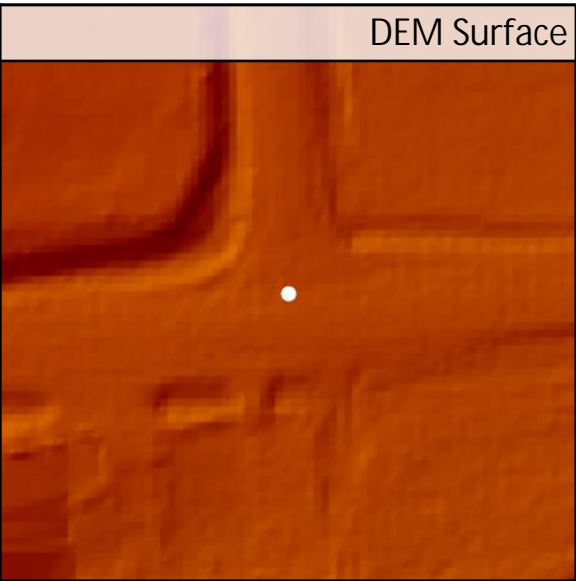
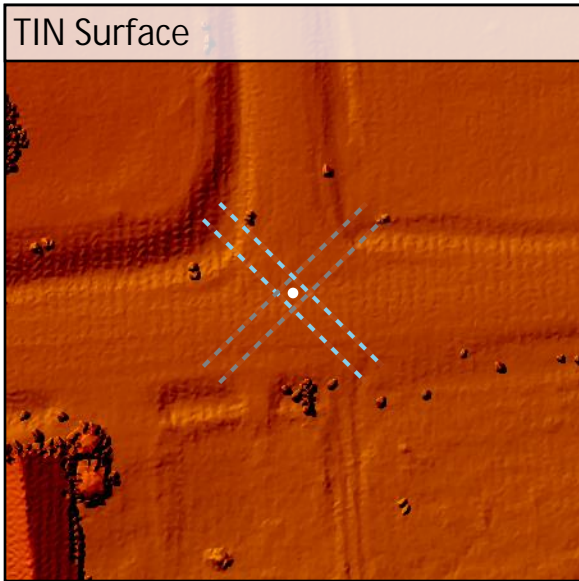
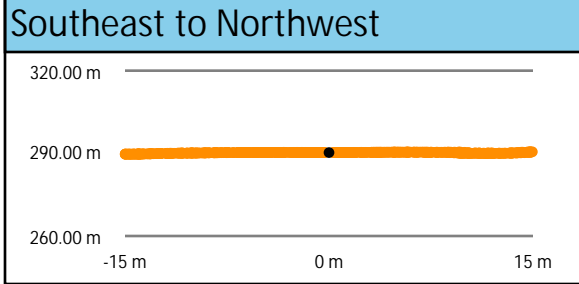
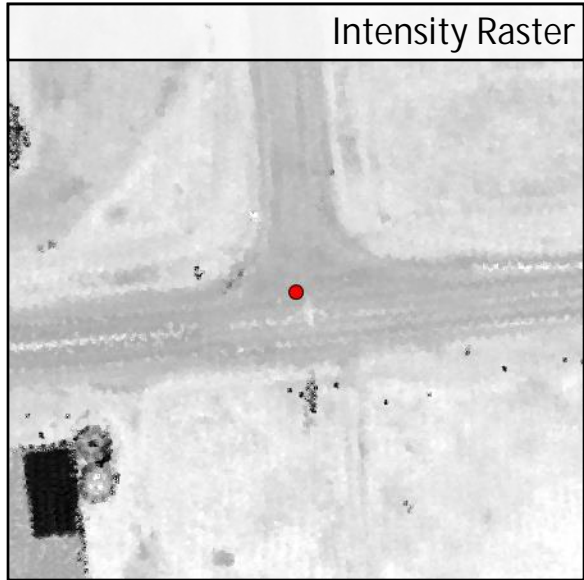
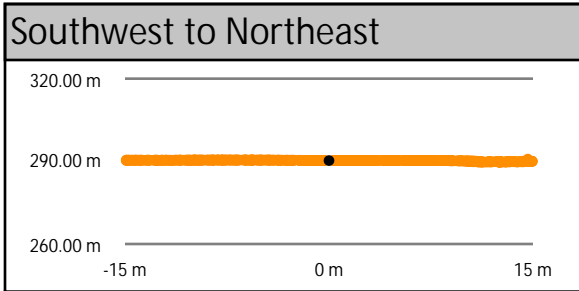
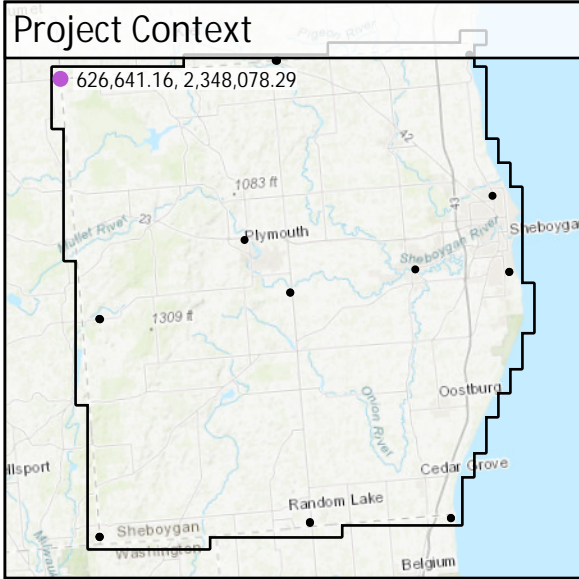
TW49	Known Z	302.26 m	Point Density	2.65 ppsm
	DEM Dz	0.12 m	Ground Density	2.65 ppsm
	All Points TIN Dz	N/A	Slope	0.46 °



DEM Dz +0.12 m

VWA - TW49

CA105	Known Z	290.27 m	Point Density	5.69 ppsm
	DEM Dz	0.04 m	Ground Density	5.69 ppsm
	All Points TIN Dz	0.03 m	Slope	0.87 °

