

Franklin County Final QAQC Report

Detailed LiDAR QA/QC Report

Report generated on 12/16/2014

This document reports on compliance with the USGS National Geospatial Program LiDAR Base Specification Version 1.0. The complete specification, which also contains a list of abbreviations, acronyms, and a glossary of related terms, can be found [here](#).

0.0 Report on LAS Statistics (By Tile)

The purpose of this section is to show detailed LAS statistics that MARS typically reports on but are not entirely covered by the USGS NGP LiDAR Base Specification Version 1.0. A user may find this useful by inspecting the values for expected ranges, values, etc., and looking for outliers that would indicate an acquisition or processing error.

[Classified Files - E:\Franklin County\las](#)

Horizontal Units: US Survey Feet Vertical Units: US Survey Feet

Number of boresighted LAS files: 51

Number of classified LAS files: 565

All LAS statistic information can be reviewed in a geographic manner by accessing the shapefile located at

[E:\Franklin County\QAQC2\0_0\tile_index.shp](#)

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
07350465	0.15	2.58	4,852,371	735000.00	739999.99	465000.00	469999.99	377.47	501.34	81816983.30	81817250.62	3,742,795	936,735	163,126	9,715	00	139	24	251,252
07400465	0.14	2.71	4,432,228	740000.00	744999.99	465000.00	469999.99	378.58	501.80	81816963.03	81817271.38	3,417,156	868,633	139,219	7,220	00	255	15	251,252
07400470	0.12	2.88	3,580,249	740000.00	744999.99	470000.00	474999.99	380.17	494.23	81817247.33	81818676.38	3,005,874	494,974	75,518	3,883	00	255	22	252,253
07400475	0.15	2.62	4,306,180	740000.00	744999.99	475000.00	479999.99	380.24	516.97	81818654.45	81818958.66	3,655,696	551,568	93,066	5,850	00	255	27	253,254
07450430	0.13	2.80	3,322,190	745000.00	749999.99	430000.00	434999.99	-207.06	524.65	81810855.21	81983700.88	3,178,696	134,724	8,655	115	00	255	38	257,258,384,392
07450435	0.19	2.30	4,731,295	745000.00	749999.99	435000.00	439999.99	377.26	469.78	81812158.71	81962836.89	4,707,955	21,589	1,709	42	00	255	37	258,259,392,391
07450440	0.28	1.90	7,182,399	745000.00	749999.99	440000.00	444999.99	300.26	572.48	81812422.25	81962581.20	6,938,113	202,033	39,630	2,623	00	255	30	259,391,260,390
07450445	0.27	1.91	7,499,643	745000.00	749999.99	445000.00	449999.99	191.01	3708.42	81813731.20	81962579.64	6,861,207	553,459	80,997	3,980	00	255	28	390,260,261,393,391
07450450	0.14	2.69	3,602,238	745000.00	749999.99	450000.00	454999.99	383.74	496.34	81813961.21	81961164.09	3,460,832	116,723	23,205	1,478	00	255	32	261,390,393,262
07450455	0.15	2.55	4,371,855	745000.00	749999.99	455000.00	459999.99	360.02	495.07	81815287.85	81815643.55	3,847,974	453,745	66,902	3,234	00	85	29	262,250
07450460	0.14	2.67	4,653,805	745000.00	749999.99	460000.00	464999.99	381.66	494.49	81815616.76	81816965.69	3,520,189	977,664	148,319	7,633	00	139	23	250,251
07450465	0.15	2.61	4,886,202	745000.00	749999.99	465000.00	469999.99	380.29	498.60	81816943.04	81817292.83	3,666,081	1,041,476	169,538	9,107	00	107	18	251,252
07450470	0.14	2.64	3,722,966	745000.00	749999.99	470000.00	474999.99	380.36	477.05	81817267.23	81818656.02	3,592,074	112,940	17,137	815	00	255	28	252,253
07450475	0.15	2.60	4,319,582	745000.00	749999.99	475000.00	479999.99	380.43	509.61	81818633.73	81818977.33	3,698,505	528,223	87,501	5,353	00	255	25	253,254
07450480	0.14	2.69	4,706,324	745000.00	749999.99	480000.00	484999.99	381.32	517.52	81818954.57	81820303.58	3,453,777	1,074,281	168,304	9,962	00	255	19	254,255
07450485	0.15	2.59	4,535,438	745000.00	749999.99	485000.00	489999.99	384.80	519.23	81820282.16	81820627.04	3,728,674	688,381	111,447	6,936	00	143	25	255,256
07450490	0.14	2.71	4,178,721	745000.00	749999.99	490000.00	494999.99	388.91	519.15	81820601.51	81869214.55	3,396,972	671,496	104,405	5,848	00	255	22	256,330
07450495	0.14	2.66	4,042,969	745000.00	749999.99	495000.00	499999.99	334.54	505.03	81869193.84	81869457.16	3,543,825	445,138	52,134	1,872	00	255	25	330,331
07450500	0.14	2.65	3,638,426	745000.00	749999.99	500000.00	504999.99	393.32	514.31	81869432.47	81870970.60	3,566,045	64,158	7,926	297	00	255	29	332,331,333

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
07500430	0.14	2.65	3,747,542	750000.00	754999.99	430000.00	434999.99	382.48	629.84	81810873.74	81812160.29	3,549,041	176,039	21,529	933	00	255	32	257,258
07500435	0.19	2.29	5,072,921	750000.00	754999.99	435000.00	439999.99	387.95	1686.52	81812137.98	81962601.08	4,755,253	264,324	50,403	2,941	00	255	32	258,259,391
07500440	0.27	1.93	7,326,730	750000.00	754999.99	440000.00	444999.99	336.32	3253.48	81812441.92	81962601.04	6,708,603	516,053	96,016	6,058	00	255	29	259,391,260,390
07500445	0.28	1.90	7,513,726	750000.00	754999.99	445000.00	449999.99	269.81	3441.63	81813712.00	81962590.58	6,946,512	471,704	89,520	5,990	00	255	30	260,390,391,261,393
07500450	0.14	2.64	3,782,956	750000.00	754999.99	450000.00	454999.99	389.89	520.25	81813979.96	81961142.41	3,594,123	156,023	30,896	1,914	00	193	33	261,393,390,262
07500455	0.15	2.57	4,021,270	750000.00	754999.99	455000.00	459999.99	390.46	528.23	81815267.68	81815661.82	3,785,383	202,297	31,965	1,625	00	255	34	262,250
07500460	0.14	2.66	4,029,147	750000.00	754999.99	460000.00	464999.99	384.72	524.47	81815637.66	81816945.14	3,523,619	433,182	68,576	3,770	00	255	28	250,251
07500465	0.15	2.62	4,319,293	750000.00	754999.99	465000.00	469999.99	382.66	508.17	81816923.01	81817310.42	3,634,646	583,108	96,067	5,472	00	255	27	251,252
07500470	0.14	2.66	4,166,834	750000.00	754999.99	470000.00	474999.99	384.45	2234.01	81817287.72	81818636.26	3,530,469	536,134	94,291	5,940	00	188	28	252,253
07500475	0.16	2.52	4,329,360	750000.00	754999.99	475000.00	479999.99	383.46	3353.08	81818613.63	81818998.33	3,945,638	322,702	57,103	3,917	00	255	33	253,254
07500480	0.15	2.59	4,349,321	750000.00	754999.99	480000.00	484999.99	382.52	3492.43	81818973.87	81820284.15	3,725,257	531,515	87,238	5,311	00	255	27	254,255
07500485	0.14	2.63	3,965,404	750000.01	754999.99	485000.00	490000.00	383.50	515.15	81820261.15	81820644.91	3,604,633	307,292	50,510	2,969	00	255	32	255,256
07500490	0.13	2.74	4,303,494	750000.00	754999.99	490000.00	494999.99	384.86	518.64	81820622.26	81869195.31	3,325,390	838,887	131,992	7,225	00	255	20	256,330
07500495	0.14	2.70	3,818,118	750000.00	754999.99	495000.00	499999.99	386.61	507.68	81869173.65	81869477.86	3,443,205	324,643	47,914	2,356	00	255	25	330,331
07500500	0.14	2.72	4,003,926	750000.00	754999.99	500000.00	504999.99	388.08	1141.73	81869453.87	81870991.75	3,387,229	532,184	80,644	3,869	00	255	23	331,332,333
07500505	0.15	2.63	4,033,122	750000.00	754999.99	505000.00	509999.99	389.44	4370.06	81870694.76	81872228.12	3,622,333	358,967	49,580	2,242	00	89	24	333,332,334
07500510	0.15	2.60	3,789,437	750000.00	754999.99	510000.00	514999.99	331.82	547.74	81870968.30	81872479.91	3,688,999	89,451	10,585	402	00	255	30	334,333,325
07500515	0.15	2.57	3,901,983	750000.00	754999.99	515000.00	519999.99	388.96	1007.34	81872206.38	81873726.72	3,781,155	107,311	12,992	525	00	255	29	325,334,326
07500520	0.14	2.63	4,107,296	750000.01	754999.99	520000.01	524999.99	333.09	4415.94	81872458.18	81873986.85	3,603,246	441,073	60,374	2,603	00	255	25	325,326,327
07500525	0.14	2.66	3,859,103	750000.00	754999.99	525000.00	529999.99	140.93	2821.10	81873705.91	81875236.48	3,524,188	290,192	42,764	1,959	00	255	25	326,327,328
07500530	0.14	2.66	3,615,861	750000.00	754999.99	530000.00	534999.99	313.29	3201.27	81873964.04	81875503.69	3,532,995	71,513	10,882	471	00	148	27	328,327,329
07550430	0.13	2.76	4,024,680	755000.00	759999.99	430000.00	434999.99	360.51	484.11	81810893.35	81812140.10	3,288,440	647,005	85,837	3,398	00	175	27	257,258
07550435	0.16	2.52	4,733,518	755000.00	759999.99	435000.00	439999.99	366.62	3150.75	81812118.16	81962605.49	3,950,793	648,949	126,032	7,744	00	255	27	258,259,391
07550440	0.18	2.39	5,244,527	755000.00	759999.99	440000.00	444999.99	230.71	558.67	81812462.13	81962605.51	4,385,688	716,490	133,923	8,426	00	255	26	259,391,260,390
07550445	0.18	2.33	4,967,007	755000.00	759999.99	445000.00	449999.99	396.51	568.15	81813691.87	81961128.39	4,611,719	295,181	56,824	3,283	00	255	33	260,390,261,393
07550450	0.14	2.64	3,685,833	755000.00	759999.99	450000.00	454999.99	416.27	538.54	81814000.33	81815270.14	3,592,395	77,424	15,112	902	00	255	37	261,262
07550455	0.16	2.51	4,104,186	755000.00	759999.99	455000.00	459999.99	424.30	539.45	81815247.17	81815682.06	3,967,956	116,329	18,872	1,029	00	255	35	262,250
07550460	0.14	2.64	3,794,782	755000.00	759999.99	460000.00	464999.99	409.97	534.66	81815656.90	81816925.01	3,590,486	172,177	30,295	1,824	00	255	32	250,251

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
07550465	0.16	2.54	4,228,607	755000.00	759999.99	465000.00	469999.99	394.27	514.33	81816903.09	81817330.80	3,875,180	300,374	50,234	2,819	00	255	32	251,252
07550470	0.14	2.63	4,486,563	755000.00	759999.99	470000.00	474999.99	394.09	742.50	81817306.03	81818615.57	3,604,245	735,008	138,210	9,100	00	255	29	252,253
07550475	0.14	2.65	4,336,343	755000.00	759999.99	475000.00	479999.99	402.29	1539.45	81818593.66	81819015.87	3,571,616	628,440	126,840	9,447	00	255	29	253,254
07550480	0.14	2.71	3,849,472	755000.00	759999.99	480000.00	484999.99	401.53	548.31	81818993.97	81820263.27	3,404,438	378,635	62,690	3,709	00	255	31	254,255
07550485	0.15	2.55	4,334,499	755000.00	759999.99	485000.00	489999.99	390.82	527.85	81820241.28	81820664.96	3,844,641	420,571	65,823	3,464	00	255	30	255,256
07550490	0.15	2.60	3,989,675	755000.00	759999.99	490000.00	494999.99	391.37	533.06	81820640.83	81869496.84	3,694,392	256,094	37,456	1,733	00	255	29	256,330,331
07550495	0.14	2.66	3,776,744	755000.00	759999.99	495000.00	499999.99	390.96	943.46	81869152.71	81870681.45	3,524,149	220,584	30,713	1,298	00	255	28	331,330,332
07550500	0.14	2.64	3,675,913	755000.00	759999.99	500000.00	504999.99	392.83	492.04	81869472.29	81871012.40	3,587,295	78,233	10,031	354	00	233	28	332,331,333
07550505	0.15	2.62	4,136,919	755000.00	759999.99	505000.00	509999.99	390.65	4692.75	81870673.93	81872207.30	3,640,171	424,142	69,068	3,538	00	255	25	333,332,334
07550510	0.14	2.67	4,106,779	755000.00	759999.99	510000.00	514999.99	302.41	531.90	81870988.90	81872500.11	3,513,956	508,591	80,398	3,834	00	255	23	334,333,325
07550515	0.14	2.65	4,305,790	755000.00	759999.99	515000.00	519999.99	267.20	3755.99	81872185.84	81873706.98	3,574,035	631,575	95,619	4,561	00	255	21	334,325,326
07550520	0.14	2.63	4,394,264	755000.00	759999.99	520000.00	524999.99	399.44	2102.83	81872476.64	81874007.84	3,603,341	685,530	100,688	4,705	00	255	20	325,326,327
07550525	0.15	2.60	4,175,729	755000.00	759999.99	525000.00	529999.99	332.38	2652.91	81873685.45	81875217.00	3,699,169	420,330	54,287	1,943	00	255	25	327,326,328
07550530	0.15	2.61	4,041,052	755000.00	759999.99	530000.00	534999.99	-104.32	4305.00	81873983.85	81875523.87	3,679,092	316,994	43,124	1,842	00	255	26	327,328,329
07600430	0.12	2.84	3,641,965	760000.00	764999.99	430000.00	434999.99	361.05	497.74	81810914.42	81812121.25	3,091,665	475,180	71,672	3,448	00	255	28	257,258
07600435	0.14	2.70	4,379,379	760000.00	764999.99	435000.00	439999.99	360.85	493.18	81812099.07	81812506.93	3,442,688	790,718	138,591	7,382	00	184	25	258,259
07600440	0.14	2.67	4,104,525	760000.00	764999.99	440000.00	444999.99	374.80	636.28	81812481.70	81813693.56	3,512,917	490,798	94,682	6,128	00	255	28	259,260
07600445	0.15	2.57	4,493,924	760000.00	764999.99	445000.00	449999.99	394.01	613.02	81813671.47	81814045.34	3,796,987	581,279	108,715	6,943	00	255	29	260,261
07600450	0.15	2.63	4,208,113	760000.00	764999.99	450000.00	454999.99	391.61	543.51	81814019.67	81815249.94	3,625,433	483,625	93,098	5,957	00	255	32	261,262
07600455	0.15	2.55	4,427,480	760000.00	764999.99	455000.00	459999.99	391.31	530.77	81815227.38	81815703.05	3,853,565	492,461	77,378	4,076	00	255	31	262,250
07600460	0.15	2.62	3,987,392	760000.00	764999.99	460000.00	464999.98	401.31	532.15	81815677.67	81816905.53	3,648,802	285,144	50,336	3,110	00	255	31	250,251
07600465	0.15	2.59	4,050,655	760000.00	764999.99	465000.00	469999.99	404.19	531.52	81816882.91	81817349.16	3,731,238	264,351	51,409	3,657	00	255	33	251,252
07600470	0.14	2.64	4,091,852	760000.00	764999.99	470000.00	474999.99	408.01	550.65	81817325.68	81818595.18	3,584,872	422,384	79,227	5,369	00	255	30	252,253
07600475	0.16	2.49	4,745,223	760000.00	764999.99	475000.00	479999.99	422.79	2113.14	81818573.09	81819037.43	4,041,166	577,424	117,528	9,105	00	255	30	253,254
07600480	0.15	2.60	4,433,071	760000.00	764999.99	480000.00	484999.99	416.77	617.10	81819011.73	81820242.88	3,699,248	624,113	103,702	6,008	00	255	29	254,255
07600485	0.14	2.66	4,289,195	760000.00	764999.99	485000.00	489999.99	398.95	570.19	81820220.60	81820684.76	3,538,147	638,432	106,635	5,981	00	255	28	256,255
07600490	0.15	2.58	4,312,272	760000.00	764999.99	490000.00	494999.99	400.56	4425.26	81820661.49	81869516.95	3,760,668	481,380	67,162	3,062	00	255	27	256,330,331
07600495	0.15	2.60	4,122,368	760000.00	764999.99	495000.00	499999.99	336.40	3021.70	81869133.20	81870675.96	3,698,065	361,231	60,077	2,995	00	255	27	331,330,332
07600500	0.14	2.66	3,802,993	760000.00	764999.99	500000.00	504999.99	401.45	1029.98	81869492.86	81871033.43	3,541,783	223,965	35,582	1,663	00	255	29	332,331,333
07600505	0.15	2.60	3,907,783	760000.00	764999.99	505000.00	509999.99	379.99	556.10	81870655.32	81872186.79	3,689,509	191,107	26,177	990	00	255	28	333,332,334
07600510	0.14	2.66	3,757,147	760000.00	764999.99	510000.00	514999.99	239.32	4352.60	81871008.79	81872519.45	3,524,663	200,729	30,367	1,388	00	255	27	333,334,325
07600515	0.14	2.70	3,674,585	760000.00	764999.99	515000.00	519999.99	163.21	3498.97	81872165.27	81873686.42	3,435,275	208,155	29,695	1,460	00	255	28	334,325,326
07600520	0.14	2.64	4,120,524	760000.00	764999.99	520000.00	524999.99	391.41	2454.00	81872496.18	81874028.11	3,578,191	477,054	62,638	2,641	00	255	25	326,325,327

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
07600525	0.15	2.61	3,976,093	760000.00	764999.99	525000.00	529999.99	-182.16	3826.08	81873666.29	81875196.49	3,663,800	276,021	34,857	1,415	00	255	27	327,326,328
07600530	0.15	2.62	3,985,902	760000.00	764999.99	530000.00	534999.99	-115.35	4204.46	81874004.35	81875545.20	3,636,015	305,398	42,744	1,745	00	255	27	327,328,329
07650430	0.13	2.81	3,511,552	765000.00	769999.99	430000.00	434999.99	360.98	487.23	81810933.74	81812101.26	3,156,985	306,893	45,541	2,133	00	255	27	257,258
07650435	0.15	2.62	4,178,178	765000.00	769999.99	435000.00	439999.99	361.19	3719.57	81812077.94	81812527.08	3,630,904	464,892	78,227	4,155	00	255	29	258,259
07650440	0.14	2.69	3,830,146	765000.00	769999.99	440000.00	444999.99	366.69	495.70	81812501.97	81813674.64	3,449,876	323,865	53,622	2,783	00	255	30	259,260
07650445	0.14	2.70	3,989,761	765000.00	769999.99	445000.00	449999.99	375.44	640.51	81813652.08	81814067.55	3,424,218	475,954	84,905	4,684	00	255	28	260,261
07650450	0.14	2.63	4,318,375	765000.00	769999.99	450000.00	454999.99	375.95	507.88	81814040.86	81815230.45	3,605,746	587,626	117,205	7,798	00	255	28	261,262
07650455	0.15	2.62	4,253,751	765000.00	769999.99	455000.00	459999.99	379.74	508.13	81815207.25	81815721.48	3,650,472	501,262	95,349	6,668	00	255	29	262,250
07650460	0.14	2.65	4,017,139	765000.00	769999.99	460000.00	464999.99	391.27	532.20	81815697.91	81816885.10	3,548,203	394,421	69,963	4,552	00	255	29	250,251
07650465	0.16	2.53	3,995,183	765000.00	769999.99	465000.00	469999.99	404.97	565.37	81816862.55	81817369.35	3,902,125	77,059	14,955	1,044	00	255	32	251,252
07650470	0.15	2.60	3,979,111	765000.00	769999.99	470000.00	474999.99	418.14	3399.97	81817345.33	81818574.95	3,688,361	241,155	46,568	3,027	00	255	32	252,253
07650475	0.14	2.64	4,138,220	765000.00	769999.99	475000.00	479999.99	432.16	1121.69	81818552.42	81819055.56	3,593,708	449,158	88,819	6,535	00	255	31	254,253
07650480	0.14	2.65	4,166,880	765000.00	769999.99	480000.00	484999.99	451.28	3048.06	81819033.16	81820702.86	3,571,609	505,861	84,810	4,600	00	255	31	254,255,256
07650485	0.14	2.68	4,108,284	765000.00	769999.99	485000.00	489999.99	427.34	590.14	81820200.89	81869130.74	3,478,034	536,033	89,119	5,098	00	255	30	256,255,330
07650490	0.15	2.56	4,358,237	765000.00	769999.99	490000.00	494999.99	318.56	626.74	81820679.75	81869536.75	3,819,216	466,052	69,547	3,422	00	82	29	256,330,331
07650495	0.15	2.60	3,864,284	765000.00	769999.99	495000.00	499999.99	126.75	3034.52	81869112.57	81870656.47	3,691,248	148,762	23,153	1,121	00	255	31	330,331,332
07650500	0.15	2.60	4,155,419	765000.00	769999.99	500000.00	504999.99	420.76	2334.84	81869513.62	81871053.45	3,713,686	381,185	57,977	2,571	00	255	29	331,332,333
07650505	0.15	2.56	4,212,498	765000.00	769999.99	505000.00	509999.99	359.99	1491.32	81870634.36	81872166.08	3,815,618	345,312	49,219	2,349	00	196	29	333,332,334
07650510	0.14	2.66	3,882,954	765000.00	769999.99	510000.00	514999.99	88.27	3544.97	81871029.11	81872539.53	3,534,684	300,558	45,465	2,247	00	255	30	334,333,325
07650515	0.15	2.60	4,063,645	765000.00	769999.99	515000.00	519999.99	116.25	2366.47	81872144.75	81873666.89	3,710,107	303,848	47,478	2,212	00	255	27	325,334,326
07650520	0.14	2.65	3,744,711	765000.00	769999.99	520000.00	524999.99	-109.63	2263.09	81872516.34	81874047.51	3,556,353	165,946	21,585	827	00	255	30	325,326,327
07650525	0.15	2.57	4,108,251	765000.00	769999.99	525000.00	529999.99	71.31	2863.26	81873646.88	81875177.23	3,775,659	296,379	34,985	1,228	00	255	27	327,326,328
07650530	0.15	2.56	4,546,763	765000.00	769999.99	530000.00	534999.99	109.75	2614.75	81874024.24	81875564.22	3,808,712	645,874	88,590	3,587	00	206	24	327,328,329
07700430	0.12	2.93	3,319,986	770000.00	774999.99	430000.00	434999.99	362.99	3983.11	81810953.27	81812079.46	2,909,019	357,240	51,459	2,268	00	255	27	257,258
07700435	0.12	2.85	3,477,228	770000.00	774999.99	435000.00	439999.99	363.23	457.49	81812060.38	81812546.74	3,089,658	341,309	44,807	1,454	00	193	27	258,259
07700440	0.13	2.82	3,681,294	770000.00	774999.99	440000.00	444999.98	364.03	476.33	81812523.12	81813654.54	3,146,837	454,415	76,247	3,795	00	255	28	259,260
07700445	0.14	2.70	4,264,494	770000.00	774999.99	445000.00	449999.99	364.59	1905.42	81813632.54	81814086.66	3,437,950	692,765	125,852	7,927	00	255	26	260,261
07700450	0.14	2.69	4,332,717	770000.00	774999.99	450000.00	454999.99	376.92	518.06	81814060.60	81815209.67	3,444,421	728,229	149,545	10,522	00	255	27	261,262
07700455	0.15	2.59	4,631,570	770000.00	774999.99	455000.00	459999.99	326.45	535.13	81815187.41	81815740.94	3,714,317	771,571	137,007	8,675	00	255	27	262,250
07700460	0.14	2.66	4,010,077	770000.00	774999.99	460000.00	464999.99	393.99	527.01	81815716.33	81816864.28	3,546,707	388,135	70,312	4,923	00	255	28	250,251
07700465	0.15	2.57	4,377,339	770000.00	774999.99	465000.00	469999.99	389.69	527.36	81816842.70	81817389.01	3,787,464	491,265	92,647	5,963	00	224	29	251,252
07700470	0.14	2.66	4,002,959	770000.00	774999.99	470000.00	474999.99	403.72	539.65	81817364.98	81819074.17	3,531,980	393,995	72,073	4,911	00	255	30	252,253,254
07700475	0.15	2.56	4,390,524	770000.00	774999.99	475000.00	479999.99	414.04	847.50	81818533.01	81820186.09	3,804,035	488,495	91,247	6,747	00	255	29	253,254,255

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
07700480	0.15	2.62	4,743,758	770000.00	774999.99	480000.00	484999.99	420.03	572.75	81819051.31	81820722.36	3,647,199	914,166	171,363	11,030	00	255	25	254,255,256
07700485	0.15	2.63	4,488,929	770000.00	774999.99	485000.00	489999.99	419.15	626.56	81820180.23	81869113.80	3,620,419	736,352	125,220	6,938	00	255	27	256,255,330
07700490	0.15	2.58	4,452,115	770000.00	774999.99	490000.00	494999.99	365.59	1624.84	81820699.21	81869556.12	3,748,986	608,292	90,217	4,620	00	255	26	256,330,331
07700495	0.15	2.61	3,952,143	770000.00	774999.99	495000.00	499999.99	338.60	3483.32	81869092.48	81870635.98	3,675,760	243,729	31,374	1,280	00	238	29	331,330,332
07700500	0.15	2.63	3,778,314	770000.00	774999.99	500000.00	504999.99	-89.67	4368.04	81869532.64	81871073.09	3,616,126	142,697	18,790	701	00	255	31	331,332,333
07700505	0.15	2.62	3,795,684	770000.00	774999.99	505000.00	509999.99	348.53	4506.89	81870615.45	81872146.07	3,640,434	136,946	17,614	690	00	255	32	333,332,334
07700510	0.15	2.62	3,884,155	770000.00	774999.99	510000.00	514999.99	419.43	2512.81	81871050.21	81872558.32	3,632,538	219,909	30,351	1,357	00	255	30	333,334,325
07700515	0.14	2.68	3,827,597	770000.00	774999.99	515000.00	519999.99	33.74	4070.76	81872123.75	81873647.67	3,490,573	294,209	40,913	1,902	00	255	28	334,325,326
07700520	0.15	2.63	3,852,974	770000.00	774999.99	520000.00	524999.99	227.70	3045.45	81872535.92	81874069.38	3,626,796	196,054	28,749	1,375	00	255	29	326,325,327
07700525	0.15	2.56	4,158,052	770000.00	774999.99	525000.00	529999.99	310.88	1904.31	81873626.67	81875156.09	3,811,982	297,590	46,068	2,412	00	255	27	326,327,328
07700530	0.14	2.64	3,770,766	770000.00	774999.99	530000.00	534999.99	-40.97	4362.16	81874045.22	81875584.52	3,588,121	157,278	24,132	1,235	00	193	30	327,328,329
07750430	0.13	2.79	3,710,425	775000.00	779999.99	430000.00	434999.99	363.34	4327.38	81810970.90	81812061.64	3,202,340	439,338	65,893	2,854	00	255	25	257,258
07750435	0.13	2.77	3,658,570	775000.00	779999.99	435000.00	439999.99	363.12	485.82	81812037.77	81812566.42	3,249,526	356,347	50,631	2,066	00	255	27	258,259
07750440	0.13	2.76	3,612,125	775000.00	779999.99	440000.00	444999.99	364.45	472.53	81812541.19	81813634.40	3,274,418	287,968	47,464	2,275	00	255	27	259,260
07750445	0.14	2.66	4,363,033	775000.00	779999.99	445000.00	449999.99	340.46	541.00	81813612.74	81814105.70	3,533,181	689,816	131,751	8,285	00	255	27	260,261
07750450	0.14	2.64	4,222,624	775000.00	779999.99	450000.00	454999.99	384.75	678.83	81814080.60	81815189.95	3,597,947	523,026	95,705	5,946	00	255	28	261,262
07750455	0.16	2.53	4,275,688	775000.00	779999.99	455000.00	459999.99	392.75	528.88	81815166.90	81815761.23	3,903,341	314,853	54,252	3,242	00	255	31	262,250
07750460	0.14	2.67	4,263,846	775000.00	779999.99	460000.00	464999.99	389.58	523.11	81815736.62	81816844.55	3,495,831	633,748	124,731	9,536	00	255	28	250,251
07750465	0.15	2.55	4,593,025	775000.00	779999.99	465000.00	469999.99	378.78	510.30	81816822.50	81817409.46	3,849,452	615,082	119,903	8,588	00	255	28	252,251
07750470	0.14	2.68	4,137,399	775000.00	779999.99	470000.00	474999.99	391.68	527.98	81817384.23	81819095.29	3,477,161	540,415	111,284	8,539	00	255	29	252,253,254
07750475	0.15	2.60	4,481,311	775000.00	779999.99	475000.00	479999.99	357.69	580.93	81818512.80	81820182.68	3,710,634	652,084	111,808	6,785	00	255	26	254,253,255
07750480	0.15	2.58	4,709,288	775000.00	779999.99	480000.00	484999.99	396.09	687.16	81819071.18	81820742.18	3,759,518	794,530	145,600	9,640	00	255	27	254,255,256
07750485	0.15	2.60	4,154,598	775000.00	779999.99	485000.00	489999.99	412.32	583.41	81820160.58	81869093.67	3,693,213	386,645	69,967	4,773	00	255	30	256,255,330
07750490	0.15	2.59	4,123,786	775000.00	779999.99	490000.00	494999.99	376.63	603.21	81820718.07	81869576.28	3,718,547	347,060	55,252	2,927	00	255	28	330,256,331
07750495	0.15	2.60	4,087,461	775000.00	779999.99	495000.00	499999.99	230.89	560.70	81869071.93	81870616.92	3,691,633	343,408	50,104	2,316	00	255	27	330,331,332
07750500	0.14	2.70	3,982,227	775000.00	779999.99	500000.00	504999.99	378.07	647.28	81869552.73	81871092.49	3,428,321	474,532	75,563	3,811	00	255	25	331,332,333
07750505	0.15	2.58	3,953,523	775000.00	779999.99	505000.00	509999.99	355.54	1636.49	81870595.44	81872124.82	3,744,945	180,005	27,248	1,325	00	255	30	333,332,334
07750510	0.14	2.72	3,729,180	775000.00	779999.99	510000.00	514999.99	351.17	3925.67	81871069.41	81872579.36	3,390,047	291,471	45,448	2,214	00	255	27	334,333,325
07750515	0.15	2.60	4,074,741	775000.00	779999.99	515000.00	519999.99	165.65	4137.10	81872104.66	81873627.34	3,687,406	337,043	48,085	2,207	00	255	25	334,325,326
07750520	0.14	2.67	3,963,739	775000.00	779999.99	520000.00	524999.99	359.59	3045.81	81872555.45	81874087.36	3,517,497	389,349	54,539	2,354	00	255	25	325,326,327
07750525	0.14	2.65	3,692,418	775000.00	779999.99	525000.00	529999.99	299.56	4628.57	81873607.10	81875138.31	3,553,561	121,785	16,416	656	00	255	27	326,327,328
07750530	0.14	2.67	3,834,899	775000.00	779999.99	530000.00	534999.99	102.63	4271.39	81874065.49	81875603.93	3,510,022	279,925	43,028	1,924	00	255	26	327,328,329
07800430	0.14	2.72	3,871,413	780000.00	784999.99	430000.00	434999.99	363.53	485.52	81810991.42	81812040.60	3,390,833	412,058	65,250	3,272	00	255	27	257,258

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
07800435	0.15	2.62	3,777,140	780000.00	784999.99	435000.00	439999.99	363.45	1218.16	81812017.83	81812586.53	3,649,901	110,774	15,930	535	00	139	31	258,259
07800440	0.13	2.73	4,023,216	780000.00	784999.99	440000.00	444999.99	365.18	491.30	81812561.27	81813614.89	3,347,978	572,139	97,804	5,295	00	255	25	259,260
07800445	0.14	2.67	3,799,550	780000.00	784999.99	445000.00	449999.99	365.63	496.22	81813591.86	81814125.49	3,510,452	236,978	48,920	3,200	00	255	33	260,261
07800450	0.14	2.69	3,471,822	780000.00	784999.99	450000.00	454999.99	367.04	500.83	81814100.33	81815169.28	3,448,291	19,614	3,651	266	00	255	36	261,262
07800455	0.14	2.69	3,876,649	780000.00	784999.99	455000.00	459999.99	366.61	501.29	81815146.58	81815780.85	3,458,131	352,811	62,027	3,680	00	255	29	262,250
07800460	0.14	2.71	4,429,945	780000.00	784999.99	460000.00	464999.99	367.66	513.52	81815756.25	81816825.62	3,404,722	852,394	162,159	10,670	00	255	25	250,251
07800465	0.15	2.57	4,442,984	780000.00	784999.99	465000.00	469999.99	375.97	511.07	81816803.22	81817429.31	3,775,516	550,386	109,338	7,744	00	255	29	252,251
07800470	0.15	2.58	4,546,287	780000.00	784999.99	470000.00	474999.99	373.96	529.43	81817404.65	81819114.52	3,752,020	663,429	122,833	8,005	00	255	26	253,252,254
07800475	0.15	2.61	4,653,126	780000.00	784999.99	475000.00	479999.99	374.48	524.54	81818493.17	81820162.20	3,672,077	826,362	145,218	9,469	00	255	25	254,253,255
07800480	0.15	2.58	4,398,582	780000.00	784999.99	480000.00	484999.99	382.28	525.89	81819090.16	81820761.75	3,767,332	529,433	95,602	6,215	00	255	29	255,254,256
07800485	0.15	2.62	4,472,192	780000.00	784999.99	485000.00	489999.99	389.21	534.56	81820139.42	81869074.10	3,654,504	680,601	128,479	8,608	00	224	27	255,256,330
07800490	0.14	2.65	4,143,403	780000.00	784999.99	490000.00	494999.99	395.75	542.63	81820737.61	81869595.97	3,557,579	493,014	87,452	5,358	00	255	27	330,256,331
07800495	0.15	2.61	4,391,794	780000.00	784999.99	495000.00	499999.99	404.69	3383.94	81869052.91	81870596.22	3,671,068	620,496	95,282	4,948	00	255	25	330,331,332
07800500	0.14	2.66	3,872,552	780000.00	784999.99	500000.00	504999.99	426.30	3487.95	81869573.15	81871112.42	3,523,190	306,384	41,198	1,780	00	255	28	331,332,333
07800505	0.15	2.62	3,908,360	780000.00	784999.99	505000.00	509999.99	415.14	593.19	81870576.60	81872105.99	3,643,077	227,390	36,084	1,809	00	255	30	333,332,334
07800510	0.14	2.70	4,152,552	780000.00	784999.99	510000.00	514999.99	365.98	595.49	81871089.61	81872599.64	3,426,642	626,808	94,534	4,568	00	255	24	334,333,325
07800515	0.14	2.65	3,779,241	780000.00	784999.99	515000.00	519999.99	-76.47	3762.92	81872083.95	81873608.47	3,565,407	186,439	26,196	1,199	00	255	28	325,334,326
07800520	0.14	2.67	4,225,958	780000.00	784999.99	520000.00	524999.99	337.60	715.00	81872575.35	81874108.27	3,508,386	640,842	74,011	2,719	00	255	22	325,326,327
07800525	0.16	2.54	3,943,297	780000.00	784999.99	525000.00	529999.99	295.42	4236.39	81873587.03	81875118.91	3,879,172	57,031	6,859	235	00	255	31	326,327,328
07800530	0.14	2.73	3,647,016	780000.00	784999.99	530000.00	534999.99	258.58	4456.18	81874083.81	81875623.78	3,366,289	249,209	30,459	1,059	00	255	28	328,327,329
07850430	0.13	2.79	4,237,989	785000.00	789999.99	430000.00	434999.99	364.08	496.36	81811010.92	81812019.87	3,216,108	884,219	131,244	6,418	00	255	23	257,258
07850435	0.15	2.61	4,505,654	785000.00	789999.99	435000.00	439999.99	364.00	533.31	81811998.40	81812606.71	3,681,738	693,750	122,971	7,195	00	255	29	258,259
07850440	0.14	2.70	4,356,860	785000.00	789999.99	440000.00	444999.99	365.66	539.73	81812581.37	81813594.10	3,427,531	765,285	153,879	10,165	00	255	29	259,260
07850445	0.14	2.68	4,361,241	785000.00	789999.99	445000.00	449999.99	365.58	507.55	81813572.67	81814145.10	3,488,337	719,824	143,431	9,649	00	255	26	260,261
07850450	0.12	2.84	3,671,856	785000.00	789999.99	450000.00	454999.99	366.55	498.53	81814119.16	81815149.81	3,099,591	484,778	82,444	5,043	00	255	25	261,262
07850455	0.12	2.94	3,631,149	785000.00	789999.99	455000.00	459999.99	366.49	481.20	81815126.62	81815800.60	2,902,176	627,953	96,067	4,953	00	255	17	262,250
07850460	0.12	2.86	4,192,588	785000.00	789999.99	460000.00	464999.99	367.86	492.04	81815775.76	81817448.42	3,057,712	963,264	162,058	9,554	00	255	17	250,251,252
07850465	0.15	2.60	4,391,698	785000.00	789999.99	465000.00	469999.99	368.92	507.77	81816783.11	81818492.82	3,700,113	564,754	117,467	9,364	00	255	30	252,251,253
07850470	0.14	2.65	4,636,234	785000.00	789999.99	470000.00	474999.99	371.79	1815.47	81817424.28	81819133.60	3,560,425	910,546	156,090	9,173	00	255	22	253,252,254
07850475	0.15	2.63	4,336,960	785000.00	789999.99	475000.00	479999.99	372.71	533.29	81818472.94	81820141.80	3,618,764	599,589	110,953	7,654	00	255	29	254,253,255
07850480	0.15	2.60	4,154,560	785000.00	789999.99	480000.00	484999.99	382.45	531.14	81819110.17	81820781.16	3,703,379	373,089	72,817	5,275	00	255	31	254,255,256
07850485	0.15	2.60	3,987,661	785000.00	789999.99	485000.00	489999.99	392.92	633.85	81820119.27	81869054.24	3,702,528	238,576	43,810	2,747	00	255	32	255,256,330
07850490	0.15	2.62	3,853,702	785000.00	789999.99	490000.00	494999.99	401.11	579.89	81820756.58	81869615.83	3,654,137	172,470	25,673	1,422	00	255	31	256,330,331

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
07850495	0.15	2.61	4,312,726	785000.00	789999.99	495000.00	499999.99	331.60	3543.17	81869033.00	81870578.14	3,683,122	541,562	83,645	4,397	00	255	28	330,331,332
07850500	0.15	2.60	4,064,600	785000.00	789999.99	500000.00	504999.99	424.58	3352.53	81869592.94	81871133.15	3,697,290	316,991	47,886	2,433	00	255	30	332,331,333
07850505	0.14	2.67	4,534,205	785000.00	789999.99	505000.00	509999.99	340.74	1208.82	81870556.14	81872084.77	3,503,741	885,510	138,141	6,813	00	255	20	332,333,334
07850510	0.14	2.69	4,058,681	785000.00	789999.99	510000.00	514999.99	312.68	3064.07	81871108.72	81872618.05	3,454,505	519,850	79,944	4,382	00	255	24	333,334,325
07850515	0.13	2.73	3,569,393	785000.00	789999.99	515000.00	519999.99	352.67	4421.78	81872063.52	81873587.99	3,354,974	189,872	23,422	1,125	00	255	27	325,334,326
07850520	0.12	2.95	3,416,627	785000.00	789999.99	520000.00	524999.99	326.61	3289.24	81872595.63	81874127.25	2,871,542	480,169	62,241	2,675	00	255	23	325,326,327
07850525	0.14	2.68	3,868,427	785000.00	789999.99	525000.00	529999.99	415.66	3239.92	81873566.81	81875097.69	3,481,827	342,538	42,514	1,548	00	255	20	326,327,328
07850530	0.14	2.67	3,701,412	785000.00	789999.99	530000.00	534999.99	408.14	4307.56	81874105.20	81875644.86	3,502,131	176,006	22,453	822	00	143	25	327,328,329
07900430	0.14	2.70	3,836,512	790000.00	794999.99	430000.00	434999.99	369.63	545.03	81811031.51	81812000.68	3,433,969	341,325	58,072	3,146	00	255	31	257,258
07900435	0.16	2.54	5,218,594	790000.00	794999.99	435000.00	439999.99	374.01	520.67	81811978.66	81812627.65	3,865,391	1,132,464	208,325	12,414	00	255	24	258,259
07900440	0.14	2.64	4,033,388	790000.00	794999.99	440000.00	444999.99	386.23	531.07	81812601.22	81813575.29	3,589,381	366,625	72,576	4,806	00	255	33	259,260
07900445	0.15	2.63	4,254,207	790000.00	794999.99	445000.00	449999.99	369.39	540.78	81813553.19	81814164.53	3,620,878	517,264	108,344	7,721	00	255	31	260,261
07900450	0.13	2.81	3,883,402	790000.00	794999.99	450000.00	454999.99	367.30	486.91	81814139.29	81815128.63	3,168,390	616,140	94,065	4,807	00	255	25	261,262
07900455	0.12	2.86	4,306,085	790000.00	794999.99	455000.00	459999.99	366.75	1539.45	81815107.03	81815820.76	3,053,011	1,072,272	171,630	9,172	00	76	15	250,262
07900460	0.13	2.79	4,562,836	790000.00	794999.99	460000.00	464999.99	367.97	489.83	81815795.94	81817468.59	3,217,750	1,142,086	191,897	11,103	00	255	17	251,250,252
07900465	0.14	2.65	5,058,013	790000.00	794999.99	465000.00	469999.99	369.20	491.84	81816763.70	81818474.77	3,559,909	1,273,936	212,040	12,128	00	148	19	252,251,253
07900470	0.14	2.70	4,809,466	790000.00	794999.99	470000.00	474999.99	371.36	904.63	81817443.55	81819154.26	3,439,022	1,182,523	178,827	9,094	00	255	18	253,252,254
07900475	0.14	2.68	4,574,242	790000.00	794999.99	475000.00	479999.99	372.87	496.17	81818452.24	81820121.21	3,494,950	926,118	145,434	7,740	00	255	18	254,253,255
07900480	0.13	2.75	3,952,230	790000.00	794999.99	480000.00	484999.99	374.03	889.93	81819129.02	81820799.66	3,307,687	546,320	92,314	5,909	00	255	26	254,255,256
07900485	0.15	2.62	3,905,335	790000.00	794999.99	485000.00	489999.99	378.90	547.70	81820098.87	81869034.13	3,647,837	219,397	35,962	2,139	00	131	30	256,255,330
07900490	0.15	2.61	3,986,837	790000.00	794999.99	490000.00	494999.99	383.69	1440.33	81820776.49	81869635.95	3,665,934	275,382	43,269	2,252	00	255	30	256,330,331
07900495	0.15	2.57	4,802,623	790000.00	794999.99	495000.00	499999.99	394.33	3469.68	81869012.62	81870557.61	3,790,934	879,518	125,919	6,252	00	255	23	331,330,332
07900500	0.15	2.59	4,597,743	790000.00	794999.99	500000.00	504999.99	287.36	4191.13	81869612.26	81871153.07	3,727,105	752,031	112,982	5,625	00	255	24	331,332,333
07900505	0.10	3.11	3,731,391	790000.00	794999.99	505000.00	509999.99	407.48	2322.42	81870535.41	81872065.25	2,590,992	965,572	165,270	9,557	00	255	16	333,332,334
07900510	0.12	2.84	4,341,080	790000.00	794999.99	510000.00	514999.99	319.80	2648.13	81871128.74	81872637.83	3,105,866	1,045,171	179,715	10,328	00	255	17	333,334,325
07900515	0.14	2.70	4,073,843	790000.00	794999.99	515000.00	519999.99	291.52	2045.27	81872044.84	81873567.74	3,432,940	552,362	84,305	4,236	00	255	23	334,325,326
07900520	0.13	2.82	4,043,686	790000.00	794999.99	520000.00	524999.99	313.57	541.59	81872615.76	81874148.45	3,134,351	791,692	112,498	5,145	00	255	18	325,326,327
07900525	0.13	2.80	3,771,084	790000.00	794999.99	525000.00	529999.99	271.09	1693.85	81873546.73	81875077.94	3,199,672	503,765	65,103	2,544	00	255	20	327,326,328
07900530	0.08	3.53	2,389,298	790000.00	794999.99	530000.00	534999.99	388.06	3140.29	81874125.01	81875656.48	2,010,688	333,618	43,366	1,626	00	255	21	328,327,329
07950430	0.14	2.71	3,460,390	795000.00	799999.99	430000.00	434999.99	370.56	482.57	81811051.00	81811980.71	3,407,358	47,720	5,126	186	00	80	35	257,258
07950435	0.14	2.63	4,221,462	795000.00	799999.99	435000.00	439999.99	373.81	487.69	81811958.67	81812646.05	3,603,791	517,055	95,053	5,563	00	202	30	258,259
07950440	0.14	2.67	4,011,520	795000.00	799999.99	440000.00	444999.99	377.99	3957.64	81812621.50	81813555.56	3,501,559	427,379	78,073	4,509	00	255	30	259,260
07950445	0.14	2.65	3,949,596	795000.00	799999.99	445000.00	449999.99	369.53	1884.29	81813533.32	81814183.11	3,560,638	318,058	66,277	4,623	00	255	33	261,260