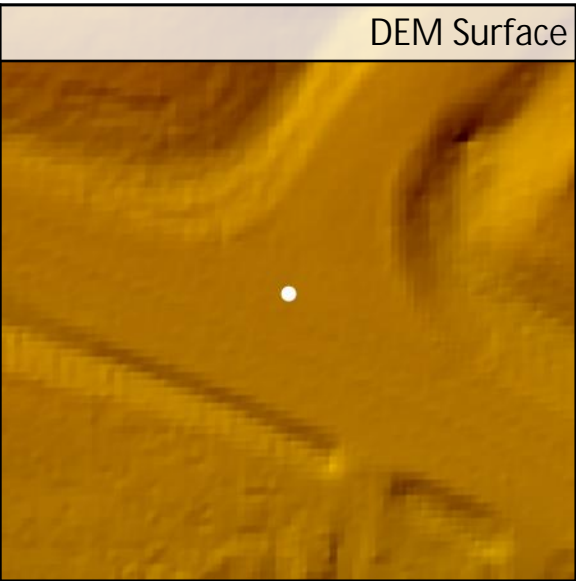
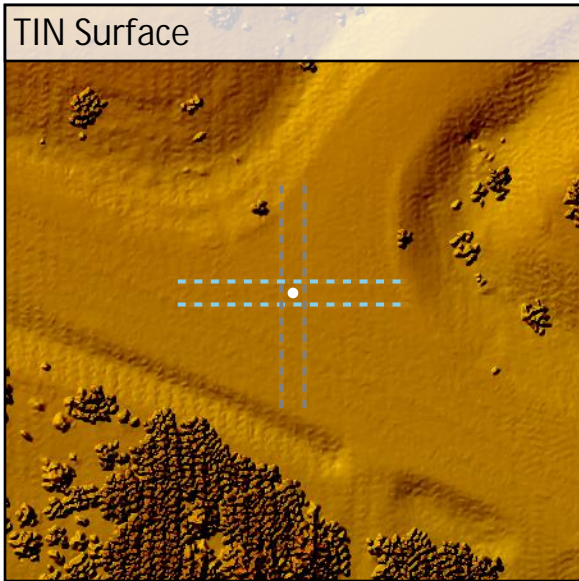
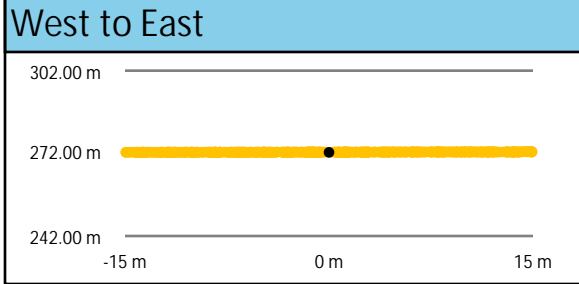
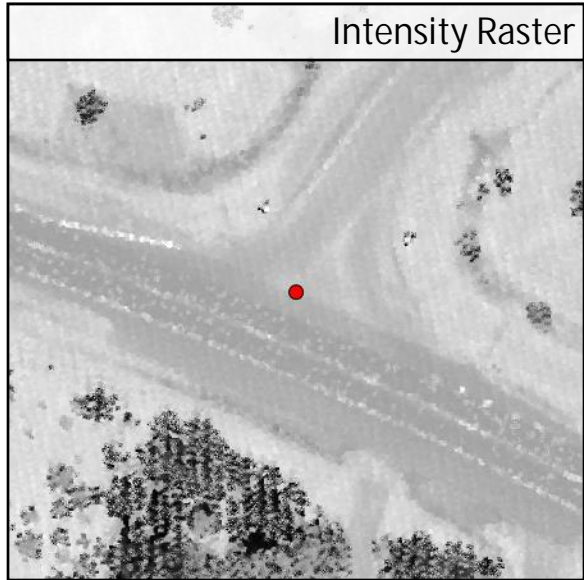
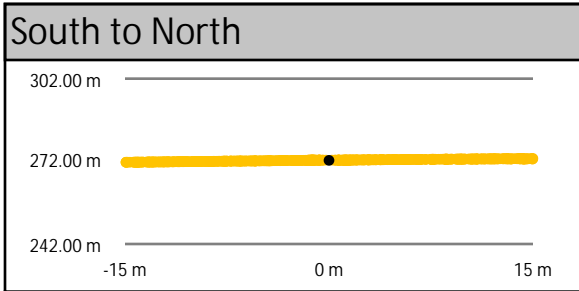
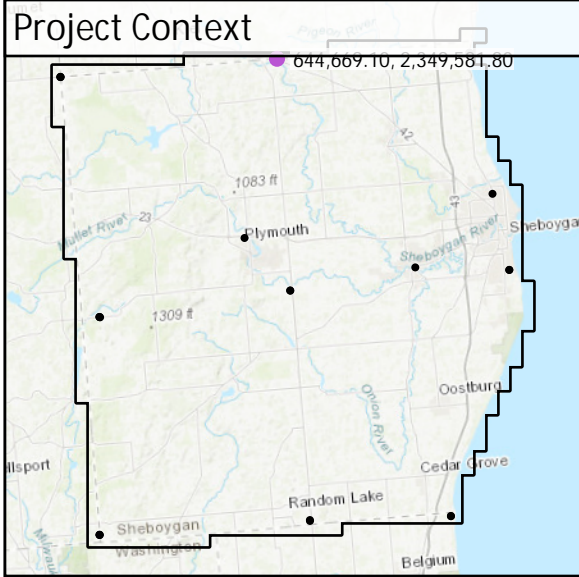


DEM Dz +0.04 m

CAL - CA105

All Points TIN Dz +0.03 m

CA106	Known Z	272.35 m	Point Density	5.13 ppsm
	DEM Dz	0.08 m	Ground Density	5.13 ppsm
	All Points TIN Dz	0.08 m	Slope	2.04 °