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
07950450	0.14	2.65	4,047,943	795000.00	799999.99	450000.00	454999.99	367.65	553.15	81814159.81	81815839.71	3,571,390	398,159	73,711	4,683	00	255	31	261,262,250
07950455	0.14	2.66	4,994,164	795000.00	799999.99	455000.00	459999.99	367.26	587.53	81815086.72	81816760.90	3,538,776	1,233,443	209,149	12,796	00	255	20	250,262,251
07950460	0.14	2.72	4,562,058	795000.00	799999.99	460000.00	464999.99	368.60	481.20	81815815.75	81817489.68	3,388,363	1,001,681	163,277	8,737	00	255	21	251,250,252
07950465	0.14	2.64	4,148,386	795000.00	799999.99	465000.00	469999.99	369.71	492.13	81816743.66	81818454.25	3,598,531	459,071	85,053	5,731	00	255	29	252,251,253
07950470	0.14	2.70	4,368,073	795000.00	799999.99	470000.00	474999.99	372.02	528.07	81817463.70	81819173.54	3,426,085	793,332	139,812	8,844	00	255	24	252,253,254
07950475	0.14	2.72	4,486,440	795000.00	799999.99	475000.00	479999.99	372.05	1036.59	81818432.05	81820101.09	3,379,569	943,506	154,778	8,587	00	211	20	254,253,255
07950480	0.11	3.02	3,296,274	795000.00	799999.99	480000.00	484999.99	373.68	2504.52	81819149.64	81820820.10	2,736,079	481,912	74,269	4,014	00	255	22	255,254,256
07950485	0.14	2.72	3,954,739	795000.00	799999.99	485000.00	489999.99	161.03	562.84	81820078.29	81869013.97	3,374,098	501,479	75,205	3,957	00	157	26	255,256,330
07950490	0.13	2.77	3,369,630	795000.00	799999.99	490000.00	494999.99	321.23	516.36	81820795.94	81869656.54	3,258,034	98,099	12,931	566	00	255	28	330,256,331
07950495	0.13	2.76	3,885,538	795000.00	799999.99	495000.00	499999.99	129.36	2922.97	81868992.05	81870537.28	3,276,139	520,727	84,071	4,601	00	255	24	331,330,332
07950500	0.07	3.79	2,077,392	795000.00	799999.99	500000.00	504999.99	407.20	603.26	81869632.58	81871172.60	1,740,536	284,794	49,081	2,981	00	255	17	332,331,333
07950505	0.05	4.64	1,349,632	795000.00	799999.97	505000.00	509999.97	407.35	522.14	81870515.35	81872045.55	1,163,367	157,414	27,160	1,691	00	255	14	333,332,334
07950510	0.05	4.63	1,282,833	795000.00	799999.98	510000.02	514999.99	407.27	1438.65	81871150.26	81872658.81	1,168,181	97,453	16,327	872	00	255	13	333,334,325
07950515	0.05	4.36	1,434,967	795000.00	799999.99	515000.00	519999.97	407.74	1008.27	81872025.19	81873547.58	1,315,277	103,152	15,874	664	00	255	14	325,334,326
07950520	0.05	4.36	1,467,321	795000.00	799999.98	520000.00	524999.99	407.51	515.93	81872634.63	81874168.80	1,313,833	133,022	19,607	859	00	255	18	325,326,327
07950525	0.04	5.03	1,072,548	795000.00	799999.99	525000.00	529999.91	407.50	496.83	81873526.87	81875058.62	988,537	75,563	8,177	271	00	255	17	326,327,328
07950530	0.02	6.93	532,970	795000.00	799999.95	530000.05	534909.74	407.51	780.15	81874145.14	81875679.95	521,204	10,761	984	21	00	255	27	328,327,329
08000430	0.13	2.73	3,649,291	800000.00	804999.99	430000.00	434999.99	371.17	502.71	81811069.69	81811960.93	3,356,483	250,613	40,083	2,112	00	255	31	257,258
08000435	0.14	2.64	4,263,488	800000.00	804999.99	435000.00	439999.99	373.99	3972.86	81811939.56	81812665.47	3,594,653	562,193	100,793	5,849	00	255	28	258,259
08000440	0.14	2.68	4,241,099	800000.00	804999.99	440000.00	444999.99	382.96	558.52	81812640.71	81813535.78	3,488,612	628,140	117,276	7,071	00	255	29	259,260
08000445	0.15	2.63	4,406,126	800000.00	804999.99	445000.00	449999.99	386.70	537.45	81813513.71	81814203.43	3,619,711	647,890	129,946	8,579	00	255	29	261,260
08000450	0.15	2.62	4,210,476	800000.00	804999.99	450000.00	454999.99	378.96	633.72	81814177.87	81815860.39	3,639,471	475,835	89,312	5,858	00	255	30	261,262,250
08000455	0.14	2.66	4,791,734	800000.00	804999.99	455000.00	459999.99	368.88	510.92	81815067.09	81816745.51	3,543,722	1,063,089	175,137	9,786	00	255	21	262,250,251
08000460	0.15	2.62	4,650,257	800000.00	804999.99	460000.00	464999.99	369.63	743.81	81815834.42	81817507.95	3,633,080	865,482	143,534	8,161	00	255	25	251,250,252
08000465	0.15	2.62	4,343,832	800000.00	804999.99	465000.00	469999.99	382.46	543.84	81816724.35	81818434.68	3,638,510	594,014	104,429	6,879	00	255	30	252,251,253
08000470	0.15	2.59	4,593,466	800000.00	804999.99	470000.00	474999.99	382.88	883.25	81817483.87	81819193.36	3,732,944	711,321	139,476	9,725	00	255	30	253,252,254
08000475	0.15	2.58	4,941,826	800000.00	804999.99	475000.00	479999.99	274.15	537.66	81818412.33	81820079.96	3,748,948	1,006,807	175,232	10,839	00	255	24	253,254,255
08000480	0.14	2.69	4,623,433	800000.00	804999.99	480000.00	484999.99	375.15	3369.32	81819168.16	81820839.37	3,447,504	991,929	172,962	11,038	00	255	23	255,254,256
08000485	0.13	2.83	4,110,909	800000.00	804999.99	485000.00	489999.99	376.01	532.66	81820058.63	81868994.08	3,125,011	850,236	128,924	6,738	00	184	22	256,255,330
08000490	0.13	2.82	4,154,124	800000.00	804999.99	490000.00	494999.99	376.27	986.14	81820815.34	81869675.13	3,149,903	869,882	128,251	6,088	00	255	19	330,256,331
08000495	0.11	3.02	3,457,400	800000.00	804999.99	495000.00	499999.99	-50.78	3784.40	81868971.50	81870516.91	2,742,257	624,360	86,913	3,870	00	255	19	330,331,332
08000500	0.05	4.62	1,170,838	800000.00	804999.99	500000.02	504999.97	407.50	2518.96	81869653.08	81871193.10	1,169,589	1,163	85	01	00	255	13	332,331,333
08000505	0.04	5.08	990,952	800000.00	804999.99	505000.01	509999.99	407.31	564.44	81870494.65	81872026.51	970,487	18,060	2,311	94	00	255	13	332,333,334

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08000510	0.04	4.74	1,111,205	800000.01	804999.99	510000.13	514999.97	407.42	423.64	81871168.98	81872676.78	1,111,204	01	00	00	00	255	16	334,333,325
08000515	0.03	5.92	714,568	800000.00	804999.99	515000.20	519999.93	386.15	528.77	81872004.86	81873527.97	714,302	266	00	00	00	255	12	325,334,326
08000520	0.02	6.85	532,444	800000.00	804999.99	520000.22	524999.94	-84.62	477.78	81872655.12	81874178.27	532,442	02	00	00	00	255	30	326,325,327
08000525	0.01	8.48	348,059	800000.00	804999.80	525000.58	529994.66	407.51	483.20	81873507.27	81875038.21	348,059	00	00	00	00	255	22	327,326,328
08000530	0.02	7.51	446,035	800000.00	804999.99	530004.64	534999.99	407.60	493.71	81874171.61	81875702.53	442,844	2,936	253	02	00	255	35	328,327,329
08050430	0.14	2.65	4,338,296	805000.00	809999.99	430000.00	434999.99	384.14	554.65	81811089.95	81811942.14	3,573,168	665,017	95,762	4,349	00	255	28	257,258
08050435	0.16	2.52	4,832,447	805000.00	809999.99	435000.00	439999.99	375.46	3787.76	81811918.11	81812686.68	3,929,520	782,881	114,712	5,334	00	255	28	258,259
08050440	0.14	2.66	4,784,264	805000.00	809999.99	440000.00	444999.99	378.73	563.77	81812660.10	81814220.16	3,528,558	1,052,735	191,471	11,500	00	255	24	259,260,261
08050445	0.14	2.68	4,522,966	805000.00	809999.99	445000.00	449999.99	300.27	540.79	81813493.75	81815054.20	3,490,010	866,621	157,467	8,868	00	255	25	261,260,262
08050450	0.14	2.68	4,210,091	805000.00	809999.99	450000.00	454999.99	376.75	515.75	81814197.99	81815880.34	3,490,615	608,313	105,104	6,059	00	255	25	262,261,250
08050455	0.13	2.78	4,502,950	805000.00	809999.99	455000.00	459999.99	370.25	489.26	81815047.21	81816726.18	3,234,489	1,092,047	168,026	8,388	00	255	17	250,262,251
08050460	0.15	2.61	4,917,660	805000.00	809999.99	460000.00	464999.99	370.22	522.22	81815855.28	81817528.82	3,668,620	1,079,590	161,117	8,333	00	255	22	251,250,252
08050465	0.16	2.54	4,527,531	805000.00	809999.99	465000.00	469999.99	389.58	552.34	81816704.07	81818414.11	3,881,010	544,499	95,807	6,215	00	255	30	252,251,253
08050470	0.15	2.57	4,205,966	805000.00	809999.99	470000.00	474999.99	421.09	559.04	81817503.56	81819211.19	3,788,326	357,694	56,928	3,018	00	255	31	252,253,254
08050475	0.14	2.65	4,704,044	805000.00	809999.99	475000.00	479999.99	383.45	554.90	81818392.09	81820060.41	3,563,230	970,279	161,377	9,158	00	255	24	253,254,255
08050480	0.15	2.59	4,758,048	805000.00	809999.99	480000.00	484999.99	379.01	2916.17	81819188.68	81820858.29	3,714,914	876,403	156,332	10,399	00	255	25	254,255,256
08050485	0.15	2.62	4,352,878	805000.00	809999.99	485000.00	489999.99	369.09	540.39	81820037.33	81868974.00	3,641,005	610,775	95,422	5,676	00	255	27	256,255,330
08050490	0.14	2.64	4,483,857	805000.00	809999.99	490000.00	494999.99	203.20	673.77	81820834.77	81869695.84	3,577,995	788,577	111,721	5,564	00	255	22	256,330,331
08050495	0.14	2.67	4,953,064	805000.00	809999.99	495000.00	499999.99	378.45	531.25	81868952.38	81870497.81	3,513,626	1,239,437	190,736	9,265	00	255	18	331,330,332
08050500	0.10	3.23	3,032,454	805000.00	809999.99	500000.00	504999.99	377.56	3951.94	81869672.54	81871214.15	2,392,174	551,619	84,022	4,639	00	255	17	331,332,333
08050505	0.10	3.13	3,365,070	805000.00	809999.99	505000.00	509999.99	407.30	577.51	81870475.67	81872006.14	2,555,838	697,744	105,940	5,548	00	255	18	332,333,334
08050510	0.05	4.65	1,204,067	805000.01	809999.99	510000.00	514999.84	407.54	520.76	81871190.12	81872698.09	1,157,839	40,305	5,613	310	00	255	19	334,333,325
08050515	0.07	3.67	2,409,608	805000.00	809999.98	515000.07	519999.99	406.03	528.54	81871987.03	81873507.98	1,860,421	476,682	69,297	3,208	00	255	16	325,334,326
08050520	0.11	3.04	3,524,465	805000.00	809999.99	520000.00	524999.99	395.24	541.54	81872676.65	81874208.08	2,702,650	710,156	106,620	5,039	00	255	21	325,326,327
08050525	0.05	4.35	1,864,638	805000.33	809999.99	525000.00	529999.96	407.47	3772.85	81873487.61	81875007.54	1,323,291	473,056	65,573	2,718	00	255	16	327,326,328
08050530	0.03	5.79	841,706	805000.00	809999.99	530000.02	534992.38	396.90	2055.21	81874197.64	81875725.46	744,972	86,067	10,326	341	00	255	28	328,327,329
08100430	0.14	2.71	4,199,301	810000.00	814999.99	430000.00	434999.99	424.77	739.33	81811109.17	81811920.88	3,413,239	672,485	108,141	5,436	00	255	29	257,258
08100435	0.15	2.56	4,683,852	810000.00	814999.99	435000.00	439999.99	388.60	547.32	81811898.99	81812708.73	3,830,443	715,526	130,080	7,803	00	255	30	259,258
08100440	0.14	2.70	4,193,088	810000.00	814999.99	440000.00	444999.99	375.22	573.22	81812682.26	81814241.90	3,436,867	633,148	115,736	7,337	00	255	28	260,259,261
08100445	0.14	2.65	4,259,311	810000.00	814999.99	445000.00	449999.99	278.23	647.70	81813475.13	81815048.66	3,562,313	593,751	98,069	5,178	00	255	25	260,261,262
08100450	0.14	2.71	4,089,743	810000.00	814999.99	450000.00	454999.99	368.61	612.10	81814217.41	81815902.00	3,404,717	592,345	88,238	4,443	00	255	25	261,262,250
08100455	0.14	2.64	4,722,152	810000.00	814999.99	455000.00	459999.99	373.45	640.59	81815027.57	81816706.15	3,588,028	985,693	141,841	6,590	00	255	19	262,250,251
08100460	0.14	2.63	4,241,673	810000.00	814999.99	460000.00	464999.99	374.30	516.26	81815874.95	81817548.19	3,606,504	542,482	87,657	5,030	00	255	27	250,251,252

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08100465	0.15	2.58	4,241,854	810000.00	814999.99	465000.00	469999.99	388.28	524.28	81816683.47	81818393.82	3,751,556	411,257	74,184	4,857	00	255	28	251,252,253
08100470	0.15	2.59	4,534,303	810000.00	814999.99	470000.00	474999.99	399.40	544.04	81817523.57	81819230.78	3,729,023	666,775	129,462	9,043	00	255	28	252,253,254
08100475	0.15	2.59	4,453,802	810000.00	814999.99	475000.00	479999.99	413.37	590.89	81818371.56	81820040.11	3,731,396	613,169	103,342	5,895	00	255	28	254,253,255
08100480	0.15	2.59	4,774,837	810000.00	814999.99	480000.00	484999.99	407.01	4362.12	81819207.18	81820877.16	3,721,217	879,485	163,186	10,949	00	255	23	254,255,256
08100485	0.14	2.64	4,107,157	810000.00	814999.99	485000.00	489999.99	420.64	3614.97	81820017.22	81868954.00	3,580,547	442,174	79,090	5,346	00	255	27	255,256,330
08100490	0.15	2.63	4,547,463	810000.00	814999.99	490000.00	494999.99	391.00	541.90	81820854.86	81869714.87	3,624,072	793,172	123,783	6,436	00	255	23	256,330,331
08100495	0.15	2.61	4,778,419	810000.00	814999.99	495000.00	499999.99	396.95	1060.80	81868932.44	81870476.97	3,683,356	940,938	146,521	7,604	00	255	21	330,331,332
08100500	0.13	2.82	4,298,934	810000.00	814999.99	500000.00	504999.99	384.50	539.70	81869691.85	81871233.37	3,136,204	1,006,817	148,768	7,145	00	255	18	331,332,333
08100505	0.15	2.58	4,085,567	810000.00	814999.99	505000.00	509999.99	416.81	3935.50	81870456.02	81871987.01	3,745,242	291,714	46,225	2,386	00	255	25	332,333,334
08100510	0.13	2.81	4,035,435	810000.00	814999.99	510000.00	514999.99	-152.84	4303.38	81871209.73	81872719.23	3,173,311	742,630	113,885	5,609	00	255	22	333,334,325
08100515	0.07	3.81	2,135,658	810000.00	814999.99	515000.00	519999.98	407.51	2624.88	81871964.82	81873487.85	1,718,665	364,434	50,453	2,106	00	255	18	325,334,326
08100520	0.11	3.08	3,164,493	810000.00	814999.99	520000.00	524999.99	407.34	533.49	81872695.74	81874228.07	2,636,093	457,803	67,282	3,315	00	255	22	326,325,327
08100525	0.14	2.73	3,872,583	810000.00	814999.99	525000.00	529999.99	309.29	4182.38	81873466.90	81874999.88	3,363,006	439,231	66,962	3,384	00	148	24	326,327,328
08100530	0.14	2.71	3,953,661	810000.00	814999.99	530000.00	534999.99	16.30	3230.19	81874206.08	81875743.34	3,393,387	484,394	72,432	3,448	00	255	24	328,327,329
08150430	0.15	2.55	4,576,647	815000.00	819999.99	430000.00	434999.99	414.45	3660.03	81811128.95	81812725.44	3,842,487	628,906	99,569	5,685	00	255	30	257,258,259
08150435	0.14	2.64	4,081,129	815000.00	819999.99	435000.00	439999.99	395.16	3185.99	81811877.71	81813473.31	3,595,741	403,392	77,258	4,738	00	255	33	258,259,260
08150440	0.14	2.65	4,213,473	815000.00	819999.99	440000.00	444999.99	282.06	507.17	81812701.78	81814261.10	3,558,119	556,012	94,150	5,192	00	255	30	260,259,261
08150445	0.15	2.59	4,507,395	815000.00	819999.99	445000.00	449999.99	381.85	575.43	81813454.16	81815029.82	3,720,852	661,825	117,908	6,810	00	255	27	261,260,262
08150450	0.14	2.66	4,530,593	815000.00	819999.99	450000.00	454999.99	375.14	579.98	81814236.49	81815921.05	3,546,588	835,069	140,928	8,008	00	255	25	261,262,250
08150455	0.13	2.75	3,707,866	815000.00	819999.99	455000.00	459999.99	374.93	482.82	81815006.92	81816685.26	3,299,228	353,838	52,031	2,769	00	80	25	262,250,251
08150460	0.11	2.99	3,342,850	815000.00	819999.99	460000.00	464999.99	375.61	813.45	81815895.28	81817568.18	2,805,974	463,684	69,366	3,826	00	255	24	251,250,252
08150465	0.14	2.70	3,936,669	815000.00	819999.99	465000.00	469999.99	377.68	2084.67	81816663.24	81818374.14	3,425,585	421,209	83,637	6,238	00	251	27	252,251,253
08150470	0.15	2.62	3,989,242	815000.00	819999.99	470000.00	474999.99	381.61	522.94	81817544.48	81819251.85	3,633,433	298,599	53,747	3,463	00	255	32	253,252,254
08150475	0.15	2.56	4,791,519	815000.00	819999.99	475000.00	479999.99	404.63	578.02	81818351.25	81820019.23	3,821,716	823,515	138,545	7,743	00	255	27	253,254,255
08150480	0.15	2.58	4,612,618	815000.00	819999.99	480000.00	484999.99	423.02	620.70	81819226.38	81820896.71	3,743,659	717,144	141,285	10,530	00	255	24	254,255,256
08150485	0.15	2.62	4,322,776	815000.00	819999.99	485000.00	489999.99	418.15	1764.09	81819996.53	81868933.88	3,636,085	583,613	97,343	5,735	00	255	24	255,256,330
08150490	0.15	2.60	3,983,880	815000.00	819999.99	490000.00	494999.99	314.34	909.78	81820873.16	81869735.76	3,688,624	256,844	36,789	1,623	00	255	27	330,256,331
08150495	0.15	2.56	4,449,443	815000.00	819999.99	495000.00	499999.99	398.99	4108.75	81868912.18	81870457.09	3,812,070	546,116	86,922	4,335	00	255	26	331,330,332
08150500	0.14	2.64	4,468,144	815000.00	819999.99	500000.00	504999.99	311.28	4308.60	81869710.74	81871253.87	3,590,627	756,487	114,816	6,214	00	255	23	331,332,333
08150505	0.13	2.79	3,930,995	815000.00	819999.99	505000.00	509999.99	363.46	1559.16	81870436.13	81871965.60	3,217,195	618,308	90,828	4,664	00	255	23	332,333,334
08150510	0.15	2.62	4,404,394	815000.00	819999.99	510000.00	514999.99	381.80	1144.31	81871229.41	81872739.74	3,653,093	655,890	91,300	4,111	00	255	23	334,333,325
08150515	0.13	2.80	3,958,085	815000.00	819999.99	515000.00	519999.99	356.48	597.03	81871944.55	81873468.37	3,194,865	662,562	96,171	4,487	00	255	22	325,334,326
08150520	0.09	3.42	2,491,217	815000.00	819999.99	520000.00	524999.99	397.80	560.63	81872720.27	81874247.10	2,143,958	303,964	41,523	1,772	00	255	22	326,325,327

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08150525	0.12	2.85	3,635,213	815000.00	819999.99	525000.00	529999.99	407.14	2402.60	81873446.72	81874980.18	3,070,472	492,232	69,630	2,879	00	255	21	326,327,328
08150530	0.14	2.67	3,722,698	815000.00	819999.99	530000.00	534999.99	117.05	4335.35	81874225.10	81875764.20	3,517,355	181,177	23,243	923	00	255	27	328,327,329
08200430	0.14	2.71	4,094,093	820000.00	824999.99	430000.00	434999.99	400.77	2854.92	81811148.92	81812747.36	3,393,348	596,690	98,628	5,427	00	255	29	257,258,259
08200435	0.15	2.59	4,391,179	820000.00	824999.99	435000.00	439999.99	390.73	510.30	81811859.38	81813457.19	3,722,583	566,453	97,062	5,081	00	255	29	259,258,260
08200440	0.15	2.60	4,626,043	820000.00	824999.99	440000.00	444999.99	388.12	519.39	81812721.18	81814281.02	3,692,471	791,736	134,365	7,471	00	255	26	260,259,261
08200445	0.14	2.63	4,218,271	820000.00	824999.99	445000.00	449999.99	384.71	647.98	81813435.44	81815010.10	3,602,678	514,261	95,081	6,251	00	255	30	260,261,262
08200450	0.14	2.65	4,799,950	820000.00	824999.99	450000.00	454999.99	377.54	571.59	81814255.84	81815941.23	3,556,340	1,058,375	175,091	10,144	00	255	21	261,262,250
08200455	0.15	2.60	4,255,579	820000.00	824999.99	455000.00	459999.99	379.79	507.73	81814987.20	81816665.50	3,689,909	483,262	77,457	4,951	00	255	27	262,250,251
08200460	0.14	2.70	3,810,488	820000.00	824999.99	460000.00	464999.99	378.65	1889.80	81815916.18	81817589.83	3,427,745	321,344	56,923	4,476	00	255	29	250,251,252
08200465	0.15	2.62	4,049,431	820000.00	824999.99	465000.00	469999.99	378.66	492.13	81816642.20	81818353.39	3,637,631	354,543	54,536	2,721	00	255	23	252,251,253
08200470	0.14	2.67	4,555,827	820000.00	824999.99	470000.00	474999.99	380.50	2791.11	81817563.83	81819270.28	3,517,397	878,547	151,404	8,479	00	255	21	252,253,254
08200475	0.14	2.64	3,946,450	820000.00	824999.99	475000.00	479999.99	384.66	558.68	81818330.62	81819999.98	3,582,501	311,230	50,037	2,682	00	255	31	254,253,255
08200480	0.14	2.65	4,309,226	820000.00	824999.99	480000.00	484999.99	319.68	707.36	81819246.51	81820916.07	3,552,157	637,201	112,765	7,103	00	255	26	254,255,256
08200485	0.15	2.62	4,322,321	820000.00	824999.99	485000.00	489999.99	395.98	536.40	81819977.05	81868914.17	3,633,841	577,778	103,945	6,757	00	255	27	255,256,330
08200490	0.15	2.59	4,077,614	820000.00	824999.99	490000.00	494999.99	364.97	570.46	81820892.33	81869756.29	3,731,498	301,932	42,381	1,803	00	255	28	330,256,331
08200495	0.15	2.56	4,416,905	820000.00	824999.99	495000.00	499999.99	172.28	2456.88	81868891.69	81870437.84	3,808,474	525,697	79,043	3,691	00	255	26	331,330,332
08200500	0.15	2.56	4,009,909	820000.00	824999.99	500000.00	504999.99	442.69	558.69	81869732.09	81871274.45	3,825,046	161,116	22,693	1,054	00	255	30	331,332,333
08200505	0.15	2.55	3,960,142	820000.00	824999.99	505000.00	509999.99	449.62	1514.82	81870415.86	81871946.14	3,835,705	108,670	15,035	732	00	255	28	333,332,334
08200510	0.15	2.63	4,089,283	820000.00	824999.99	510000.00	514999.99	439.86	600.16	81871249.96	81872759.17	3,623,664	399,749	62,862	3,008	00	255	28	334,333,325
08200515	0.15	2.63	3,938,634	820000.00	824999.99	515000.00	519999.99	306.04	2590.88	81871925.19	81873447.04	3,616,612	276,136	43,679	2,207	00	255	27	334,325,326
08200520	0.12	2.95	3,545,689	820000.00	824999.99	520000.00	524999.99	378.21	4201.81	81872736.18	81874267.69	2,879,053	580,804	81,992	3,840	00	255	21	326,325,327
08200525	0.07	3.86	2,033,966	820000.00	824999.99	525000.00	529999.99	407.29	981.18	81873425.87	81874960.09	1,674,869	312,051	44,746	2,300	00	255	18	327,326,328
08200530	0.14	2.67	4,050,741	820000.00	824999.99	530000.00	534999.99	264.95	556.47	81874244.58	81875784.73	3,497,559	479,373	70,666	3,143	00	255	20	328,327,329
08250430	0.16	2.54	4,672,019	825000.00	829999.99	430000.00	434999.99	405.52	742.87	81811168.18	81812767.88	3,874,178	677,489	114,269	6,083	00	255	30	257,258,259
08250435	0.15	2.61	4,366,112	825000.00	829999.99	435000.00	439999.99	394.21	520.85	81811839.69	81813437.39	3,684,832	585,306	91,652	4,322	00	255	28	259,258,260
08250440	0.15	2.62	3,751,842	825000.00	829999.99	440000.00	444999.99	397.98	510.17	81812742.61	81814301.51	3,635,967	93,660	20,590	1,625	00	255	36	259,260,261
08250445	0.15	2.59	4,175,893	825000.00	829999.99	445000.00	449999.99	372.53	928.65	81813415.16	81814989.63	3,722,728	367,332	79,963	5,870	00	255	32	260,261,262
08250450	0.14	2.71	4,372,854	825000.00	829999.99	450000.00	454999.99	381.13	495.68	81814276.72	81815961.96	3,403,310	824,602	137,640	7,302	00	255	23	262,261,250
08250455	0.15	2.57	4,049,959	825000.00	829999.99	455000.00	459999.99	375.30	510.68	81814966.76	81816644.55	3,797,219	205,304	43,582	3,854	00	255	33	250,262,251
08250460	0.15	2.55	4,134,402	825000.00	829999.99	460000.00	464999.99	398.12	540.95	81815936.82	81817608.60	3,840,512	240,849	49,354	3,687	00	255	32	251,250,252
08250465	0.15	2.61	3,999,116	825000.00	829999.99	465000.00	469999.99	380.35	3283.03	81816621.21	81818332.45	3,668,267	284,263	44,213	2,373	00	179	33	251,252,253
08250470	0.14	2.71	4,842,908	825000.00	829999.99	470000.00	474999.99	381.04	506.22	81817586.18	81819288.59	3,416,282	1,220,420	196,178	10,028	00	255	18	252,253,254
08250475	0.14	2.70	4,790,380	825000.00	829999.99	475000.00	479999.99	382.67	521.08	81818310.06	81819978.81	3,432,120	1,151,367	196,330	10,563	00	255	17	254,253,255

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08250480	0.14	2.70	4,056,976	825000.00	829999.99	480000.00	484999.99	386.39	525.91	81819264.68	81820935.15	3,423,718	522,515	102,945	7,798	00	255	26	255,254,256
08250485	0.15	2.60	4,034,137	825000.00	829999.99	485000.00	489999.99	396.87	558.86	81819956.66	81868893.31	3,694,756	279,295	55,846	4,240	00	255	30	256,255,330
08250490	0.12	2.90	3,666,180	825000.00	829999.99	490000.00	494999.99	307.75	3829.25	81820911.32	81869775.32	2,982,799	590,600	88,487	4,294	00	255	24	256,330,331
08250495	0.15	2.62	4,172,284	825000.00	829999.99	495000.00	499999.99	410.60	4116.58	81868872.90	81870417.54	3,641,378	465,348	62,888	2,670	00	255	28	330,331,332
08250500	0.15	2.63	3,984,011	825000.00	829999.99	500000.00	504999.99	426.62	4314.88	81869752.81	81871293.18	3,627,953	306,345	47,384	2,329	00	255	27	331,332,333
08250505	0.14	2.65	3,761,224	825000.00	829999.99	505000.00	509999.99	446.71	2665.11	81870396.39	81871926.81	3,567,651	170,274	22,353	946	00	255	27	332,333,334
08250510	0.15	2.58	3,962,998	825000.00	829999.99	510000.00	514999.99	449.43	3303.90	81871271.10	81872779.55	3,747,685	188,945	25,274	1,094	00	255	26	333,334,325
08250515	0.15	2.57	4,083,793	825000.00	829999.99	515000.00	519999.99	289.09	571.36	81871905.49	81873426.92	3,793,183	251,725	37,089	1,796	00	98	27	325,334,326
08250520	0.14	2.66	3,628,450	825000.00	829999.99	520000.00	524999.99	312.22	1720.00	81872755.92	81874287.32	3,538,737	78,099	11,185	429	00	255	31	326,325,327
08250525	0.14	2.65	4,133,919	825000.00	829999.99	525000.00	529999.99	283.09	2004.55	81873407.04	81874939.30	3,549,965	502,247	78,002	3,705	00	125	23	327,326,328
08250530	0.13	2.78	4,139,336	825000.00	829999.99	530000.00	534999.99	407.23	3327.32	81874264.64	81875804.77	3,241,936	780,668	111,919	4,813	00	255	18	328,327,329
08300430	0.15	2.61	4,159,271	830000.00	834999.99	430000.00	434999.99	404.58	4089.25	81811187.80	81812786.84	3,662,758	423,122	69,708	3,683	00	255	31	257,258,259
08300435	0.15	2.62	4,155,170	830000.00	834999.99	435000.00	439999.99	398.14	519.10	81811821.28	81813417.74	3,642,914	436,508	72,056	3,692	00	255	30	259,258,260
08300440	0.15	2.60	3,893,673	830000.00	834999.99	440000.00	444999.99	406.55	534.37	81812762.08	81814321.09	3,708,986	154,870	28,333	1,484	00	255	35	259,260,261
08300445	0.15	2.61	3,953,650	830000.00	834999.99	445000.00	449999.99	397.73	549.67	81813395.74	81814969.56	3,667,949	240,217	43,306	2,178	00	255	37	261,260,262
08300450	0.14	2.68	4,437,522	830000.00	834999.99	450000.00	454999.99	370.32	502.65	81814295.76	81815982.51	3,488,670	812,936	129,618	6,298	00	255	25	261,262,250
08300455	0.15	2.55	4,103,735	830000.00	834999.99	455000.00	459999.99	391.75	517.31	81814946.76	81816623.24	3,850,941	212,371	37,577	2,846	00	85	34	262,250,251
08300460	0.16	2.53	4,256,202	830000.00	834999.99	460000.00	464999.99	413.06	579.66	81815956.53	81817628.00	3,897,758	308,825	46,953	2,666	00	166	34	250,251,252
08300465	0.15	2.56	4,395,866	830000.00	834999.99	465000.00	469999.99	393.57	558.80	81816599.68	81818311.79	3,811,126	532,501	50,350	1,889	00	255	29	252,251,253
08300470	0.14	2.72	4,026,459	830000.00	834999.99	470000.00	474999.99	385.00	4192.95	81817604.53	81819307.57	3,391,019	544,629	85,921	4,890	00	255	28	252,253,254
08300475	0.15	2.62	4,645,768	830000.00	834999.99	475000.00	479999.99	382.59	521.02	81818289.54	81819958.90	3,633,853	857,123	146,668	8,124	00	233	21	253,254,255
08300480	0.14	2.67	4,672,857	830000.00	834999.99	480000.00	484999.99	386.48	511.32	81819284.03	81820953.99	3,519,517	970,831	171,994	10,515	00	255	19	255,254,256
08300485	0.14	2.67	3,661,220	830000.00	834999.99	485000.00	489999.99	389.22	828.96	81819935.66	81868874.23	3,503,765	136,164	20,276	1,015	00	255	30	255,256,330
08300490	0.13	2.78	3,619,762	830000.00	834999.99	490000.00	494999.99	365.52	597.23	81820932.03	81869795.00	3,226,975	337,782	52,513	2,492	00	255	27	256,330,331
08300495	0.15	2.61	4,433,240	830000.00	834999.99	495000.00	499999.99	290.41	555.47	81868853.66	81870397.32	3,678,473	659,489	91,300	3,978	00	255	25	331,330,332
08300500	0.15	2.62	3,985,107	830000.00	834999.99	500000.00	504999.99	297.06	4178.37	81869772.64	81871312.81	3,634,275	303,851	44,897	2,084	00	255	29	332,331,333
08300505	0.15	2.57	4,024,177	830000.00	834999.99	505000.00	509999.99	303.09	539.12	81870376.07	81871906.38	3,772,920	223,535	26,595	1,127	00	255	29	332,333,334
08300510	0.15	2.60	3,799,382	830000.00	834999.99	510000.00	514999.99	366.05	2623.79	81871289.63	81872800.07	3,703,787	81,321	13,561	713	00	166	29	334,333,325
08300515	0.16	2.54	4,139,175	830000.00	834999.99	515000.00	519999.99	417.79	3562.62	81871885.76	81873407.76	3,873,431	229,621	34,327	1,796	00	255	27	334,325,326
08300520	0.15	2.58	3,826,017	830000.00	834999.99	520000.00	524999.99	335.27	4249.93	81872777.34	81874307.39	3,762,914	55,619	7,172	312	00	255	29	325,326,327
08300525	0.15	2.57	4,050,536	830000.00	834999.99	525000.00	529999.99	281.07	4348.69	81873386.73	81874918.70	3,786,053	231,416	31,726	1,341	00	255	26	327,326,328
08300530	0.14	2.65	3,945,193	830000.00	834999.99	530000.00	534999.99	-190.61	3124.61	81874284.56	81875824.94	3,559,464	340,662	43,333	1,734	00	255	25	327,328,329
08350430	0.15	2.58	3,985,066	835000.00	839999.99	430000.00	434999.99	403.24	537.39	81811207.82	81812807.24	3,744,695	207,852	31,238	1,281	00	255	33	258,257,259

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08350435	0.15	2.56	4,179,727	835000.00	839999.99	435000.00	439999.99	406.39	2949.00	81811800.10	81813397.56	3,825,024	304,183	48,202	2,318	00	255	32	259,258,260
08350440	0.15	2.62	4,004,981	835000.00	839999.99	440000.00	444999.99	420.04	594.69	81812782.31	81814341.00	3,649,591	306,102	47,103	2,185	00	255	35	259,260,261
08350445	0.15	2.61	4,702,642	835000.00	839999.99	445000.00	449999.99	406.56	603.27	81813375.58	81814949.32	3,679,705	882,105	134,607	6,225	00	255	28	260,261,262
08350450	0.14	2.67	4,497,968	835000.00	839999.99	450000.00	454999.99	390.64	593.23	81814316.01	81816002.35	3,504,104	844,546	141,714	7,604	00	255	25	261,262,250
08350455	0.15	2.58	4,111,018	835000.00	839999.99	455000.00	459999.99	391.64	505.68	81814925.88	81816602.05	3,759,419	301,856	47,333	2,410	00	255	32	250,262,251
08350460	0.15	2.55	4,286,096	835000.00	839999.99	460000.00	464999.99	419.65	574.31	81815976.47	81817648.08	3,860,725	360,618	61,249	3,504	00	255	34	250,251,252
08350465	0.15	2.59	4,595,693	835000.00	839999.99	465000.00	469999.99	419.77	601.69	81816578.35	81818291.22	3,730,764	738,862	119,393	6,674	00	255	28	251,252,253
08350470	0.15	2.56	4,890,493	835000.00	839999.99	470000.00	474999.99	405.53	568.48	81817624.34	81819326.75	3,811,885	919,440	151,110	8,058	00	255	26	252,253,254
08350475	0.15	2.58	4,493,329	835000.00	839999.99	475000.00	479999.99	389.74	4496.30	81818268.16	81819937.78	3,752,263	629,111	105,882	6,073	00	255	28	253,254,255
08350480	0.15	2.63	4,451,931	835000.00	839999.99	480000.00	484999.99	388.56	552.77	81819303.00	81820974.54	3,614,516	714,779	116,089	6,547	00	255	26	255,254,256
08350485	0.15	2.59	5,089,353	835000.00	839999.99	485000.00	489999.99	389.58	522.04	81819916.53	81868855.29	3,718,326	1,170,751	190,099	10,177	00	255	112	256,255,330
08350490	0.15	2.61	3,978,713	835000.00	839999.99	490000.00	494999.99	391.93	511.11	81820949.56	81869816.51	3,677,319	256,207	42,992	2,195	00	255	18	256,255,330
08350495	0.15	2.57	4,092,263	835000.00	839999.99	495000.00	499999.99	394.00	1973.49	81868832.66	81870378.47	3,798,016	250,878	41,183	2,186	00	255	27	331,330,332
08350500	0.15	2.58	3,847,148	835000.00	839999.99	500000.00	504999.99	406.22	1249.56	81869791.86	81871333.41	3,746,417	84,826	15,047	858	00	255	30	332,331,333
08350505	0.15	2.59	3,753,825	835000.00	839999.99	505000.00	509999.99	360.68	3384.69	81870354.92	81871886.81	3,714,560	34,464	4,604	197	00	179	31	332,333,334
08350510	0.15	2.60	3,907,425	835000.00	839999.99	510000.00	514999.99	358.17	4347.79	81871310.60	81872820.14	3,703,492	179,733	23,248	952	00	255	28	333,334,325
08350515	0.14	2.65	3,806,509	835000.00	839999.99	515000.00	519999.99	68.07	4471.67	81871865.51	81873388.14	3,552,486	221,105	31,600	1,318	00	255	28	334,325,326
08350520	0.15	2.55	4,048,241	835000.00	839999.99	520000.00	524999.99	443.54	585.32	81872798.71	81874328.21	3,851,283	172,907	23,120	931	00	255	29	326,325,327
08350525	0.16	2.54	4,279,328	835000.00	839999.99	525000.00	529999.99	337.63	2924.55	81873366.59	81874899.21	3,882,482	349,451	45,691	1,704	00	255	28	326,327,328
08350530	0.15	2.62	4,110,920	835000.00	839999.99	530000.00	534999.99	252.50	4308.29	81874304.50	81875843.99	3,639,794	418,767	50,555	1,804	00	255	25	328,327,329
08400430	0.15	2.63	4,243,670	840000.00	844999.99	430000.00	434999.99	413.23	555.41	81811229.06	81812826.60	3,625,267	534,441	80,645	3,317	00	255	29	258,257,259
08400435	0.14	2.65	3,928,492	840000.00	844999.99	435000.00	439999.99	417.20	3473.15	81811780.76	81813378.56	3,551,799	320,831	53,333	2,529	00	255	32	259,258,260
08400440	0.14	2.67	4,095,208	840000.00	844999.99	440000.00	444999.99	439.24	611.12	81812803.34	81814361.25	3,515,772	497,938	77,574	3,924	00	255	32	259,260,261
08400445	0.13	2.73	3,944,250	840000.00	844999.99	445000.00	449999.99	411.91	721.74	81813356.71	81814929.05	3,346,389	514,850	78,776	4,235	00	255	30	261,260,262
08400450	0.13	2.77	4,038,761	840000.00	844999.99	450000.00	454999.99	391.85	527.77	81814335.34	81816021.87	3,264,603	659,351	108,679	6,128	00	255	27	261,262,250
08400455	0.15	2.60	4,050,338	840000.00	844999.99	455000.00	459999.99	391.92	771.04	81814905.72	81816581.26	3,696,380	298,048	52,641	3,269	00	220	29	262,250,251
08400460	0.15	2.57	4,203,785	840000.00	844999.99	460000.00	464999.99	406.89	591.31	81815997.18	81817668.26	3,775,266	364,586	60,095	3,838	00	255	33	250,251,252
08400465	0.15	2.60	4,512,389	840000.00	844999.99	465000.00	469999.99	415.53	606.70	81816558.08	81818270.85	3,710,154	679,015	116,435	6,785	00	255	30	252,251,253
08400470	0.15	2.61	4,394,393	840000.00	844999.99	470000.00	474999.99	416.06	600.86	81817643.71	81819345.36	3,671,086	610,481	106,628	6,198	00	255	31	253,252,254
08400475	0.14	2.66	4,421,750	840000.00	844999.99	475000.00	479999.99	393.88	537.45	81818248.55	81819918.02	3,535,704	750,558	128,375	7,113	00	255	26	253,254,255
08400480	0.14	2.67	3,887,778	840000.00	844999.99	480000.00	484999.99	409.95	556.43	81819323.13	81820992.04	3,500,139	331,938	53,132	2,569	00	255	35	255,254,256
08400485	0.13	2.77	3,939,671	840000.00	844999.99	485000.00	489999.99	326.13	4214.91	81819897.38	81868834.25	3,264,922	587,134	83,729	3,886	00	157	25	255,256,330
08400490	0.14	2.68	4,381,640	840000.00	844999.99	490000.00	494999.99	391.83	522.35	81820970.49	81869835.84	3,474,608	792,927	109,466	4,639	00	255	19	330,256,331