DEM Dz +0.08 m

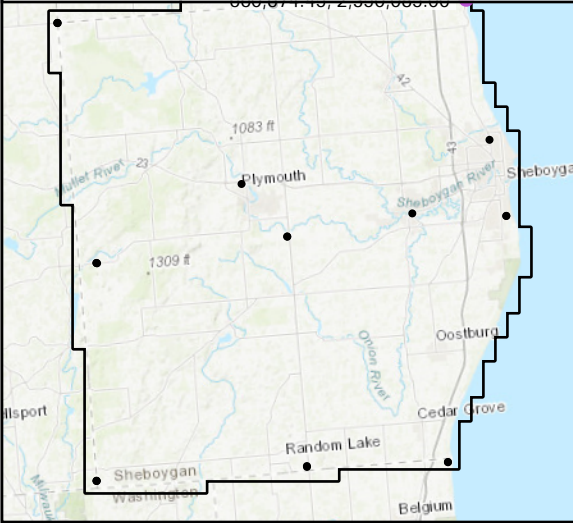
CAL - CA106

All Points TIN Dz +0.08 m

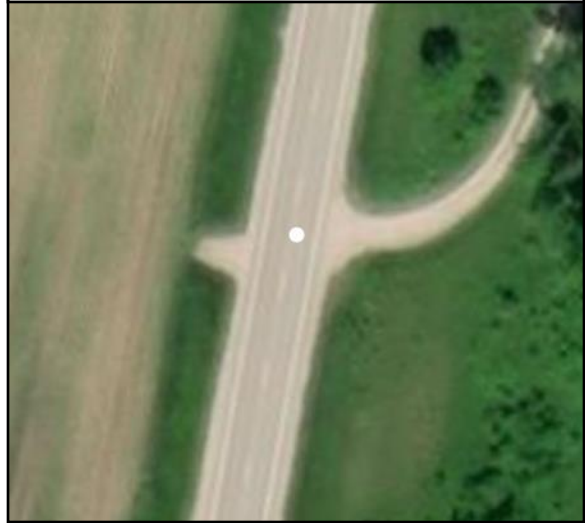
CA107

Known Z	194.61 m	Point Density	5.34 ppsm
DEM Dz	0.06 m	Ground Density	5.34 ppsm
All Points TIN Dz	0.07 m	Slope	0.55 °