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08400495	0.14	2.66	3,780,498	840000.00	844999.99	495000.00	499999.99	393.50	524.86	81868812.75	81870356.13	3,527,571	221,120	30,557	1,250	00	255	27	331,330,332
08400500	0.14	2.72	3,584,264	840000.00	844999.99	500000.00	504999.99	298.41	4375.55	81869812.78	81871352.70	3,379,024	177,899	25,979	1,362	00	255	28	332,331,333
08400505	0.15	2.63	3,733,193	840000.00	844999.99	505000.00	509999.99	337.69	2752.84	81870335.67	81871866.66	3,621,028	95,788	15,573	804	00	255	32	332,333,334
08400510	0.15	2.61	3,834,587	840000.00	844999.99	510000.00	514999.99	203.58	2509.04	81871330.32	81872840.57	3,668,903	146,131	18,724	829	00	184	29	333,334,325
08400515	0.15	2.55	3,983,248	840000.00	844999.99	515000.00	519999.99	193.64	661.77	81871845.92	81873367.86	3,859,423	110,343	12,976	506	00	255	28	334,325,326
08400520	0.15	2.60	4,043,533	840000.00	844999.99	520000.00	524999.99	428.18	1446.06	81872816.53	81874347.20	3,686,401	318,950	36,880	1,302	00	255	27	326,325,327
08400525	0.15	2.59	3,956,002	840000.00	844999.99	525000.00	529999.99	357.41	640.72	81873347.21	81874878.58	3,737,557	195,785	21,887	773	00	255	29	326,327,328
08400530	0.14	2.64	4,080,498	840000.00	844999.99	530000.00	534999.99	-34.73	3820.27	81874857.63	81875862.85	3,600,886	420,802	56,318	2,492	00	255	25	328,329
08450430	0.15	2.63	4,012,135	845000.00	849999.99	430000.00	434999.99	425.61	545.32	81811248.39	81812845.84	3,618,190	337,158	54,325	2,462	00	255	32	257,258,259
08450435	0.15	2.63	4,122,361	845000.00	849999.99	435000.00	439999.99	436.91	595.83	81811761.35	81813358.86	3,627,326	439,291	53,418	2,326	00	255	32	259,258,260
08450440	0.14	2.68	4,380,272	845000.00	849999.99	440000.00	444999.99	439.03	588.61	81812820.88	81814382.71	3,492,939	756,341	124,869	6,123	00	255	28	260,259,261
08450445	0.11	2.96	4,155,288	845000.00	849999.99	445000.00	449999.99	412.80	590.78	81813335.72	81814908.49	2,861,372	1,103,199	181,493	9,224	00	255	22	260,261,262
08450450	0.14	2.70	4,584,763	845000.00	849999.99	450000.00	454999.99	398.53	589.88	81814356.90	81816042.67	3,424,189	979,960	170,606	10,008	00	255	25	261,262,250
08450455	0.15	2.56	4,882,515	845000.00	849999.99	455000.00	459999.99	397.75	585.64	81814886.08	81816560.18	3,811,062	912,160	151,348	7,945	00	255	25	262,250,251
08450460	0.15	2.59	4,775,689	845000.00	849999.99	460000.00	464999.99	397.73	543.56	81816017.04	81817687.87	3,734,081	871,481	160,097	10,030	00	255	24	251,250,252
08450465	0.15	2.55	4,369,409	845000.00	849999.99	465000.00	469999.99	411.17	582.77	81816537.71	81818250.32	3,841,815	437,255	84,881	5,458	00	255	34	251,252,253
08450470	0.16	2.49	4,425,389	845000.00	849999.99	470000.00	474999.99	435.45	611.26	81817663.16	81819365.47	4,033,136	329,580	59,261	3,412	00	255	35	252,253,254
08450475	0.15	2.55	4,278,604	845000.00	849999.99	475000.00	479999.99	404.99	555.52	81818226.58	81819899.31	3,839,643	367,225	67,597	4,139	00	255	32	253,254,255
08450480	0.16	2.54	4,299,003	845000.00	849999.99	480000.00	484999.99	407.70	543.75	81819341.46	81821012.39	3,877,518	355,247	62,760	3,478	00	255	30	254,255,256
08450485	0.15	2.56	3,978,804	845000.00	849999.99	485000.00	489999.99	242.91	564.82	81819876.49	81868814.52	3,810,567	143,647	23,166	1,424	00	255	32	255,256,330
08450490	0.14	2.65	3,953,759	845000.00	849999.99	490000.00	494999.99	393.49	3690.20	81820988.30	81869855.34	3,563,237	343,897	44,889	1,736	00	255	25	330,256,331
08450495	0.14	2.70	3,834,236	845000.00	849999.99	495000.00	499999.99	394.21	507.18	81868792.46	81870337.05	3,435,714	353,203	43,675	1,644	00	255	24	330,331,332
08450500	0.14	2.65	3,767,196	845000.00	849999.99	500000.00	504999.99	401.57	1456.52	81869832.38	81871372.46	3,558,673	180,171	27,053	1,299	00	255	29	332,331,333
08450505	0.15	2.59	3,961,260	845000.00	849999.99	505000.00	509999.99	351.66	2348.46	81870315.65	81871847.35	3,719,111	207,886	32,636	1,627	00	255	29	333,332,334
08450510	0.15	2.60	3,920,695	845000.00	849999.99	510000.00	514999.99	333.91	665.75	81871349.39	81872860.24	3,706,295	191,160	22,606	634	00	255	28	334,333,325
08450515	0.15	2.59	3,992,282	845000.00	849999.99	515000.00	519999.99	320.60	580.43	81871825.30	81873347.59	3,742,037	222,913	26,532	800	00	94	28	334,325,326
08450520	0.15	2.62	3,973,478	845000.00	849999.99	520000.00	524999.99	268.51	626.47	81872837.66	81874366.96	3,651,900	286,039	34,264	1,275	00	255	28	326,325,327
08450525	0.14	2.66	3,838,929	845000.00	849999.99	525000.00	529999.99	403.54	4014.13	81873333.12	81874859.04	3,535,690	265,252	36,364	1,623	00	224	28	326,327,328
08450530	0.16	2.53	4,439,095	845000.00	849999.99	530000.00	534999.99	395.36	604.72	81874837.60	81875883.91	3,914,339	460,656	61,535	2,565	00	255	26	328,329
08500430	0.14	2.65	4,038,467	850000.00	854999.99	430000.00	434999.99	439.00	606.35	81811268.14	81812865.78	3,559,419	416,193	60,196	2,659	00	255	31	257,258,259
08500435	0.15	2.60	4,116,431	850000.00	854999.99	435000.00	439999.99	448.12	1980.82	81811742.87	81813337.93	3,697,949	361,834	54,378	2,270	00	255	35	259,258,260
08500440	0.15	2.61	4,110,244	850000.00	854999.99	440000.00	444999.99	444.81	602.51	81812840.46	81814403.34	3,665,480	374,855	66,218	3,691	00	255	34	260,259,261
08500445	0.13	2.79	3,999,461	850000.00	854999.99	445000.00	449999.99	433.00	582.12	81813316.18	81814888.24	3,204,087	671,630	117,318	6,426	00	255	31	261,260,262

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08500450	0.12	2.87	3,838,240	850000.00	854999.99	450000.00	454999.99	433.23	597.23	81814376.90	81816062.41	3,039,833	672,242	119,219	6,946	00	255	29	261,262,250
08500455	0.15	2.62	4,887,502	850000.00	854999.99	455000.00	459999.99	414.47	585.41	81814867.10	81816539.79	3,639,414	1,051,758	185,542	10,788	00	175	24	250,262,251
08500460	0.15	2.59	4,382,599	850000.00	854999.99	460000.00	464999.99	405.32	567.82	81816037.27	81817706.23	3,731,498	554,078	92,079	4,944	00	255	30	250,251,252
08500465	0.15	2.62	4,365,533	850000.00	854999.99	465000.00	469999.99	404.95	543.46	81816517.06	81818228.04	3,642,097	614,991	102,480	5,965	00	255	28	252,251,253
08500470	0.15	2.58	3,988,358	850000.00	854999.99	470000.00	474999.99	423.40	574.45	81817683.18	81819384.93	3,758,495	195,790	32,379	1,694	00	255	35	252,253,254
08500475	0.15	2.58	3,968,700	850000.00	854999.99	475000.00	479999.99	380.34	581.94	81818206.74	81819879.31	3,743,488	192,966	30,507	1,739	00	255	33	253,254,255
08500480	0.15	2.58	3,984,086	850000.00	854999.99	480000.00	484999.99	424.79	564.90	81819360.74	81821032.32	3,758,270	195,282	29,328	1,206	00	255	32	255,254,256
08500485	0.15	2.58	3,821,905	850000.00	854999.99	485000.00	489999.99	379.86	594.43	81819857.07	81868794.37	3,758,559	54,953	8,004	389	00	255	35	255,256,330
08500490	0.14	2.67	3,734,895	850000.00	854999.99	490000.00	494999.99	394.72	515.70	81821008.59	81869875.35	3,498,112	205,157	30,307	1,319	00	71	26	256,330,331
08500495	0.14	2.68	3,819,756	850000.00	854999.99	495000.00	499999.99	394.77	1077.38	81868772.52	81870317.79	3,479,287	294,441	44,040	1,988	00	255	22	331,330,332
08500500	0.14	2.68	3,608,712	850000.00	854999.99	500000.00	504999.99	403.57	524.97	81869851.86	81871392.32	3,491,920	102,169	13,971	652	00	255	29	331,332,333
08500505	0.15	2.59	3,777,832	850000.00	854999.99	505000.00	509999.99	350.15	4219.08	81870295.64	81871827.30	3,728,955	42,647	5,942	288	00	255	29	333,332,334
08500510	0.14	2.70	3,470,179	850000.00	854999.99	510000.00	514999.99	367.73	544.70	81871369.65	81872879.16	3,433,104	31,953	4,895	227	00	255	31	333,334,325
08500515	0.15	2.61	4,047,220	850000.00	854999.99	515000.00	519999.99	354.72	556.18	81871806.14	81873328.49	3,662,770	338,434	44,297	1,719	00	255	28	325,334,326
08500520	0.15	2.56	4,166,796	850000.00	854999.99	520000.00	524999.99	325.53	589.39	81873306.47	81874387.81	3,830,485	301,396	33,832	1,083	00	255	26	326,327
08500525	0.15	2.58	4,205,884	850000.00	854999.99	525000.00	529999.99	368.37	3078.81	81874363.67	81874838.79	3,743,984	406,611	53,164	2,125	00	255	26	327,328
08500530	0.15	2.55	4,005,193	850000.00	854999.99	530000.00	534999.99	31.20	4145.01	81874817.05	81875904.70	3,842,319	142,392	19,633	849	00	255	29	328,329
08500430	0.15	2.57	4,453,414	850000.00	859999.99	430000.00	434999.99	453.57	3064.47	81811287.57	81812884.23	3,800,860	562,150	86,556	3,848	00	255	31	257,258,259
08500435	0.15	2.61	4,351,764	850000.00	859999.99	435000.00	439999.99	466.49	618.22	81811720.69	81813318.55	3,671,846	585,305	90,348	4,265	00	255	31	259,258,260
08500440	0.15	2.59	4,762,902	850000.00	859999.99	440000.00	444999.99	439.21	613.09	81812861.13	81814422.17	3,716,157	896,398	143,109	7,238	00	255	28	259,260,261
08500445	0.14	2.64	4,900,089	850000.00	859999.99	445000.00	449999.99	432.92	573.11	81813296.28	81814870.01	3,576,795	1,112,357	199,786	11,151	00	255	26	261,260,262
08500450	0.15	2.56	4,465,271	850000.00	859999.99	450000.00	454999.99	435.90	602.64	81814398.10	81816082.85	3,819,547	550,164	90,684	4,876	00	255	33	261,262,250
08500455	0.15	2.60	4,509,746	850000.00	859999.99	455000.00	459999.99	426.75	589.46	81814846.02	81816519.93	3,702,394	685,467	115,514	6,371	00	255	28	262,250,251
08500460	0.15	2.55	4,703,863	850000.00	859999.99	460000.00	464999.99	435.84	585.99	81816057.71	81817726.69	3,831,516	760,937	105,628	5,782	00	255	29	250,251,252
08500465	0.15	2.55	4,419,003	850000.00	859999.99	465000.00	469999.99	410.78	563.09	81816496.78	81818207.95	3,831,153	495,203	87,191	5,456	00	255	31	252,251,253
08500470	0.16	2.50	4,357,631	850000.00	859999.99	470000.00	474999.99	420.33	576.71	81817702.55	81819406.01	4,009,458	293,173	51,628	3,372	00	255	35	252,253,254
08500475	0.15	2.56	4,055,866	850000.00	859999.99	475000.00	479999.99	448.02	587.34	81818184.73	81819859.12	3,814,149	204,112	35,363	2,242	00	255	34	254,253,255
08500480	0.16	2.53	4,252,258	850000.00	859999.99	480000.00	484999.99	439.64	650.81	81819380.91	81821051.84	3,895,763	307,123	46,982	2,390	00	255	33	254,255,256
08500485	0.15	2.58	4,222,871	850000.00	859999.99	485000.00	489999.99	371.17	735.49	81819835.99	81868775.23	3,771,308	387,065	61,249	3,249	00	255	29	256,255,330
08500490	0.12	2.90	3,358,163	850000.00	859999.99	490000.00	494999.99	399.67	649.78	81821028.10	81869895.33	2,969,986	334,814	50,912	2,451	00	255	23	256,330,331
08500495	0.14	2.66	3,910,311	850000.00	859999.99	495000.00	499999.99	375.82	646.32	81868753.56	81870297.39	3,532,612	332,458	43,625	1,616	00	255	23	330,331,332
08500500	0.13	2.73	3,604,693	850000.00	859999.99	500000.00	504999.99	353.11	4334.92	81869871.77	81871412.81	3,361,720	213,331	28,483	1,159	00	255	26	331,332,333
08500505	0.15	2.60	4,427,061	850000.00	859999.99	505000.00	509999.99	379.87	1004.45	81870276.31	81871807.21	3,709,202	621,896	91,974	3,989	00	112	22	332,333,334

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08550510	0.13	2.74	3,533,631	855000.00	859999.99	510000.00	514999.99	389.40	538.38	81871786.52	81872898.93	3,339,476	170,632	22,594	929	00	251	27	334,325
08550515	0.14	2.69	3,749,386	855000.00	859999.99	515000.00	519999.99	328.57	3106.56	81871794.43	81873307.87	3,460,455	252,850	34,693	1,388	00	255	26	334,325,326
08550520	0.14	2.67	4,000,150	855000.00	859999.99	520000.00	524999.99	415.93	3718.21	81873286.85	81874407.97	3,520,707	421,444	55,838	2,161	00	255	23	326,327
08550525	0.15	2.61	3,994,363	855000.00	859999.99	525000.00	529999.99	85.03	585.22	81874384.76	81874818.58	3,681,518	269,678	41,216	1,951	00	255	27	327,328
08550530	0.16	2.52	4,101,426	855000.00	859999.99	530000.00	534999.99	361.64	3391.18	81874796.01	81875925.64	3,932,349	146,319	21,843	915	00	255	29	328,329
08600430	0.14	2.64	4,586,563	860000.00	864999.99	430000.00	434999.99	429.34	581.05	81811307.33	81812903.41	3,594,784	863,223	123,100	5,456	00	255	26	257,258,259
08600435	0.15	2.63	4,293,819	860000.00	864999.99	435000.00	439999.99	426.66	615.40	81811701.01	81813297.97	3,622,912	585,737	81,332	3,838	00	255	31	259,258,260
08600440	0.15	2.60	4,518,701	860000.00	864999.99	440000.00	444999.99	449.10	602.26	81812880.18	81814442.46	3,688,236	709,833	115,024	5,608	00	255	32	260,259,261
08600445	0.15	2.60	4,710,576	860000.00	864999.99	445000.00	449999.99	452.41	3655.37	81813275.59	81814849.46	3,691,121	863,727	148,046	7,682	00	255	29	261,260,262
08600450	0.15	2.62	4,338,711	860000.00	864999.99	450000.00	454999.99	442.50	589.15	81814417.45	81816103.38	3,641,329	583,928	107,388	6,066	00	255	34	262,261,250
08600455	0.15	2.59	4,397,883	860000.00	864999.99	455000.00	459999.99	442.99	641.53	81814827.10	81816499.38	3,721,661	569,037	101,181	6,004	00	255	30	262,250,251
08600460	0.15	2.55	4,257,425	860000.00	864999.99	460000.00	464999.99	454.16	744.42	81816078.25	81817745.69	3,840,202	366,857	47,714	2,652	00	255	33	250,251,252
08600465	0.15	2.60	4,468,401	860000.00	864999.99	465000.00	469999.99	419.48	2832.59	81816475.30	81818187.40	3,701,230	652,197	109,012	5,962	00	255	28	251,252,253
08600470	0.16	2.54	4,264,093	860000.00	864999.99	470000.00	474999.99	422.11	556.22	81817721.87	81819425.12	3,868,466	333,582	58,772	3,273	00	255	33	253,252,254
08600475	0.15	2.59	3,977,437	860000.00	864999.99	475000.00	479999.99	440.35	572.16	81818164.02	81819838.34	3,739,141	196,568	38,469	3,259	00	255	34	254,253,255
08600480	0.15	2.56	4,143,935	860000.00	864999.99	480000.00	484999.99	441.96	2072.47	81819400.99	81821072.34	3,815,393	277,644	47,591	3,307	00	255	31	254,255,256
08600485	0.15	2.58	4,123,919	860000.00	864999.99	485000.00	489999.99	399.84	1705.28	81819815.70	81868755.96	3,750,383	324,244	47,181	2,111	00	255	30	255,256,330
08600490	0.14	2.65	4,028,041	860000.00	864999.99	490000.00	494999.99	404.49	547.50	81821048.29	81869915.89	3,558,435	407,702	59,241	2,663	00	255	25	256,330,331
08600495	0.15	2.60	4,167,536	860000.00	864999.99	495000.00	499999.99	406.77	1336.53	81868733.68	81870277.65	3,713,763	403,465	48,537	1,771	00	255	26	331,330,332
08600500	0.14	2.72	3,836,888	860000.00	864999.99	500000.00	504999.99	399.74	587.51	81869891.52	81871432.36	3,376,186	403,486	54,926	2,290	00	255	25	331,332,333
08600505	0.14	2.63	3,752,191	860000.00	864999.99	505000.00	509999.99	361.83	608.05	81870263.47	81871787.91	3,606,659	124,014	20,443	1,075	00	255	28	333,332,334
08600510	0.15	2.63	4,225,242	860000.00	864999.99	510000.00	514999.99	292.76	2478.65	81871766.12	81872918.58	3,615,355	533,439	73,462	2,986	00	255	25	334,325
08600515	0.14	2.66	4,023,656	860000.00	864999.99	515000.00	519999.99	76.62	4412.75	81872895.98	81873288.57	3,541,533	426,445	53,650	2,028	00	255	25	325,326
08600520	0.15	2.62	4,634,213	860000.00	864999.99	520000.00	524999.99	422.45	651.33	81873267.00	81874426.46	3,632,264	891,992	106,237	3,720	00	255	21	326,327
08600525	0.13	2.76	3,844,138	860000.00	864999.99	525000.00	529999.99	-45.71	4403.33	81874405.05	81874797.73	3,294,104	488,078	59,653	2,303	00	255	23	327,328
08600530	0.15	2.63	4,263,803	860000.00	864999.99	530000.00	534999.99	311.19	1503.53	81874776.22	81875943.20	3,625,250	559,599	75,745	3,209	00	255	25	328,329
08650430	0.15	2.61	4,556,334	865000.00	869999.99	430000.00	434999.99	404.85	563.12	81811327.55	81812924.32	3,661,949	789,222	101,128	4,035	00	255	27	258,257,259
08650435	0.15	2.57	4,433,063	865000.00	869999.99	435000.00	439999.99	382.56	2523.99	81811681.47	81813279.07	3,792,066	557,498	80,080	3,419	00	255	29	259,258,260
08650440	0.15	2.58	4,139,576	865000.00	869999.99	440000.00	444999.99	423.80	2951.63	81812899.04	81814462.94	3,746,192	341,211	50,057	2,116	00	255	36	259,260,261
08650445	0.15	2.56	4,303,813	865000.00	869999.99	445000.00	449999.99	437.58	599.58	81813255.42	81814830.02	3,821,082	415,573	64,417	2,741	00	255	37	260,261,262
08650450	0.15	2.59	4,210,751	865000.00	869999.99	450000.00	454999.99	446.61	597.87	81814437.51	81816122.96	3,734,121	405,270	67,269	4,091	00	255	35	262,261,250
08650455	0.15	2.58	4,237,957	865000.00	869999.99	455000.00	459999.99	462.54	607.77	81814807.38	81816478.21	3,766,900	397,434	69,411	4,212	00	255	33	250,262,251
08650460	0.15	2.57	4,395,587	865000.00	869999.99	460000.00	464999.99	454.08	596.55	81816098.16	81817764.87	3,789,201	518,529	83,483	4,374	00	255	30	251,250,252

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08650465	0.15	2.59	4,471,046	865000.00	869999.99	465000.00	469999.99	442.29	577.71	81816454.73	81818166.09	3,730,878	617,581	115,358	7,229	00	255	29	252,251,253
08650470	0.15	2.55	4,588,942	865000.00	869999.99	470000.00	474999.99	430.68	563.39	81817741.39	81819445.62	3,839,282	628,986	113,737	6,937	00	255	28	252,253,254
08650475	0.16	2.54	3,956,157	865000.00	869999.99	475000.00	479999.99	445.89	560.15	81818144.32	81819818.11	3,875,904	66,940	12,468	845	00	255	36	254,253,255
08650480	0.16	2.53	4,166,032	865000.00	869999.99	480000.00	484999.99	432.94	595.02	81819420.85	81821092.04	3,906,477	217,209	39,734	2,612	00	255	35	254,255,256
08650485	0.16	2.54	4,100,306	865000.00	869999.99	485000.00	489999.99	-5.05	550.23	81819794.47	81868735.14	3,862,805	201,866	33,710	1,925	00	255	31	255,256,330
08650490	0.14	2.63	3,906,974	865000.00	869999.99	490000.00	494999.99	416.74	544.67	81821067.80	81869935.39	3,603,409	262,055	39,481	2,029	00	255	29	256,330,331
08650495	0.16	2.54	4,167,827	865000.00	869999.99	495000.00	499999.99	437.89	2627.04	81868713.86	81870258.17	3,881,542	254,287	30,888	1,110	00	255	30	330,331,332
08650500	0.15	2.56	4,345,120	865000.00	869999.99	500000.00	504999.99	409.48	911.51	81870234.72	81871453.80	3,809,782	473,275	59,572	2,491	00	255	26	332,333
08650505	0.14	2.66	3,939,890	865000.00	869999.99	505000.00	509999.99	407.12	562.30	81871429.12	81871767.59	3,545,022	339,382	52,661	2,825	00	185	25	333,334
08650510	0.15	2.62	3,909,231	865000.00	869999.99	510000.00	514999.99	420.61	558.13	81871745.95	81872939.30	3,637,250	238,079	32,486	1,416	00	255	26	334,325
08650515	0.14	2.66	3,882,688	865000.00	869999.99	515000.00	519999.99	311.66	4555.00	81872914.97	81873268.52	3,523,287	314,864	42,745	1,792	00	255	26	325,326
08650520	0.15	2.58	4,169,287	865000.00	869999.99	520000.00	524999.99	128.74	670.80	81873247.68	81874446.20	3,744,985	382,826	40,178	1,298	00	255	28	326,327
08650525	0.15	2.62	4,226,996	865000.00	869999.99	525000.00	529999.99	-27.16	1596.07	81874423.44	81874777.62	3,656,936	503,470	64,048	2,542	00	255	25	327,328
08650530	0.16	2.53	4,908,375	865000.00	869999.99	530000.00	534999.99	372.86	4081.65	81874755.89	81875965.26	3,910,548	883,681	109,767	4,379	00	255	21	328,329
08700430	0.14	2.65	4,303,573	870000.00	874999.99	430000.00	434999.99	390.25	2345.33	81811348.04	81812943.78	3,573,362	632,977	93,245	3,989	00	255	30	258,257,259
08700435	0.14	2.65	3,853,084	870000.00	874999.99	435000.00	439999.99	404.61	3009.38	81811661.98	81813258.98	3,573,530	241,345	36,623	1,586	00	255	35	258,259,260
08700440	0.15	2.58	4,071,486	870000.00	874999.99	440000.00	444999.99	414.71	560.20	81812919.34	81814481.97	3,750,540	271,923	46,380	2,643	00	193	33	260,259,261
08700445	0.15	2.61	4,372,598	870000.00	874999.99	445000.00	449999.99	407.72	572.40	81813234.82	81814809.25	3,677,266	593,516	96,975	4,841	00	255	33	260,261,262
08700450	0.14	2.67	3,926,418	870000.00	874999.99	450000.00	454999.99	434.96	3696.11	81814458.16	81816143.76	3,505,336	361,705	56,323	3,054	00	255	34	262,261,250
08700455	0.15	2.56	4,546,437	870000.00	874999.99	455000.00	459999.99	453.87	641.18	81814786.68	81816457.32	3,813,031	625,166	102,391	5,849	00	255	30	250,262,251
08700460	0.15	2.58	4,703,647	870000.00	874999.99	460000.00	464999.99	465.53	2890.60	81816117.95	81817785.61	3,747,802	839,252	111,814	4,779	00	255	28	251,250,252
08700465	0.15	2.55	4,722,135	870000.00	874999.99	465000.00	469999.99	469.01	679.93	81816434.10	81818146.25	3,836,682	775,106	105,965	4,382	00	136	29	251,252,253
08700470	0.16	2.50	5,111,717	870000.00	874999.99	470000.00	474999.99	442.44	615.98	81817761.28	81819465.26	4,010,578	941,488	151,731	7,920	00	255	25	253,252,254
08700475	0.15	2.55	4,244,763	870000.00	874999.99	475000.00	479999.99	450.51	593.57	81818122.79	81819796.88	3,838,069	339,423	62,879	4,392	00	255	31	254,253,255
08700480	0.16	2.54	4,809,553	870000.00	874999.99	480000.00	484999.99	459.31	653.80	81819441.25	81821112.95	3,877,140	816,831	110,955	4,627	00	255	27	255,254,256
08700485	0.15	2.62	4,421,804	870000.00	874999.99	485000.00	489999.99	425.11	1318.47	81819773.51	81868714.94	3,630,567	682,818	103,706	4,713	00	255	28	255,256,330
08700490	0.15	2.62	4,005,236	870000.00	874999.99	490000.00	494999.99	424.61	3686.93	81821088.56	81869954.54	3,652,048	307,638	43,559	1,991	00	255	29	330,256,331
08700495	0.15	2.62	4,178,428	870000.00	874999.99	495000.00	499999.99	12.56	3794.11	81868693.38	81870235.81	3,655,911	460,016	60,170	2,331	00	255	28	330,331,332
08700500	0.15	2.59	4,308,245	870000.00	874999.99	500000.00	504999.99	425.34	3745.09	81870214.95	81871473.73	3,725,103	509,856	70,180	3,106	00	255	26	332,333
08700505	0.14	2.67	4,163,160	870000.00	874999.99	505000.00	509999.99	414.18	970.36	81871450.03	81871747.55	3,507,410	573,140	79,109	3,501	00	202	23	333,334
08700510	0.14	2.65	3,823,848	870000.00	874999.99	510000.00	514999.99	175.56	2431.78	81871726.40	81872957.88	3,574,041	216,547	31,773	1,487	00	255	26	334,325
08700515	0.14	2.64	4,273,584	870000.00	874999.99	515000.00	519999.99	298.37	4008.93	81872933.52	81873249.26	3,599,449	594,490	76,624	3,021	00	255	23	325,326
08700520	0.16	2.53	4,443,986	870000.00	874999.99	520000.00	524999.99	452.05	1692.52	81873227.14	81874468.16	3,902,906	485,796	53,529	1,755	00	255	25	326,327

0.0 Report on LAS Statistics (By Tile) - continued

TNAME	Point Density	Average GSD	Total Points	X Min	X Max	Y Min	Y Max	Z Min	Z MAX	GPS Min	GPS Max	1st Returns	2nd Returns	3rd Returns	Other Returns	Min Int	Max Int	Mean Int	Flightlines
08700525	0.15	2.63	3,966,958	870000.00	874999.99	525000.00	529999.99	386.77	4533.62	81874444.62	81874757.53	3,629,493	300,894	35,380	1,191	00	255	28	327,328
08700530	0.14	2.64	4,460,267	870000.00	874999.99	530000.00	534999.99	413.34	1643.03	81874736.52	81875984.30	3,591,049	770,857	94,764	3,597	00	255	23	328,329
08750430	0.15	2.57	4,114,471	875000.00	879999.99	430000.00	434999.99	382.69	4275.59	81811367.72	81812962.76	3,792,988	282,423	37,303	1,757	00	255	35	258,257,259
08750435	0.15	2.61	3,886,604	875000.00	879999.99	435000.00	439999.99	394.70	521.48	81811640.33	81813237.11	3,675,438	182,885	26,967	1,314	00	255	34	258,259,260
08750440	0.15	2.60	3,982,609	875000.00	879999.99	440000.00	444999.99	397.11	594.78	81812938.28	81814500.64	3,686,446	243,594	49,157	3,412	00	255	33	259,260,261
08750445	0.15	2.59	4,666,797	875000.00	879999.99	445000.00	449999.99	412.78	2508.32	81813213.76	81814790.19	3,733,426	781,957	143,148	8,266	00	255	30	261,260,262
08750450	0.16	2.54	4,492,211	875000.00	879999.99	450000.00	454999.99	417.64	579.15	81814477.07	81816163.41	3,890,563	502,477	93,554	5,617	00	255	32	262,261,250
08750455	0.15	2.55	4,662,330	875000.00	879999.99	455000.00	459999.99	421.21	578.58	81814765.22	81816436.44	3,838,690	691,825	124,370	7,445	00	255	28	262,250,251
08750460	0.15	2.55	4,533,065	875000.00	879999.99	460000.00	464999.99	441.41	667.56	81816138.62	81817801.51	3,834,021	603,151	91,032	4,861	00	255	30	251,250,252
08750465	0.14	2.65	4,638,760	875000.00	879999.99	465000.00	469999.99	475.31	839.59	81816411.57	81818124.50	3,557,367	947,646	128,244	5,503	00	255	26	252,251,253
08750470	0.16	2.54	4,926,005	875000.00	879999.99	470000.00	474999.99	453.79	665.97	81817780.06	81819485.59	3,871,818	904,992	141,948	7,247	00	255	28	253,252,254
08750475	0.15	2.55	4,515,158	875000.00	879999.99	475000.00	479999.99	454.85	2681.63	81818101.63	81819775.32	3,849,187	564,746	95,559	5,666	00	255	29	253,254,255
08750480	0.16	2.54	4,883,069	875000.00	879999.99	480000.00	484999.99	462.50	640.01	81819461.11	81821131.50	3,863,343	886,789	126,884	6,053	00	255	26	254,255,256
08750485	0.15	2.61	4,653,371	875000.00	879999.99	485000.00	489999.99	435.89	3576.84	81819752.52	81868695.98	3,669,524	853,517	124,274	6,056	00	148	26	255,256,330
08750490	0.15	2.61	4,492,326	875000.00	879999.99	490000.00	494999.99	446.87	641.98	81868674.70	81869974.61	3,666,995	721,672	99,175	4,484	00	255	27	330,331
08750495	0.15	2.62	4,375,584	875000.00	879999.99	495000.00	499999.99	455.38	1042.43	81868686.27	81870216.35	3,652,515	643,648	76,508	2,913	00	255	26	331,330,332
08750500	0.15	2.55	4,396,416	875000.00	879999.99	500000.00	504999.99	390.51	3424.72	81870194.30	81871494.52	3,859,406	468,238	65,805	2,967	00	255	28	332,333
08750505	0.14	2.67	3,690,919	875000.00	879999.99	505000.00	509999.99	420.52	2056.73	81871471.29	81871727.72	3,514,761	150,204	24,651	1,303	00	255	28	333,334
08750510	0.14	2.66	3,884,988	875000.00	879999.99	510000.00	514999.99	302.07	1474.83	81871705.68	81872977.56	3,540,991	300,223	41,907	1,867	00	255	25	334,325
08750515	0.14	2.66	3,786,004	875000.00	879999.99	515000.00	519999.99	303.47	2624.14	81872954.72	81873229.47	3,529,763	222,580	32,216	1,445	00	255	28	325,326
08750520	0.15	2.59	3,891,053	875000.00	879999.99	520000.00	524999.99	-20.09	3982.30	81873207.60	81874488.18	3,738,016	134,370	17,901	766	00	255	29	326,327
08750525	0.15	2.61	3,812,770	875000.00	879999.99	525000.00	529999.99	421.43	661.20	81874465.54	81874738.42	3,683,383	116,772	12,206	409	00	148	31	327,328
08750530	0.15	2.55	3,925,369	875000.00	879999.99	530000.00	534999.99	86.23	2970.18	81874716.75	81876004.11	3,852,820	62,803	9,277	469	00	255	31	328,329
Average	0.14/1.51	2.73/0.83																	
	pp Square US Survey Feet/ pp Square Meter	US Survey Feet/ Meter																	

Note: These statistics are for tiled LAS files. Not all LAS files fill tiles completely, especially along project boundaries. This may skew the results by including area, count, and density values for partially filled tiles.

0.0 Report on LAS Statistics (By Tile)

- Class Totals

The purpose of this section is to list the number of points in each classification so that the user can determine if any points were filtered to unintended classes.

[Classified Files - E:\Franklin County\las](#)

Class(es) Expected: N/A

Class(es) Present: 1,2,3,4,5,6,7,8,9,10,17,18,19,20,21,22,23,24,25,26

Class	Total	Class	Total	Class	Total	Class	Total
0	00	64	00	128	00	192	00
1	117,596,672	65	00	129	00	193	00
2	436,942,603	66	00	130	00	194	00
3	44,263,793	67	00	131	00	195	00
4	41,185,061	68	00	132	00	196	00
5	207,219,392	69	00	133	00	197	00
6	6,538,533	70	00	134	00	198	00
7	1,190,132	71	00	135	00	199	00
8	581,598,867	72	00	136	00	200	00
9	16,380,250	73	00	137	00	201	00
10	148,145	74	00	138	00	202	00
11	00	75	00	139	00	203	00
12	00	76	00	140	00	204	00
13	00	77	00	141	00	205	00
14	00	78	00	142	00	206	00
15	00	79	00	143	00	207	00
16	00	80	00	144	00	208	00
17	109,789,824	81	00	145	00	209	00
18	314,442,077	82	00	146	00	210	00
19	27,134,339	83	00	147	00	211	00
20	26,250,194	84	00	148	00	212	00
21	123,248,718	85	00	149	00	213	00
22	3,179,615	86	00	150	00	214	00
23	800,118	87	00	151	00	215	00
24	247,542,860	88	00	152	00	216	00
25	977,608	89	00	153	00	217	00
26	59,286	90	00	154	00	218	00
27	00	91	00	155	00	219	00
28	00	92	00	156	00	220	00
29	00	93	00	157	00	221	00
30	00	94	00	158	00	222	00
31	00	95	00	159	00	223	00
32	00	96	00	160	00	224	00
33	00	97	00	161	00	225	00
34	00	98	00	162	00	226	00
35	00	99	00	163	00	227	00
36	00	100	00	164	00	228	00
37	00	101	00	165	00	229	00
38	00	102	00	166	00	230	00
39	00	103	00	167	00	231	00
40	00	104	00	168	00	232	00
41	00	105	00	169	00	233	00
42	00	106	00	170	00	234	00
43	00	107	00	171	00	235	00
44	00	108	00	172	00	236	00
45	00	109	00	173	00	237	00
46	00	110	00	174	00	238	00
47	00	111	00	175	00	239	00
48	00	112	00	176	00	240	00
49	00	113	00	177	00	241	00
50	00	114	00	178	00	242	00
51	00	115	00	179	00	243	00
52	00	116	00	180	00	244	00
53	00	117	00	181	00	245	00
54	00	118	00	182	00	246	00
55	00	119	00	183	00	247	00
56	00	120	00	184	00	248	00
57	00	121	00	185	00	249	00
58	00	122	00	186	00	250	00
59	00	123	00	187	00	251	00
60	00	124	00	188	00	252	00
61	00	125	00	189	00	253	00
62	00	126	00	190	00	254	00
63	00	127	00	191	00	255	00

1.1 Report on Multiple Discrete Returns (Swath Data)

The USGS LiDAR Base Specification Version 1.0 requires: "Data collection must be capable of at least three returns per pulse. Full waveform collection is acceptable and welcomed; however, waveform data are regarded as supplemental information. Deriving and delivering multiple discrete returns is required in all cases."

The purpose of this section is to report on the presence and quantities of LiDAR returns in the LAS swath data. Empty return columns can indicate a collection or processing problem dealing with LiDAR return attribute information.

[Boresighted Files - E:\Franklin County\swath](#)

File	First return	Second return	Third return	Other return	Total points
140417_224329_1-1.las	56,491,313	11,457,927	1,935,095	115,665	70,000,000
140417_224329_1-2.las	26,099,398	4,298,377	650,743	35,366	31,083,884
140417_230025_1-1.las	61,179,955	7,596,836	1,165,118	58,091	70,000,000
140417_230025_1-2.las	37,206,355	6,713,452	941,639	41,293	44,902,739
140417_231322_1-1.las	59,633,251	8,936,191	1,365,162	65,396	70,000,000
140417_231322_1-2.las	42,036,717	4,786,790	747,812	36,469	47,607,788
140417_232632_1-1.las	60,227,676	8,218,571	1,468,992	84,761	70,000,000
140417_232632_1-2.las	42,239,625	4,573,423	691,666	33,031	47,537,745
140417_233933_1-1.las	59,762,113	8,674,462	1,482,320	81,105	70,000,000
140417_233933_1-2.las	42,676,332	5,189,509	968,145	59,477	48,893,463
140417_235212_1-1.las	60,365,007	8,007,619	1,531,126	96,248	70,000,000
140417_235212_1-2.las	39,817,169	7,281,908	1,261,964	68,441	48,429,482
140418_000524_1-1.las	57,319,166	10,776,586	1,803,936	100,312	70,000,000
140418_000524_1-2.las	51,755,398	7,795,206	1,366,105	82,179	60,998,888
140418_001909_1-1.las	57,615,565	10,561,088	1,725,668	97,679	70,000,000
140418_001909_1-2.las	50,888,611	7,127,501	1,176,310	68,666	59,261,088
140418_003250_1-1.las	58,984,022	9,433,998	1,496,374	85,606	70,000,000
140418_003250_1-2.las	53,703,303	9,714,384	1,657,415	100,822	65,175,924
140418_004640_1-1.las	59,392,337	8,909,180	1,598,419	100,064	70,000,000
140418_004640_1-2.las	48,755,275	9,112,937	1,406,473	71,318	59,346,003
140418_010058_1-1.las	57,825,746	10,361,959	1,718,297	93,998	70,000,000
140418_010058_1-2.las	56,106,788	8,640,858	1,528,933	98,405	66,374,984
140418_011447_1-1.las	57,505,102	10,535,595	1,842,122	117,181	70,000,000
140418_011447_1-2.las	50,589,685	7,295,645	1,200,784	67,627	59,153,741
140418_012827_1-1.las	59,117,871	9,248,794	1,540,862	92,473	70,000,000
140418_012827_1-2.las	54,177,123	8,800,873	1,493,788	90,666	64,562,450
140418_014215_1-1.las	59,980,454	8,497,555	1,434,413	87,578	70,000,000
140418_014215_1-2.las	46,653,956	6,332,201	996,865	53,735	54,036,757