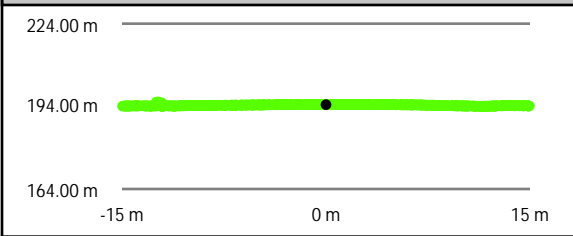
Project Context



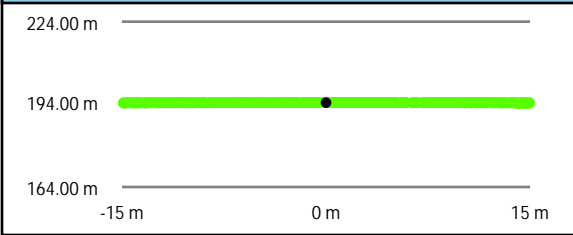
World Imagery



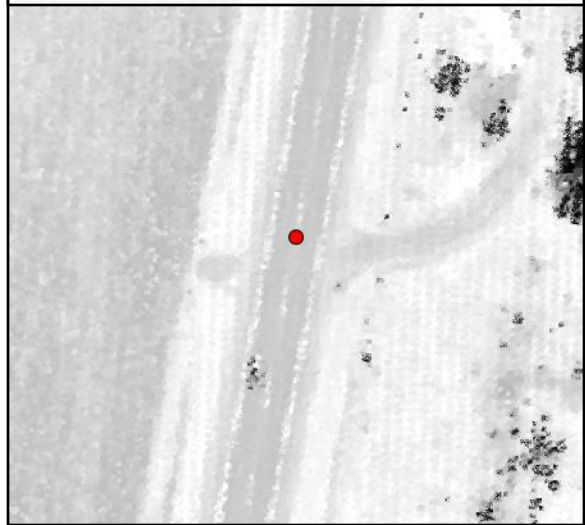
Southeast to Northwest



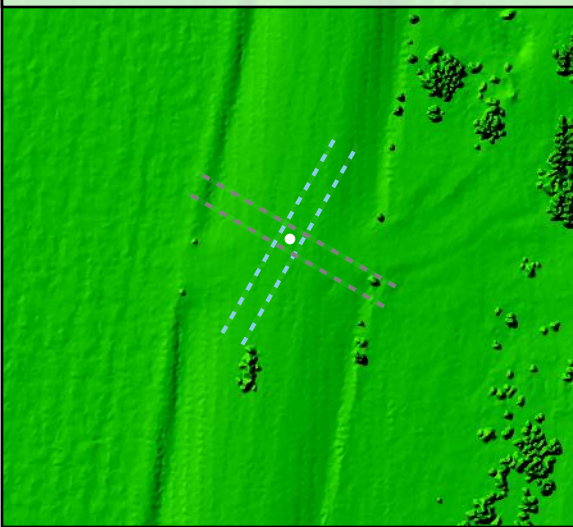
Southwest to Northeast



Intensity Raster



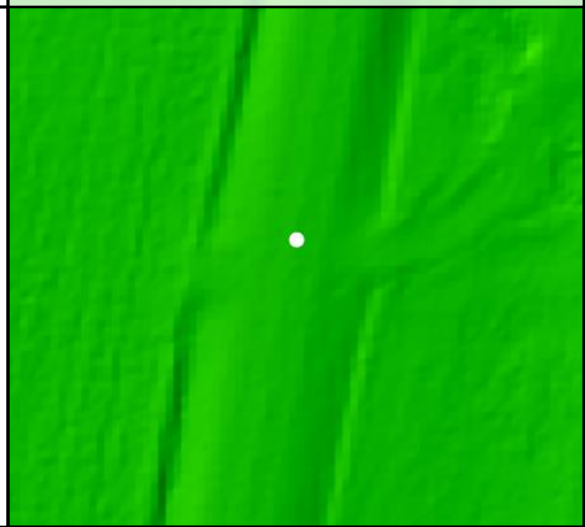
TIN Surface



Project Elevation



DEM Surface



DEM Dz +0.06 m

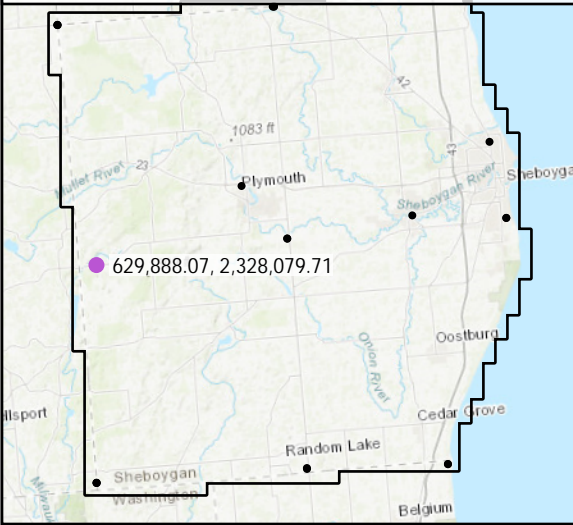
CAL - CA107

All Points TIN Dz +0.07 m

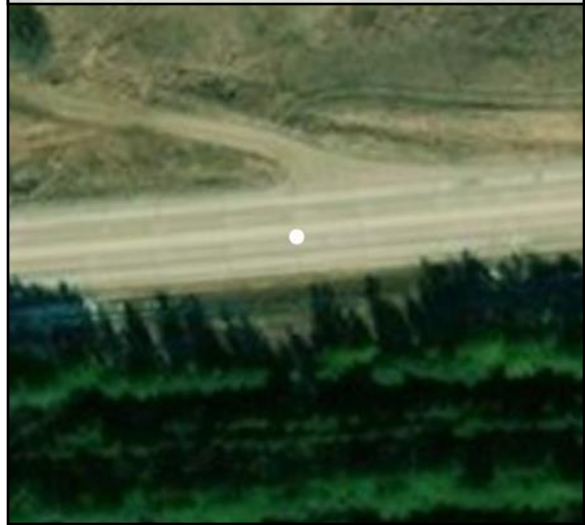
CA108

Known Z	323.22 m	Point Density	5.41 ppsm
DEM Dz	0.01 m	Ground Density	5.41 ppsm
All Points TIN Dz	0.02 m	Slope	0.57 °

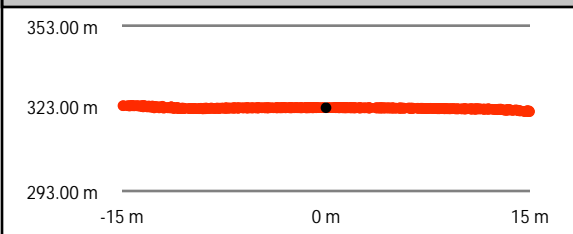
Project Context



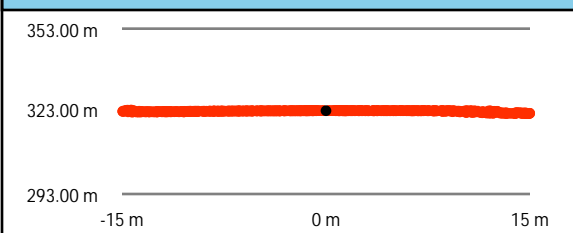
World Imagery



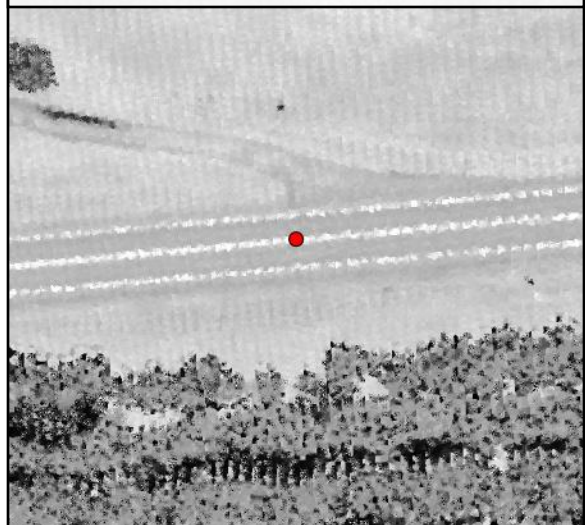
Southwest to Northeast



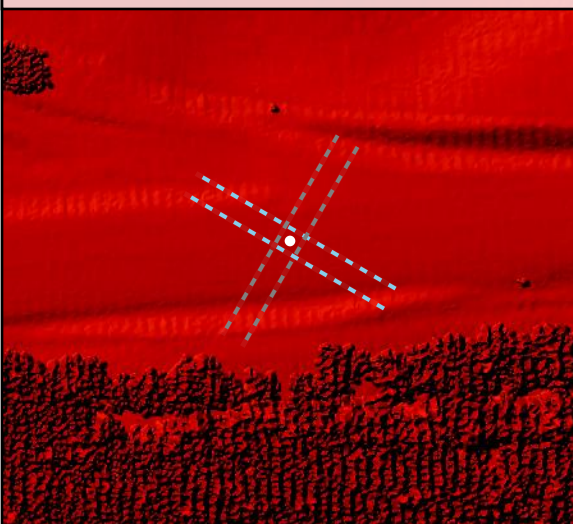
Southeast to Northwest



Intensity Raster



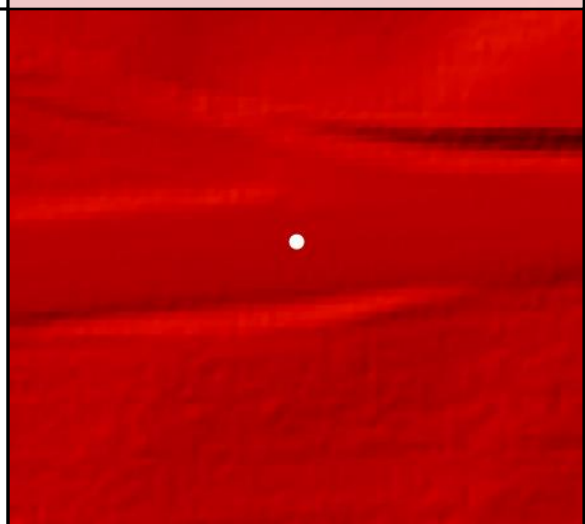
TIN Surface



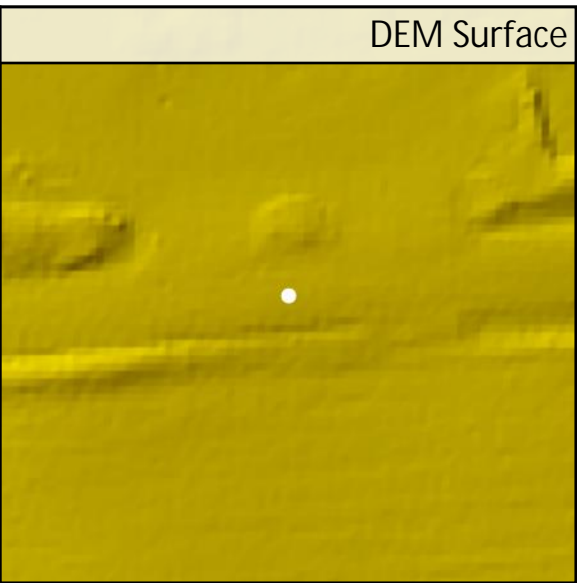
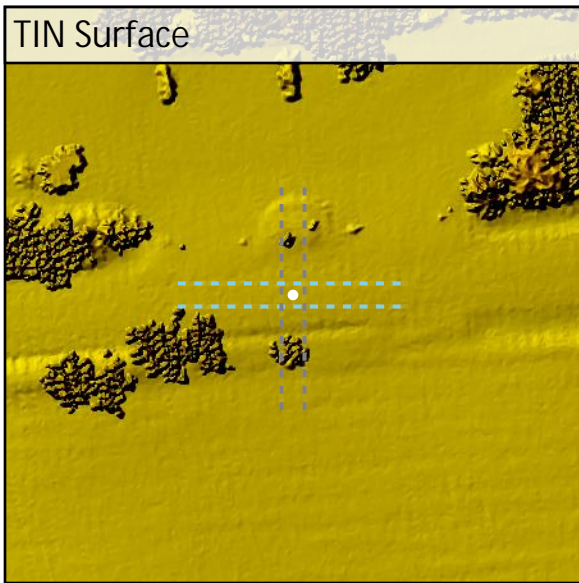
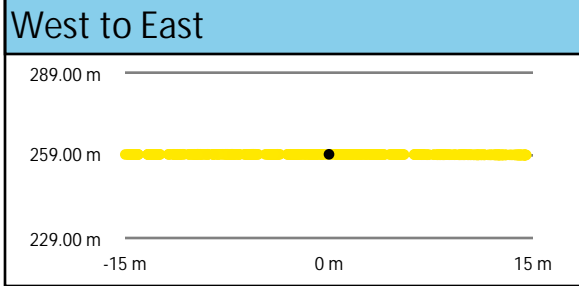
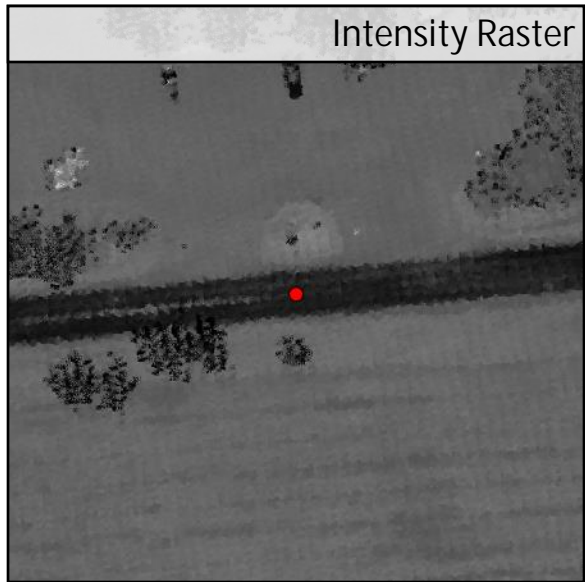
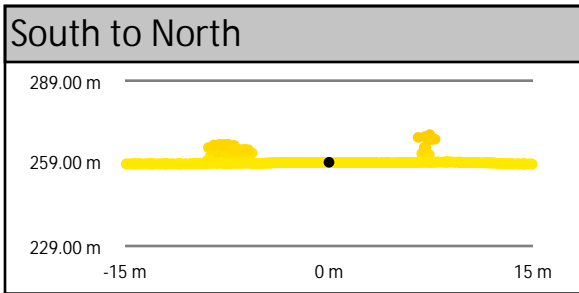
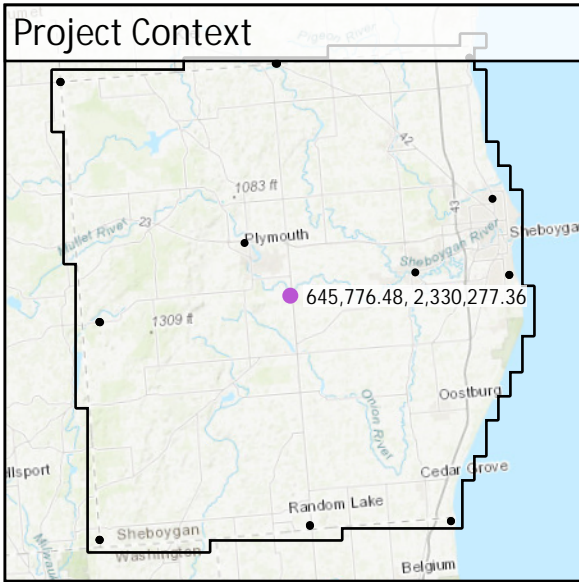
Project Elevation



DEM Surface



CA109	Known Z	259.37 m	Point Density	4.92 ppsm
	DEM Dz	-0.04 m	Ground Density	4.92 ppsm
	All Points TIN Dz	-0.04 m	Slope	0.35 °