1.1 Report on Multiple Discrete Returns (Swath Data) - continued

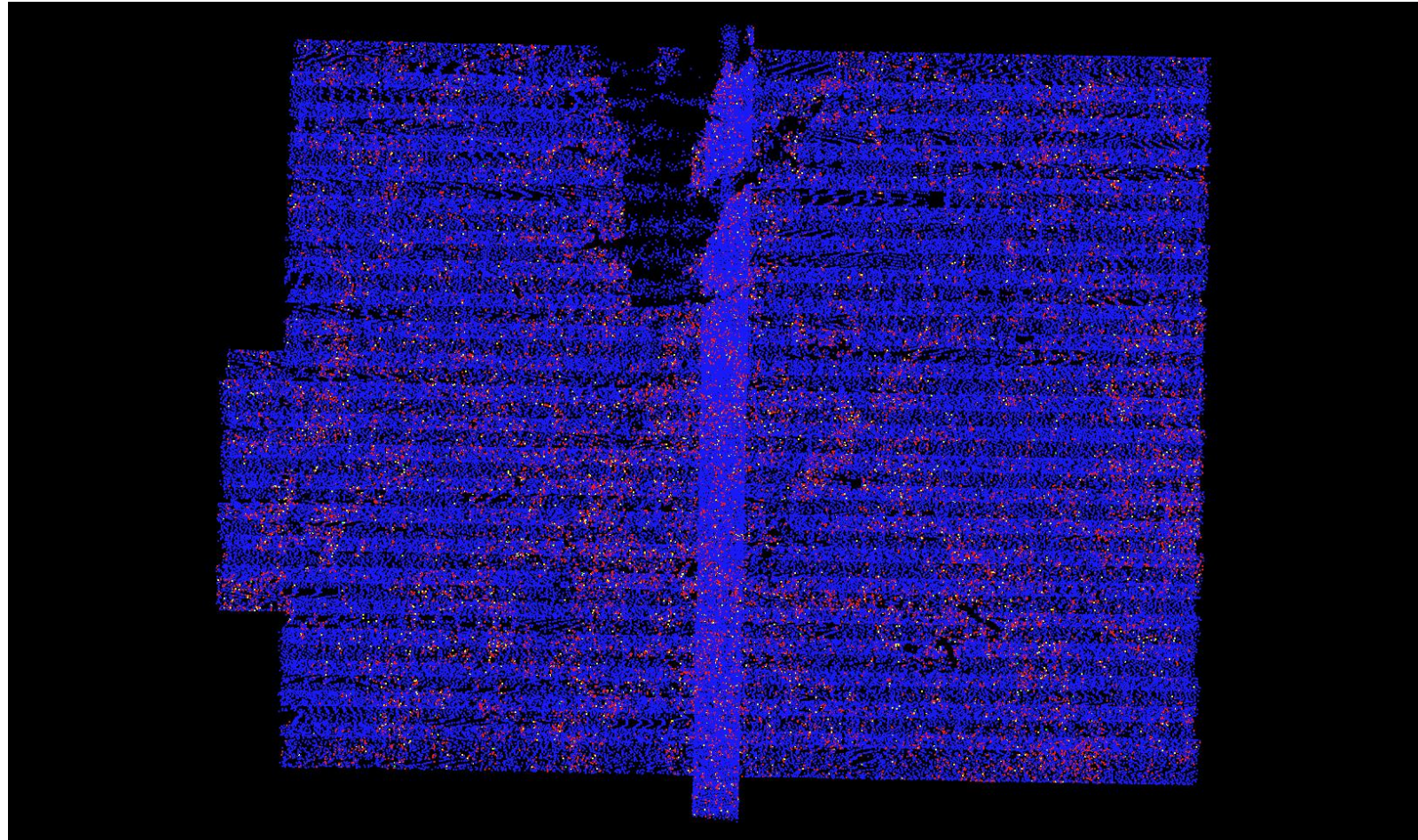
File	First return	Second return	Third return	Other return	Total points
140418_020434_1.las	54,353,982	10,252,692	1,714,540	102,428	66,423,642
140418_145120_1.las	32,363,727	7,047,345	1,144,270	62,129	40,617,471
140418_150350_1-1.las	60,663,693	8,127,884	1,155,581	52,842	70,000,000
140418_150350_1-2.las	41,700,770	4,689,018	687,132	33,162	47,110,082
140418_151646_1-1.las	60,150,626	8,509,388	1,277,804	62,182	70,000,000
140418_151646_1-2.las	39,096,865	4,557,795	623,618	26,983	44,305,261
140418_152909_1-1.las	62,082,262	6,891,703	979,872	46,163	70,000,000
140418_152909_1-2.las	36,619,141	3,095,043	465,618	22,327	40,202,129
140418_154201_1-1.las	62,164,386	6,739,831	1,042,166	53,617	70,000,000
140418_154201_1-2.las	33,495,889	2,864,012	425,323	20,488	36,805,712
140418_155420_1-1.las	63,521,519	5,613,218	825,932	39,331	70,000,000
140418_155420_1-2.las	32,753,755	3,011,081	441,428	20,331	36,226,595
140418_160651_1-1.las	63,149,269	5,946,838	863,693	40,200	70,000,000
140418_160651_1-2.las	28,147,096	2,514,909	341,216	14,323	31,017,544
140418_161920_1-1.las	61,993,799	7,049,389	919,240	37,572	70,000,000
140418_161920_1-2.las	32,780,450	3,167,344	431,956	18,781	36,398,531
140418_163158_1-1.las	63,231,216	5,913,799	819,436	35,549	70,000,000
140418_163158_1-2.las	28,709,279	3,184,329	400,330	15,784	32,309,722
140418_164429_1-1.las	61,806,416	7,207,968	947,244	38,372	70,000,000
140418_164429_1-2.las	30,739,928	2,250,104	301,045	12,069	33,303,146
140418_165715_1-1.las	62,309,731	6,718,898	930,580	40,791	70,000,000
140418_165715_1-2.las	28,286,065	2,468,127	328,456	13,295	31,095,943
140418_171610_1.las	32,057,684	6,513,877	998,905	51,509	39,621,975
Total	2,540,282,861	353,214,017	56,261,931	3,043,880	2,952,802,689

1.1 Report on Multiple Discrete Returns (Swath Data) - All Returns

The purpose of this section is to show a graphic of LiDAR swath data points colored by all returns. Blank flight lines can indicate a collection or processing problem dealing with LiDAR return attribute information.

[Data Source - E:\Franklin_County\swath](#)

[Result Path - E:\Franklin_County\QAQC\1_1\ColorByReturns_Boresighted.jpg](#)



First Second Third Fourth or other

1.1 Report on Multiple Discrete Returns (Tiled Data)

The purpose of this section is to report on the presence and quantities of LiDAR returns in the LAS tiled data. Empty return columns can indicate a collection or processing problem dealing with LiDAR return attribute information.

[Classified Files - E:\Franklin County\las](#)

File	First return	Second return	Third return	Other return	Total points
07350465.las	3,742,795	936,735	163,126	9,715	4,852,371
07400465.las	3,417,156	868,633	139,219	7,220	4,432,228
07400470.las	3,005,874	494,974	75,518	3,883	3,580,249
07400475.las	3,655,696	551,568	93,066	5,850	4,306,180
07450430.las	3,178,696	134,724	8,655	115	3,322,190
07450435.las	4,707,955	21,589	1,709	42	4,731,295
07450440.las	6,938,113	202,033	39,630	2,623	7,182,399
07450445.las	6,861,207	553,459	80,997	3,980	7,499,643
07450450.las	3,460,832	116,723	23,205	1,478	3,602,238
07450455.las	3,847,974	453,745	66,902	3,234	4,371,855
07450460.las	3,520,189	977,664	148,319	7,633	4,653,805
07450465.las	3,666,081	1,041,476	169,538	9,107	4,886,202
07450470.las	3,592,074	112,940	17,137	815	3,722,966
07450475.las	3,698,505	528,223	87,501	5,353	4,319,582
07450480.las	3,453,777	1,074,281	168,304	9,962	4,706,324
07450485.las	3,728,674	688,381	111,447	6,936	4,535,438
07450490.las	3,396,972	671,496	104,405	5,848	4,178,721
07450495.las	3,543,825	445,138	52,134	1,872	4,042,969
07450500.las	3,566,045	64,158	7,926	297	3,638,426
07500430.las	3,549,041	176,039	21,529	933	3,747,542
07500435.las	4,755,253	264,324	50,403	2,941	5,072,921
07500440.las	6,708,603	516,053	96,016	6,058	7,326,730
07500445.las	6,946,512	471,704	89,520	5,990	7,513,726
07500450.las	3,594,123	156,023	30,896	1,914	3,782,956
07500455.las	3,785,383	202,297	31,965	1,625	4,021,270
07500460.las	3,523,619	433,182	68,576	3,770	4,029,147
07500465.las	3,634,646	583,108	96,067	5,472	4,319,293
07500470.las	3,530,469	536,134	94,291	5,940	4,166,834
07500475.las	3,945,638	322,702	57,103	3,917	4,329,360
07500480.las	3,725,257	531,515	87,238	5,311	4,349,321

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
07500485.las	3,604,633	307,292	50,510	2,969	3,965,404
07500490.las	3,325,390	838,887	131,992	7,225	4,303,494
07500495.las	3,443,205	324,643	47,914	2,356	3,818,118
07500500.las	3,387,229	532,184	80,644	3,869	4,003,926
07500505.las	3,622,333	358,967	49,580	2,242	4,033,122
07500510.las	3,688,999	89,451	10,585	402	3,789,437
07500515.las	3,781,155	107,311	12,992	525	3,901,983
07500520.las	3,603,246	441,073	60,374	2,603	4,107,296
07500525.las	3,524,188	290,192	42,764	1,959	3,859,103
07500530.las	3,532,995	71,513	10,882	471	3,615,861
07550430.las	3,288,440	647,005	85,837	3,398	4,024,680
07550435.las	3,950,793	648,949	126,032	7,744	4,733,518
07550440.las	4,385,688	716,490	133,923	8,426	5,244,527
07550445.las	4,611,719	295,181	56,824	3,283	4,967,007
07550450.las	3,592,395	77,424	15,112	902	3,685,833
07550455.las	3,967,956	116,329	18,872	1,029	4,104,186
07550460.las	3,590,486	172,177	30,295	1,824	3,794,782
07550465.las	3,875,180	300,374	50,234	2,819	4,228,607
07550470.las	3,604,245	735,008	138,210	9,100	4,486,563
07550475.las	3,571,616	628,440	126,840	9,447	4,336,343
07550480.las	3,404,438	378,635	62,690	3,709	3,849,472
07550485.las	3,844,641	420,571	65,823	3,464	4,334,499
07550490.las	3,694,392	256,094	37,456	1,733	3,989,675
07550495.las	3,524,149	220,584	30,713	1,298	3,776,744
07550500.las	3,587,295	78,233	10,031	354	3,675,913
07550505.las	3,640,171	424,142	69,068	3,538	4,136,919
07550510.las	3,513,956	508,591	80,398	3,834	4,106,779
07550515.las	3,574,035	631,575	95,619	4,561	4,305,790
07550520.las	3,603,341	685,530	100,688	4,705	4,394,264
07550525.las	3,699,169	420,330	54,287	1,943	4,175,729
07550530.las	3,679,092	316,994	43,124	1,842	4,041,052
07600430.las	3,091,665	475,180	71,672	3,448	3,641,965
07600435.las	3,442,688	790,718	138,591	7,382	4,379,379
07600440.las	3,512,917	490,798	94,682	6,128	4,104,525

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
07600445.las	3,796,987	581,279	108,715	6,943	4,493,924
07600450.las	3,625,433	483,625	93,098	5,957	4,208,113
07600455.las	3,853,565	492,461	77,378	4,076	4,427,480
07600460.las	3,648,802	285,144	50,336	3,110	3,987,392
07600465.las	3,731,238	264,351	51,409	3,657	4,050,655
07600470.las	3,584,872	422,384	79,227	5,369	4,091,852
07600475.las	4,041,166	577,424	117,528	9,105	4,745,223
07600480.las	3,699,248	624,113	103,702	6,008	4,433,071
07600485.las	3,538,147	638,432	106,635	5,981	4,289,195
07600490.las	3,760,668	481,380	67,162	3,062	4,312,272
07600495.las	3,698,065	361,231	60,077	2,995	4,122,368
07600500.las	3,541,783	223,965	35,582	1,663	3,802,993
07600505.las	3,689,509	191,107	26,177	990	3,907,783
07600510.las	3,524,663	200,729	30,367	1,388	3,757,147
07600515.las	3,435,275	208,155	29,695	1,460	3,674,585
07600520.las	3,578,191	477,054	62,638	2,641	4,120,524
07600525.las	3,663,800	276,021	34,857	1,415	3,976,093
07600530.las	3,636,015	305,398	42,744	1,745	3,985,902
07650430.las	3,156,985	306,893	45,541	2,133	3,511,552
07650435.las	3,630,904	464,892	78,227	4,155	4,178,178
07650440.las	3,449,876	323,865	53,622	2,783	3,830,146
07650445.las	3,424,218	475,954	84,905	4,684	3,989,761
07650450.las	3,605,746	587,626	117,205	7,798	4,318,375
07650455.las	3,650,472	501,262	95,349	6,668	4,253,751
07650460.las	3,548,203	394,421	69,963	4,552	4,017,139
07650465.las	3,902,125	77,059	14,955	1,044	3,995,183
07650470.las	3,688,361	241,155	46,568	3,027	3,979,111
07650475.las	3,593,708	449,158	88,819	6,535	4,138,220
07650480.las	3,571,609	505,861	84,810	4,600	4,166,880
07650485.las	3,478,034	536,033	89,119	5,098	4,108,284
07650490.las	3,819,216	466,052	69,547	3,422	4,358,237
07650495.las	3,691,248	148,762	23,153	1,121	3,864,284
07650500.las	3,713,686	381,185	57,977	2,571	4,155,419
07650505.las	3,815,618	345,312	49,219	2,349	4,212,498

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
07650510.las	3,534,684	300,558	45,465	2,247	3,882,954
07650515.las	3,710,107	303,848	47,478	2,212	4,063,645
07650520.las	3,556,353	165,946	21,585	827	3,744,711
07650525.las	3,775,659	296,379	34,985	1,228	4,108,251
07650530.las	3,808,712	645,874	88,590	3,587	4,546,763
07700430.las	2,909,019	357,240	51,459	2,268	3,319,986
07700435.las	3,089,658	341,309	44,807	1,454	3,477,228
07700440.las	3,146,837	454,415	76,247	3,795	3,681,294
07700445.las	3,437,950	692,765	125,852	7,927	4,264,494
07700450.las	3,444,421	728,229	149,545	10,522	4,332,717
07700455.las	3,714,317	771,571	137,007	8,675	4,631,570
07700460.las	3,546,707	388,135	70,312	4,923	4,010,077
07700465.las	3,787,464	491,265	92,647	5,963	4,377,339
07700470.las	3,531,980	393,995	72,073	4,911	4,002,959
07700475.las	3,804,035	488,495	91,247	6,747	4,390,524
07700480.las	3,647,199	914,166	171,363	11,030	4,743,758
07700485.las	3,620,419	736,352	125,220	6,938	4,488,929
07700490.las	3,748,986	608,292	90,217	4,620	4,452,115
07700495.las	3,675,760	243,729	31,374	1,280	3,952,143
07700500.las	3,616,126	142,697	18,790	701	3,778,314
07700505.las	3,640,434	136,946	17,614	690	3,795,684
07700510.las	3,632,538	219,909	30,351	1,357	3,884,155
07700515.las	3,490,573	294,209	40,913	1,902	3,827,597
07700520.las	3,626,796	196,054	28,749	1,375	3,852,974
07700525.las	3,811,982	297,590	46,068	2,412	4,158,052
07700530.las	3,588,121	157,278	24,132	1,235	3,770,766
07750430.las	3,202,340	439,338	65,893	2,854	3,710,425
07750435.las	3,249,526	356,347	50,631	2,066	3,658,570
07750440.las	3,274,418	287,968	47,464	2,275	3,612,125
07750445.las	3,533,181	689,816	131,751	8,285	4,363,033
07750450.las	3,597,947	523,026	95,705	5,946	4,222,624
07750455.las	3,903,341	314,853	54,252	3,242	4,275,688
07750460.las	3,495,831	633,748	124,731	9,536	4,263,846
07750465.las	3,849,452	615,082	119,903	8,588	4,593,025

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
07750470.las	3,477,161	540,415	111,284	8,539	4,137,399
07750475.las	3,710,634	652,084	111,808	6,785	4,481,311
07750480.las	3,759,518	794,530	145,600	9,640	4,709,288
07750485.las	3,693,213	386,645	69,967	4,773	4,154,598
07750490.las	3,718,547	347,060	55,252	2,927	4,123,786
07750495.las	3,691,633	343,408	50,104	2,316	4,087,461
07750500.las	3,428,321	474,532	75,563	3,811	3,982,227
07750505.las	3,744,945	180,005	27,248	1,325	3,953,523
07750510.las	3,390,047	291,471	45,448	2,214	3,729,180
07750515.las	3,687,406	337,043	48,085	2,207	4,074,741
07750520.las	3,517,497	389,349	54,539	2,354	3,963,739
07750525.las	3,553,561	121,785	16,416	656	3,692,418
07750530.las	3,510,022	279,925	43,028	1,924	3,834,899
07800430.las	3,390,833	412,058	65,250	3,272	3,871,413
07800435.las	3,649,901	110,774	15,930	535	3,777,140
07800440.las	3,347,978	572,139	97,804	5,295	4,023,216
07800445.las	3,510,452	236,978	48,920	3,200	3,799,550
07800450.las	3,448,291	19,614	3,651	266	3,471,822
07800455.las	3,458,131	352,811	62,027	3,680	3,876,649
07800460.las	3,404,722	852,394	162,159	10,670	4,429,945
07800465.las	3,775,516	550,386	109,338	7,744	4,442,984
07800470.las	3,752,020	663,429	122,833	8,005	4,546,287
07800475.las	3,672,077	826,362	145,218	9,469	4,653,126
07800480.las	3,767,332	529,433	95,602	6,215	4,398,582
07800485.las	3,654,504	680,601	128,479	8,608	4,472,192
07800490.las	3,557,579	493,014	87,452	5,358	4,143,403
07800495.las	3,671,068	620,496	95,282	4,948	4,391,794
07800500.las	3,523,190	306,384	41,198	1,780	3,872,552
07800505.las	3,643,077	227,390	36,084	1,809	3,908,360
07800510.las	3,426,642	626,808	94,534	4,568	4,152,552
07800515.las	3,565,407	186,439	26,196	1,199	3,779,241
07800520.las	3,508,386	640,842	74,011	2,719	4,225,958
07800525.las	3,879,172	57,031	6,859	235	3,943,297
07800530.las	3,366,289	249,209	30,459	1,059	3,647,016

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
07850430.las	3,216,108	884,219	131,244	6,418	4,237,989
07850435.las	3,681,738	693,750	122,971	7,195	4,505,654
07850440.las	3,427,531	765,285	153,879	10,165	4,356,860
07850445.las	3,488,337	719,824	143,431	9,649	4,361,241
07850450.las	3,099,591	484,778	82,444	5,043	3,671,856
07850455.las	2,902,176	627,953	96,067	4,953	3,631,149
07850460.las	3,057,712	963,264	162,058	9,554	4,192,588
07850465.las	3,700,113	564,754	117,467	9,364	4,391,698
07850470.las	3,560,425	910,546	156,090	9,173	4,636,234
07850475.las	3,618,764	599,589	110,953	7,654	4,336,960
07850480.las	3,703,379	373,089	72,817	5,275	4,154,560
07850485.las	3,702,528	238,576	43,810	2,747	3,987,661
07850490.las	3,654,137	172,470	25,673	1,422	3,853,702
07850495.las	3,683,122	541,562	83,645	4,397	4,312,726
07850500.las	3,697,290	316,991	47,886	2,433	4,064,600
07850505.las	3,503,741	885,510	138,141	6,813	4,534,205
07850510.las	3,454,505	519,850	79,944	4,382	4,058,681
07850515.las	3,354,974	189,872	23,422	1,125	3,569,393
07850520.las	2,871,542	480,169	62,241	2,675	3,416,627
07850525.las	3,481,827	342,538	42,514	1,548	3,868,427
07850530.las	3,502,131	176,006	22,453	822	3,701,412
07900430.las	3,433,969	341,325	58,072	3,146	3,836,512
07900435.las	3,865,391	1,132,464	208,325	12,414	5,218,594
07900440.las	3,589,381	366,625	72,576	4,806	4,033,388
07900445.las	3,620,878	517,264	108,344	7,721	4,254,207
07900450.las	3,168,390	616,140	94,065	4,807	3,883,402
07900455.las	3,053,011	1,072,272	171,630	9,172	4,306,085
07900460.las	3,217,750	1,142,086	191,897	11,103	4,562,836
07900465.las	3,559,909	1,273,936	212,040	12,128	5,058,013
07900470.las	3,439,022	1,182,523	178,827	9,094	4,809,466
07900475.las	3,494,950	926,118	145,434	7,740	4,574,242
07900480.las	3,307,687	546,320	92,314	5,909	3,952,230
07900485.las	3,647,837	219,397	35,962	2,139	3,905,335
07900490.las	3,665,934	275,382	43,269	2,252	3,986,837

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
07900495.las	3,790,934	879,518	125,919	6,252	4,802,623
07900500.las	3,727,105	752,031	112,982	5,625	4,597,743
07900505.las	2,590,992	965,572	165,270	9,557	3,731,391
07900510.las	3,105,866	1,045,171	179,715	10,328	4,341,080
07900515.las	3,432,940	552,362	84,305	4,236	4,073,843
07900520.las	3,134,351	791,692	112,498	5,145	4,043,686
07900525.las	3,199,672	503,765	65,103	2,544	3,771,084
07900530.las	2,010,688	333,618	43,366	1,626	2,389,298
07950430.las	3,407,358	47,720	5,126	186	3,460,390
07950435.las	3,603,791	517,055	95,053	5,563	4,221,462
07950440.las	3,501,559	427,379	78,073	4,509	4,011,520
07950445.las	3,560,638	318,058	66,277	4,623	3,949,596
07950450.las	3,571,390	398,159	73,711	4,683	4,047,943
07950455.las	3,538,776	1,233,443	209,149	12,796	4,994,164
07950460.las	3,388,363	1,001,681	163,277	8,737	4,562,058
07950465.las	3,598,531	459,071	85,053	5,731	4,148,386
07950470.las	3,426,085	793,332	139,812	8,844	4,368,073
07950475.las	3,379,569	943,506	154,778	8,587	4,486,440
07950480.las	2,736,079	481,912	74,269	4,014	3,296,274
07950485.las	3,374,098	501,479	75,205	3,957	3,954,739
07950490.las	3,258,034	98,099	12,931	566	3,369,630
07950495.las	3,276,139	520,727	84,071	4,601	3,885,538
07950500.las	1,740,536	284,794	49,081	2,981	2,077,392
07950505.las	1,163,367	157,414	27,160	1,691	1,349,632
07950510.las	1,168,181	97,453	16,327	872	1,282,833
07950515.las	1,315,277	103,152	15,874	664	1,434,967
07950520.las	1,313,833	133,022	19,607	859	1,467,321
07950525.las	988,537	75,563	8,177	271	1,072,548
07950530.las	521,204	10,761	984	21	532,970
08000430.las	3,356,483	250,613	40,083	2,112	3,649,291
08000435.las	3,594,653	562,193	100,793	5,849	4,263,488
08000440.las	3,488,612	628,140	117,276	7,071	4,241,099
08000445.las	3,619,711	647,890	129,946	8,579	4,406,126
08000450.las	3,639,471	475,835	89,312	5,858	4,210,476