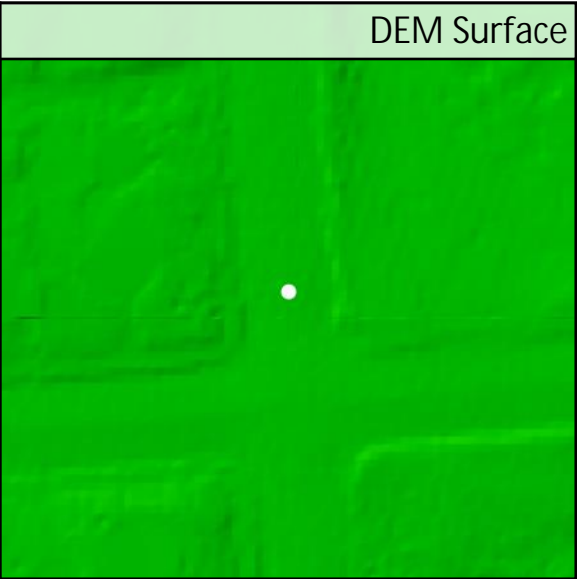
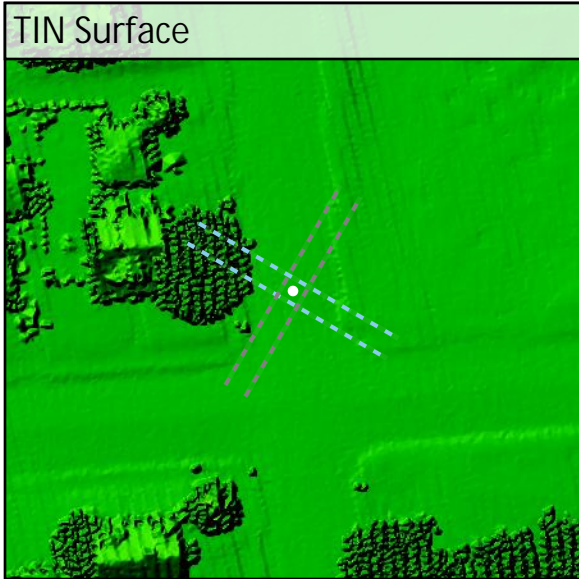
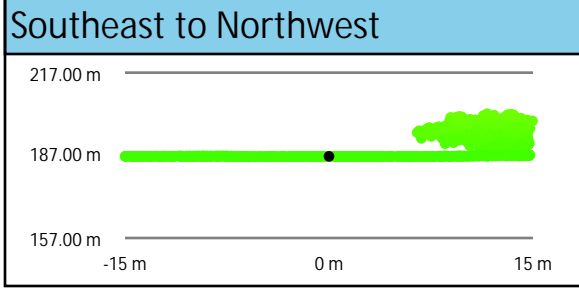
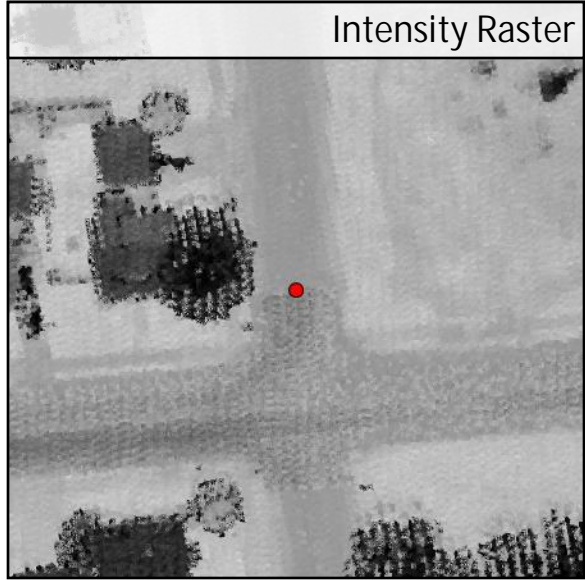
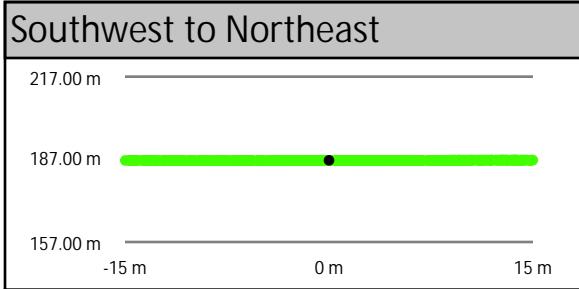
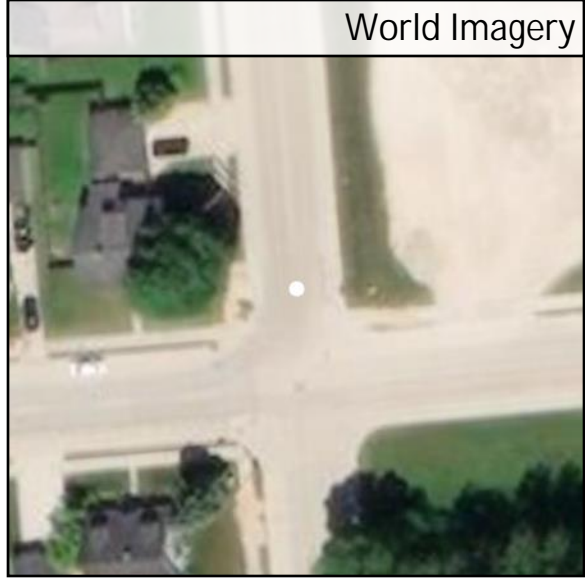
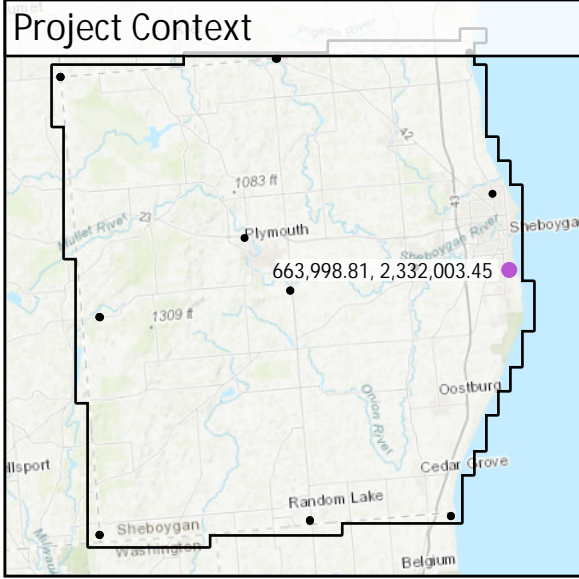


DEM Dz -0.04 m

CAL - CA109

All Points TIN Dz -0.04 m

CA110	Known Z	186.63 m	Point Density	5.06 ppsm
	DEM Dz	-0.02 m	Ground Density	5.06 ppsm
	All Points TIN Dz	-0.03 m	Slope	0.16 °



DEM Dz -0.02 m

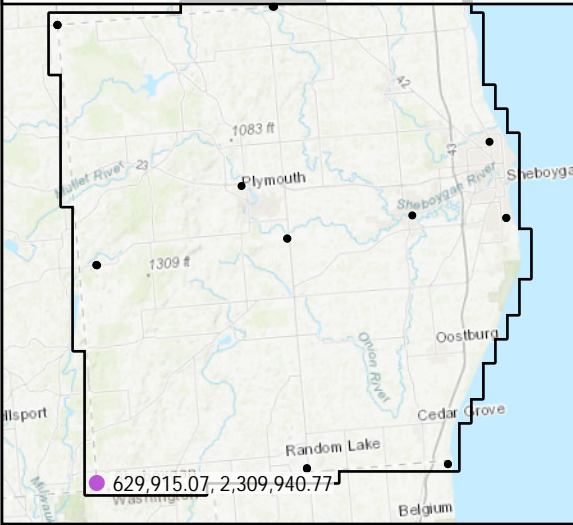
CAL - CA110

All Points TIN Dz -0.03 m

CA111

Known Z	302.83 m	Point Density	2.51 ppsm
DEM Dz	-0.01 m	Ground Density	2.51 ppsm
All Points TIN Dz	0.00 m	Slope	0.37 °

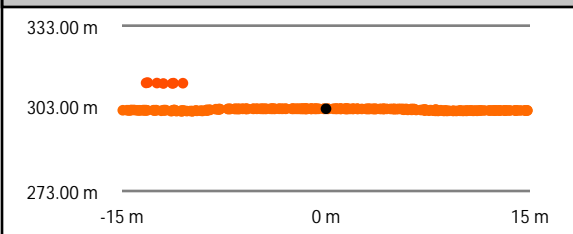
Project Context



World Imagery



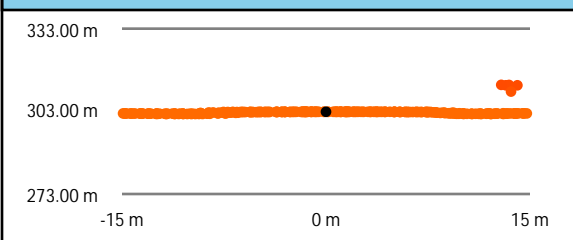
Southwest to Northeast



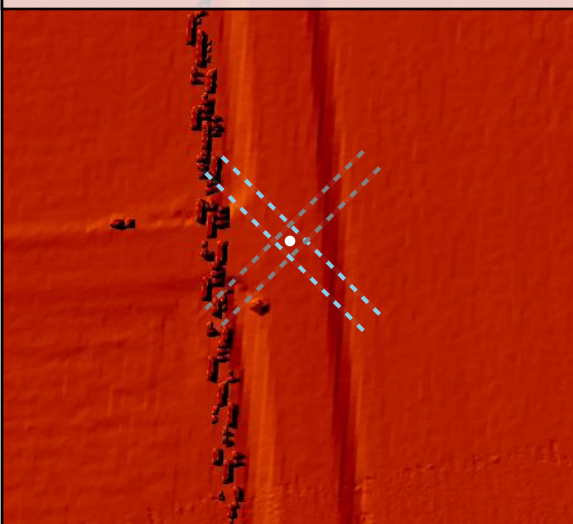
Intensity Raster



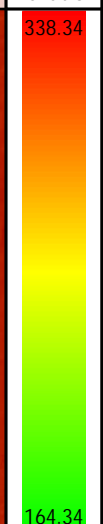
Southeast to Northwest



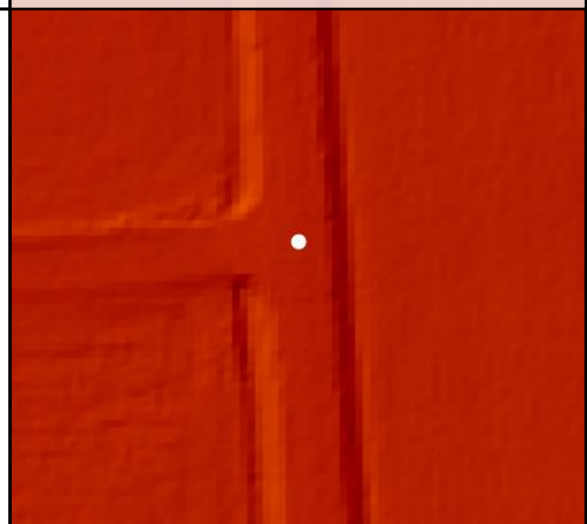
TIN Surface



Project Elevation



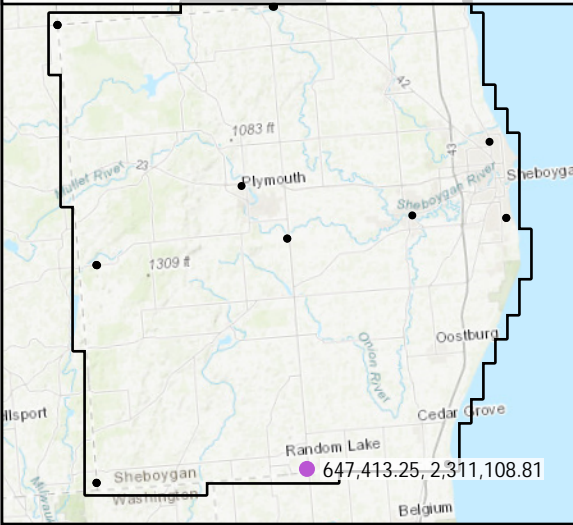
DEM Surface



CA112

Known Z	275.97 m	Point Density	4.92 ppsm
DEM Dz	0.02 m	Ground Density	4.92 ppsm
All Points TIN Dz	0.01 m	Slope	0.73 °

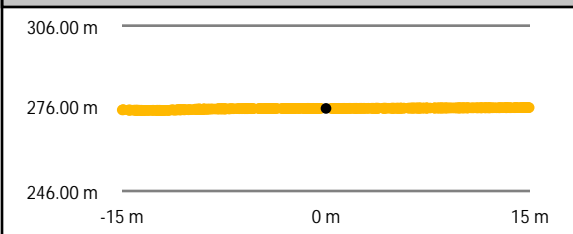
Project Context



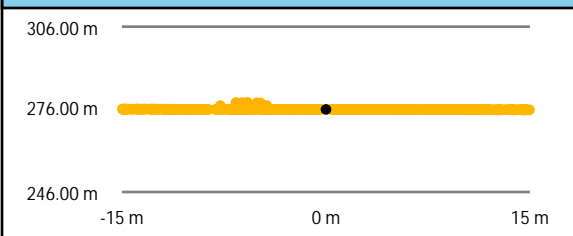
World Imagery



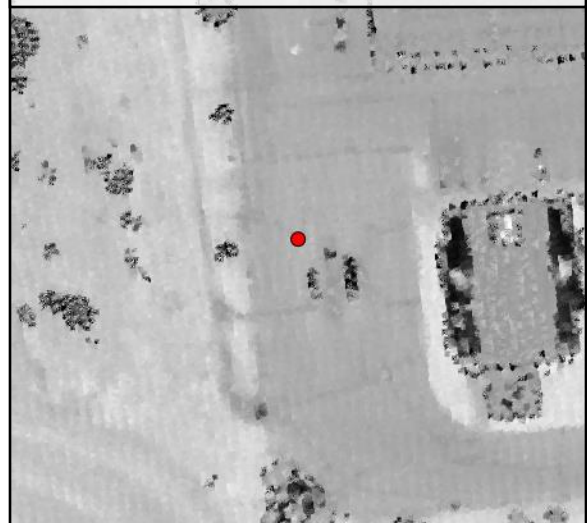
Southwest to Northeast



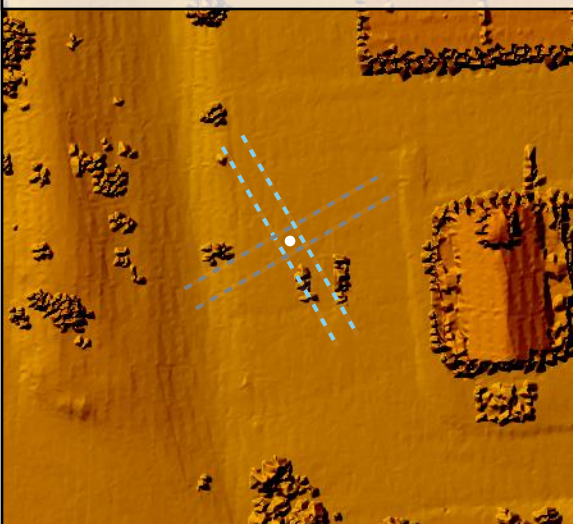
Southeast to Northwest



Intensity Raster



TIN Surface



Project Elevation



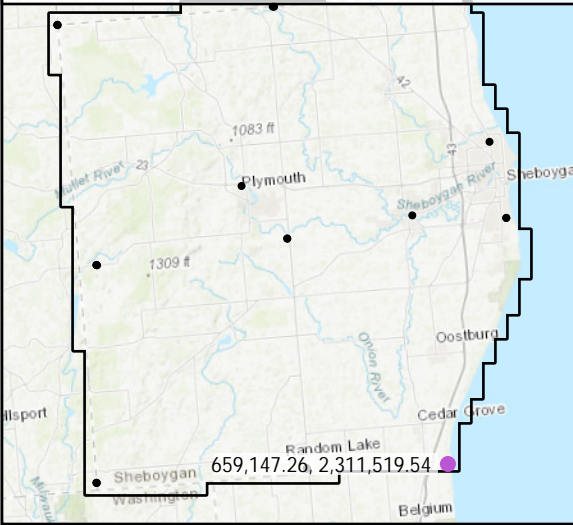
DEM Surface



CA113

Known Z	193.20 m	Point Density	2.86 ppsm
DEM Dz	-0.06 m	Ground Density	2.86 ppsm
All Points TIN Dz	-0.06 m	Slope	0.97 °

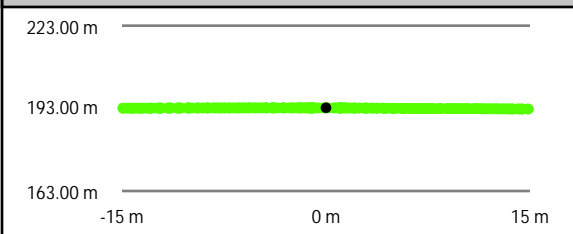
Project Context



World Imagery



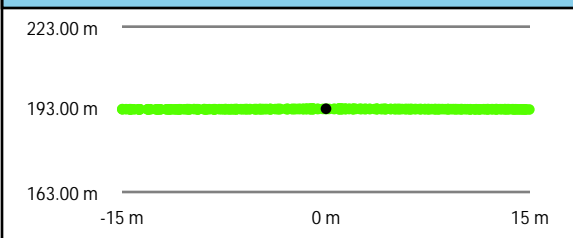
Southwest to Northeast



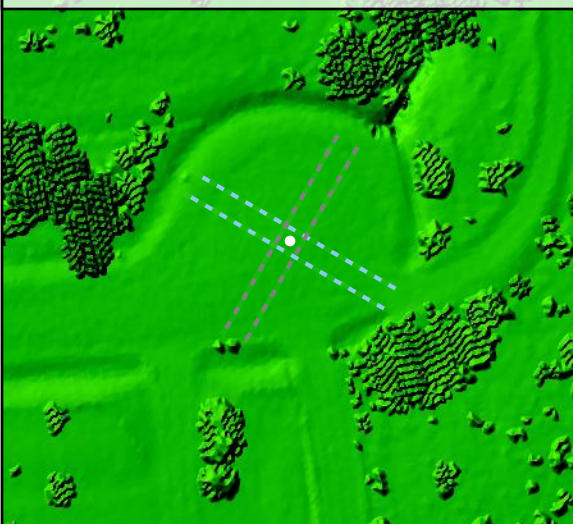
Intensity Raster



Southeast to Northwest



TIN Surface



Project Elevation



DEM Surface