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08000455.las	3,543,722	1,063,089	175,137	9,786	4,791,734
08000460.las	3,633,080	865,482	143,534	8,161	4,650,257
08000465.las	3,638,510	594,014	104,429	6,879	4,343,832
08000470.las	3,732,944	711,321	139,476	9,725	4,593,466
08000475.las	3,748,948	1,006,807	175,232	10,839	4,941,826
08000480.las	3,447,504	991,929	172,962	11,038	4,623,433
08000485.las	3,125,011	850,236	128,924	6,738	4,110,909
08000490.las	3,149,903	869,882	128,251	6,088	4,154,124
08000495.las	2,742,257	624,360	86,913	3,870	3,457,400
08000500.las	1,169,589	1,163	85	01	1,170,838
08000505.las	970,487	18,060	2,311	94	990,952
08000510.las	1,111,204	01	00	00	1,111,205
08000515.las	714,302	266	00	00	714,568
08000520.las	532,442	02	00	00	532,444
08000525.las	348,059	00	00	00	348,059
08000530.las	442,844	2,936	253	02	446,035
08050430.las	3,573,168	665,017	95,762	4,349	4,338,296
08050435.las	3,929,520	782,881	114,712	5,334	4,832,447
08050440.las	3,528,558	1,052,735	191,471	11,500	4,784,264
08050445.las	3,490,010	866,621	157,467	8,868	4,522,966
08050450.las	3,490,615	608,313	105,104	6,059	4,210,091
08050455.las	3,234,489	1,092,047	168,026	8,388	4,502,950
08050460.las	3,668,620	1,079,590	161,117	8,333	4,917,660
08050465.las	3,881,010	544,499	95,807	6,215	4,527,531
08050470.las	3,788,326	357,694	56,928	3,018	4,205,966
08050475.las	3,563,230	970,279	161,377	9,158	4,704,044
08050480.las	3,714,914	876,403	156,332	10,399	4,758,048
08050485.las	3,641,005	610,775	95,422	5,676	4,352,878
08050490.las	3,577,995	788,577	111,721	5,564	4,483,857
08050495.las	3,513,626	1,239,437	190,736	9,265	4,953,064
08050500.las	2,392,174	551,619	84,022	4,639	3,032,454
08050505.las	2,555,838	697,744	105,940	5,548	3,365,070
08050510.las	1,157,839	40,305	5,613	310	1,204,067
08050515.las	1,860,421	476,682	69,297	3,208	2,409,608

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08050520.las	2,702,650	710,156	106,620	5,039	3,524,465
08050525.las	1,323,291	473,056	65,573	2,718	1,864,638
08050530.las	744,972	86,067	10,326	341	841,706
08100430.las	3,413,239	672,485	108,141	5,436	4,199,301
08100435.las	3,830,443	715,526	130,080	7,803	4,683,852
08100440.las	3,436,867	633,148	115,736	7,337	4,193,088
08100445.las	3,562,313	593,751	98,069	5,178	4,259,311
08100450.las	3,404,717	592,345	88,238	4,443	4,089,743
08100455.las	3,588,028	985,693	141,841	6,590	4,722,152
08100460.las	3,606,504	542,482	87,657	5,030	4,241,673
08100465.las	3,751,556	411,257	74,184	4,857	4,241,854
08100470.las	3,729,023	666,775	129,462	9,043	4,534,303
08100475.las	3,731,396	613,169	103,342	5,895	4,453,802
08100480.las	3,721,217	879,485	163,186	10,949	4,774,837
08100485.las	3,580,547	442,174	79,090	5,346	4,107,157
08100490.las	3,624,072	793,172	123,783	6,436	4,547,463
08100495.las	3,683,356	940,938	146,521	7,604	4,778,419
08100500.las	3,136,204	1,006,817	148,768	7,145	4,298,934
08100505.las	3,745,242	291,714	46,225	2,386	4,085,567
08100510.las	3,173,311	742,630	113,885	5,609	4,035,435
08100515.las	1,718,665	364,434	50,453	2,106	2,135,658
08100520.las	2,636,093	457,803	67,282	3,315	3,164,493
08100525.las	3,363,006	439,231	66,962	3,384	3,872,583
08100530.las	3,393,387	484,394	72,432	3,448	3,953,661
08150430.las	3,842,487	628,906	99,569	5,685	4,576,647
08150435.las	3,595,741	403,392	77,258	4,738	4,081,129
08150440.las	3,558,119	556,012	94,150	5,192	4,213,473
08150445.las	3,720,852	661,825	117,908	6,810	4,507,395
08150450.las	3,546,588	835,069	140,928	8,008	4,530,593
08150455.las	3,299,228	353,838	52,031	2,769	3,707,866
08150460.las	2,805,974	463,684	69,366	3,826	3,342,850
08150465.las	3,425,585	421,209	83,637	6,238	3,936,669
08150470.las	3,633,433	298,599	53,747	3,463	3,989,242
08150475.las	3,821,716	823,515	138,545	7,743	4,791,519

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08150480.las	3,743,697	717,144	141,285	10,530	4,612,656
08150485.las	3,636,085	583,613	97,343	5,735	4,322,776
08150490.las	3,688,624	256,844	36,789	1,623	3,983,880
08150495.las	3,812,070	546,116	86,922	4,335	4,449,443
08150500.las	3,590,627	756,487	114,816	6,214	4,468,144
08150505.las	3,217,195	618,308	90,828	4,664	3,930,995
08150510.las	3,653,093	655,890	91,300	4,111	4,404,394
08150515.las	3,194,865	662,562	96,171	4,487	3,958,085
08150520.las	2,143,958	303,964	41,523	1,772	2,491,217
08150525.las	3,070,472	492,232	69,630	2,879	3,635,213
08150530.las	3,517,355	181,177	23,243	923	3,722,698
08200430.las	3,393,348	596,690	98,628	5,427	4,094,093
08200435.las	3,722,583	566,453	97,062	5,081	4,391,179
08200440.las	3,692,471	791,736	134,365	7,471	4,626,043
08200445.las	3,602,678	514,261	95,081	6,251	4,218,271
08200450.las	3,556,340	1,058,375	175,091	10,144	4,799,950
08200455.las	3,689,909	483,262	77,457	4,951	4,255,579
08200460.las	3,427,745	321,344	56,923	4,476	3,810,488
08200465.las	3,637,631	354,543	54,536	2,721	4,049,431
08200470.las	3,517,397	878,547	151,404	8,479	4,555,827
08200475.las	3,582,501	311,230	50,037	2,682	3,946,450
08200480.las	3,552,157	637,201	112,765	7,103	4,309,226
08200485.las	3,633,841	577,778	103,945	6,757	4,322,321
08200490.las	3,731,498	301,932	42,381	1,803	4,077,614
08200495.las	3,808,474	525,697	79,043	3,691	4,416,905
08200500.las	3,825,046	161,116	22,693	1,054	4,009,909
08200505.las	3,835,705	108,670	15,035	732	3,960,142
08200510.las	3,623,664	399,749	62,862	3,008	4,089,283
08200515.las	3,616,612	276,136	43,679	2,207	3,938,634
08200520.las	2,879,053	580,804	81,992	3,840	3,545,689
08200525.las	1,674,869	312,051	44,746	2,300	2,033,966
08200530.las	3,497,559	479,373	70,666	3,143	4,050,741
08250430.las	3,874,178	677,489	114,269	6,083	4,672,019
08250435.las	3,684,832	585,306	91,652	4,322	4,366,112

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08250440.las	3,635,967	93,660	20,590	1,625	3,751,842
08250445.las	3,722,728	367,332	79,963	5,870	4,175,893
08250450.las	3,403,310	824,602	137,640	7,302	4,372,854
08250455.las	3,797,219	205,304	43,582	3,854	4,049,959
08250460.las	3,840,512	240,849	49,354	3,687	4,134,402
08250465.las	3,668,267	284,263	44,213	2,373	3,999,116
08250470.las	3,416,282	1,220,420	196,178	10,028	4,842,908
08250475.las	3,432,120	1,151,367	196,330	10,563	4,790,380
08250480.las	3,423,718	522,515	102,945	7,798	4,056,976
08250485.las	3,694,756	279,295	55,846	4,240	4,034,137
08250490.las	2,982,799	590,600	88,487	4,294	3,666,180
08250495.las	3,641,378	465,348	62,888	2,670	4,172,284
08250500.las	3,627,953	306,345	47,384	2,329	3,984,011
08250505.las	3,567,651	170,274	22,353	946	3,761,224
08250510.las	3,747,685	188,945	25,274	1,094	3,962,998
08250515.las	3,793,183	251,725	37,089	1,796	4,083,793
08250520.las	3,538,737	78,099	11,185	429	3,628,450
08250525.las	3,549,965	502,247	78,002	3,705	4,133,919
08250530.las	3,241,936	780,668	111,919	4,813	4,139,336
08300430.las	3,662,758	423,122	69,708	3,683	4,159,271
08300435.las	3,642,914	436,508	72,056	3,692	4,155,170
08300440.las	3,708,986	154,870	28,333	1,484	3,893,673
08300445.las	3,667,949	240,217	43,306	2,178	3,953,650
08300450.las	3,488,670	812,936	129,618	6,298	4,437,522
08300455.las	3,850,941	212,371	37,577	2,846	4,103,735
08300460.las	3,897,758	308,825	46,953	2,666	4,256,202
08300465.las	3,811,126	532,501	50,350	1,889	4,395,866
08300470.las	3,391,019	544,629	85,921	4,890	4,026,459
08300475.las	3,633,853	857,123	146,668	8,124	4,645,768
08300480.las	3,519,517	970,831	171,994	10,515	4,672,857
08300485.las	3,503,765	136,164	20,276	1,015	3,661,220
08300490.las	3,226,975	337,782	52,513	2,492	3,619,762
08300495.las	3,678,473	659,489	91,300	3,978	4,433,240
08300500.las	3,634,275	303,851	44,897	2,084	3,985,107

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08300505.las	3,772,920	223,535	26,595	1,127	4,024,177
08300510.las	3,703,787	81,321	13,561	713	3,799,382
08300515.las	3,873,431	229,621	34,327	1,796	4,139,175
08300520.las	3,762,914	55,619	7,172	312	3,826,017
08300525.las	3,786,053	231,416	31,726	1,341	4,050,536
08300530.las	3,559,464	340,662	43,333	1,734	3,945,193
08350430.las	3,744,695	207,852	31,238	1,281	3,985,066
08350435.las	3,825,024	304,183	48,202	2,318	4,179,727
08350440.las	3,649,591	306,102	47,103	2,185	4,004,981
08350445.las	3,679,705	882,105	134,607	6,225	4,702,642
08350450.las	3,504,104	844,546	141,714	7,604	4,497,968
08350455.las	3,759,419	301,856	47,333	2,410	4,111,018
08350460.las	3,860,725	360,618	61,249	3,504	4,286,096
08350465.las	3,730,764	738,862	119,393	6,674	4,595,693
08350470.las	3,811,885	919,440	151,110	8,058	4,890,493
08350475.las	3,752,263	629,111	105,882	6,073	4,493,329
08350480.las	3,614,516	714,779	116,089	6,547	4,451,931
08350485.las	3,718,326	1,170,751	190,099	10,177	5,089,353
08350490.las	3,677,319	256,207	42,992	2,195	3,978,713
08350495.las	3,798,016	250,878	41,183	2,186	4,092,263
08350500.las	3,746,417	84,826	15,047	858	3,847,148
08350505.las	3,714,560	34,464	4,604	197	3,753,825
08350510.las	3,703,492	179,733	23,248	952	3,907,425
08350515.las	3,552,486	221,105	31,600	1,318	3,806,509
08350520.las	3,851,283	172,907	23,120	931	4,048,241
08350525.las	3,882,482	349,451	45,691	1,704	4,279,328
08350530.las	3,639,794	418,767	50,555	1,804	4,110,920
08400430.las	3,625,267	534,441	80,645	3,317	4,243,670
08400435.las	3,551,799	320,831	53,333	2,529	3,928,492
08400440.las	3,515,772	497,938	77,574	3,924	4,095,208
08400445.las	3,346,389	514,850	78,776	4,235	3,944,250
08400450.las	3,264,603	659,351	108,679	6,128	4,038,761
08400455.las	3,696,380	298,048	52,641	3,269	4,050,338
08400460.las	3,775,266	364,586	60,095	3,838	4,203,785

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08400465.las	3,710,154	679,015	116,435	6,785	4,512,389
08400470.las	3,671,086	610,481	106,628	6,198	4,394,393
08400475.las	3,535,704	750,558	128,375	7,113	4,421,750
08400480.las	3,500,139	331,938	53,132	2,569	3,887,778
08400485.las	3,264,922	587,134	83,729	3,886	3,939,671
08400490.las	3,474,608	792,927	109,466	4,639	4,381,640
08400495.las	3,527,571	221,120	30,557	1,250	3,780,498
08400500.las	3,379,024	177,899	25,979	1,362	3,584,264
08400505.las	3,621,028	95,788	15,573	804	3,733,193
08400510.las	3,668,903	146,131	18,724	829	3,834,587
08400515.las	3,859,423	110,343	12,976	506	3,983,248
08400520.las	3,686,401	318,950	36,880	1,302	4,043,533
08400525.las	3,737,557	195,785	21,887	773	3,956,002
08400530.las	3,600,886	420,802	56,318	2,492	4,080,498
08450430.las	3,618,190	337,158	54,325	2,462	4,012,135
08450435.las	3,627,326	439,291	53,418	2,326	4,122,361
08450440.las	3,492,939	756,341	124,869	6,123	4,380,272
08450445.las	2,861,372	1,103,199	181,493	9,224	4,155,288
08450450.las	3,424,189	979,960	170,606	10,008	4,584,763
08450455.las	3,811,062	912,160	151,348	7,945	4,882,515
08450460.las	3,734,081	871,481	160,097	10,030	4,775,689
08450465.las	3,841,815	437,255	84,881	5,458	4,369,409
08450470.las	4,033,136	329,580	59,261	3,412	4,425,389
08450475.las	3,839,643	367,225	67,597	4,139	4,278,604
08450480.las	3,877,518	355,247	62,760	3,478	4,299,003
08450485.las	3,810,567	143,647	23,166	1,424	3,978,804
08450490.las	3,563,237	343,897	44,889	1,736	3,953,759
08450495.las	3,435,714	353,203	43,675	1,644	3,834,236
08450500.las	3,558,673	180,171	27,053	1,299	3,767,196
08450505.las	3,719,111	207,886	32,636	1,627	3,961,260
08450510.las	3,706,295	191,160	22,606	634	3,920,695
08450515.las	3,742,037	222,913	26,532	800	3,992,282
08450520.las	3,651,900	286,039	34,264	1,275	3,973,478
08450525.las	3,535,690	265,252	36,364	1,623	3,838,929

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08450530.las	3,914,339	460,656	61,535	2,565	4,439,095
08500430.las	3,559,419	416,193	60,196	2,659	4,038,467
08500435.las	3,697,949	361,834	54,378	2,270	4,116,431
08500440.las	3,665,480	374,855	66,218	3,691	4,110,244
08500445.las	3,204,087	671,630	117,318	6,426	3,999,461
08500450.las	3,039,833	672,242	119,219	6,946	3,838,240
08500455.las	3,639,414	1,051,758	185,542	10,788	4,887,502
08500460.las	3,731,498	554,078	92,079	4,944	4,382,599
08500465.las	3,642,097	614,991	102,480	5,965	4,365,533
08500470.las	3,758,495	195,790	32,379	1,694	3,988,358
08500475.las	3,743,488	192,966	30,507	1,739	3,968,700
08500480.las	3,758,270	195,282	29,328	1,206	3,984,086
08500485.las	3,758,559	54,953	8,004	389	3,821,905
08500490.las	3,498,112	205,157	30,307	1,319	3,734,895
08500495.las	3,479,287	294,441	44,040	1,988	3,819,756
08500500.las	3,491,920	102,169	13,971	652	3,608,712
08500505.las	3,728,955	42,647	5,942	288	3,777,832
08500510.las	3,433,104	31,953	4,895	227	3,470,179
08500515.las	3,662,770	338,434	44,297	1,719	4,047,220
08500520.las	3,830,485	301,396	33,832	1,083	4,166,796
08500525.las	3,743,984	406,611	53,164	2,125	4,205,884
08500530.las	3,842,319	142,392	19,633	849	4,005,193
08550430.las	3,800,860	562,150	86,556	3,848	4,453,414
08550435.las	3,671,846	585,305	90,348	4,265	4,351,764
08550440.las	3,716,157	896,398	143,109	7,238	4,762,902
08550445.las	3,576,795	1,112,357	199,786	11,151	4,900,089
08550450.las	3,819,547	550,164	90,684	4,876	4,465,271
08550455.las	3,702,394	685,467	115,514	6,371	4,509,746
08550460.las	3,831,516	760,937	105,628	5,782	4,703,863
08550465.las	3,831,153	495,203	87,191	5,456	4,419,003
08550470.las	4,009,458	293,173	51,628	3,372	4,357,631
08550475.las	3,814,149	204,112	35,363	2,242	4,055,866
08550480.las	3,895,763	307,123	46,982	2,390	4,252,258
08550485.las	3,771,308	387,065	61,249	3,249	4,222,871

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08550490.las	2,969,986	334,814	50,912	2,451	3,358,163
08550495.las	3,532,612	332,458	43,625	1,616	3,910,311
08550500.las	3,361,720	213,331	28,483	1,159	3,604,693
08550505.las	3,709,202	621,896	91,974	3,989	4,427,061
08550510.las	3,339,476	170,632	22,594	929	3,533,631
08550515.las	3,460,455	252,850	34,693	1,388	3,749,386
08550520.las	3,520,707	421,444	55,838	2,161	4,000,150
08550525.las	3,681,518	269,678	41,216	1,951	3,994,363
08550530.las	3,932,349	146,319	21,843	915	4,101,426
08600430.las	3,594,784	863,223	123,100	5,456	4,586,563
08600435.las	3,622,912	585,737	81,332	3,838	4,293,819
08600440.las	3,688,236	709,833	115,024	5,608	4,518,701
08600445.las	3,691,121	863,727	148,046	7,682	4,710,576
08600450.las	3,641,329	583,928	107,388	6,066	4,338,711
08600455.las	3,721,661	569,037	101,181	6,004	4,397,883
08600460.las	3,840,202	366,857	47,714	2,652	4,257,425
08600465.las	3,701,230	652,197	109,012	5,962	4,468,401
08600470.las	3,868,466	333,582	58,772	3,273	4,264,093
08600475.las	3,739,141	196,568	38,469	3,259	3,977,437
08600480.las	3,815,393	277,644	47,591	3,307	4,143,935
08600485.las	3,750,383	324,244	47,181	2,111	4,123,919
08600490.las	3,558,435	407,702	59,241	2,663	4,028,041
08600495.las	3,713,763	403,465	48,537	1,771	4,167,536
08600500.las	3,376,186	403,486	54,926	2,290	3,836,888
08600505.las	3,606,659	124,014	20,443	1,075	3,752,191
08600510.las	3,615,355	533,439	73,462	2,986	4,225,242
08600515.las	3,541,533	426,445	53,650	2,028	4,023,656
08600520.las	3,632,264	891,992	106,237	3,720	4,634,213
08600525.las	3,294,104	488,078	59,653	2,303	3,844,138
08600530.las	3,625,250	559,599	75,745	3,209	4,263,803
08650430.las	3,661,949	789,222	101,128	4,035	4,556,334
08650435.las	3,792,066	557,498	80,080	3,419	4,433,063
08650440.las	3,746,192	341,211	50,057	2,116	4,139,576
08650445.las	3,821,082	415,573	64,417	2,741	4,303,813

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other return	Total points
08650450.las	3,734,121	405,270	67,269	4,091	4,210,751
08650455.las	3,766,900	397,434	69,411	4,212	4,237,957
08650460.las	3,789,201	518,529	83,483	4,374	4,395,587
08650465.las	3,730,878	617,581	115,358	7,229	4,471,046
08650470.las	3,839,282	628,986	113,737	6,937	4,588,942
08650475.las	3,875,904	66,940	12,468	845	3,956,157
08650480.las	3,906,477	217,209	39,734	2,612	4,166,032
08650485.las	3,862,805	201,866	33,710	1,925	4,100,306
08650490.las	3,603,409	262,055	39,481	2,029	3,906,974
08650495.las	3,881,542	254,287	30,888	1,110	4,167,827
08650500.las	3,809,782	473,275	59,572	2,491	4,345,120
08650505.las	3,545,022	339,382	52,661	2,825	3,939,890
08650510.las	3,637,250	238,079	32,486	1,416	3,909,231
08650515.las	3,523,287	314,864	42,745	1,792	3,882,688
08650520.las	3,744,985	382,826	40,178	1,298	4,169,287
08650525.las	3,656,936	503,470	64,048	2,542	4,226,996
08650530.las	3,910,548	883,681	109,767	4,379	4,908,375
08700430.las	3,573,362	632,977	93,245	3,989	4,303,573
08700435.las	3,573,530	241,345	36,623	1,586	3,853,084
08700440.las	3,750,540	271,923	46,380	2,643	4,071,486
08700445.las	3,677,266	593,516	96,975	4,841	4,372,598
08700450.las	3,505,336	361,705	56,323	3,054	3,926,418
08700455.las	3,813,031	625,166	102,391	5,849	4,546,437
08700460.las	3,747,802	839,252	111,814	4,779	4,703,647
08700465.las	3,836,682	775,106	105,965	4,382	4,722,135
08700470.las	4,010,578	941,488	151,731	7,920	5,111,717
08700475.las	3,838,069	339,423	62,879	4,392	4,244,763
08700480.las	3,877,140	816,831	110,955	4,627	4,809,553
08700485.las	3,630,567	682,818	103,706	4,713	4,421,804
08700490.las	3,652,048	307,638	43,559	1,991	4,005,236
08700495.las	3,655,911	460,016	60,170	2,331	4,178,428
08700500.las	3,725,103	509,856	70,180	3,106	4,308,245
08700505.las	3,507,410	573,140	79,109	3,501	4,163,160
08700510.las	3,574,041	216,547	31,773	1,487	3,823,848

1.1 Report on Multiple Discrete Returns (Tiled Data) - continued

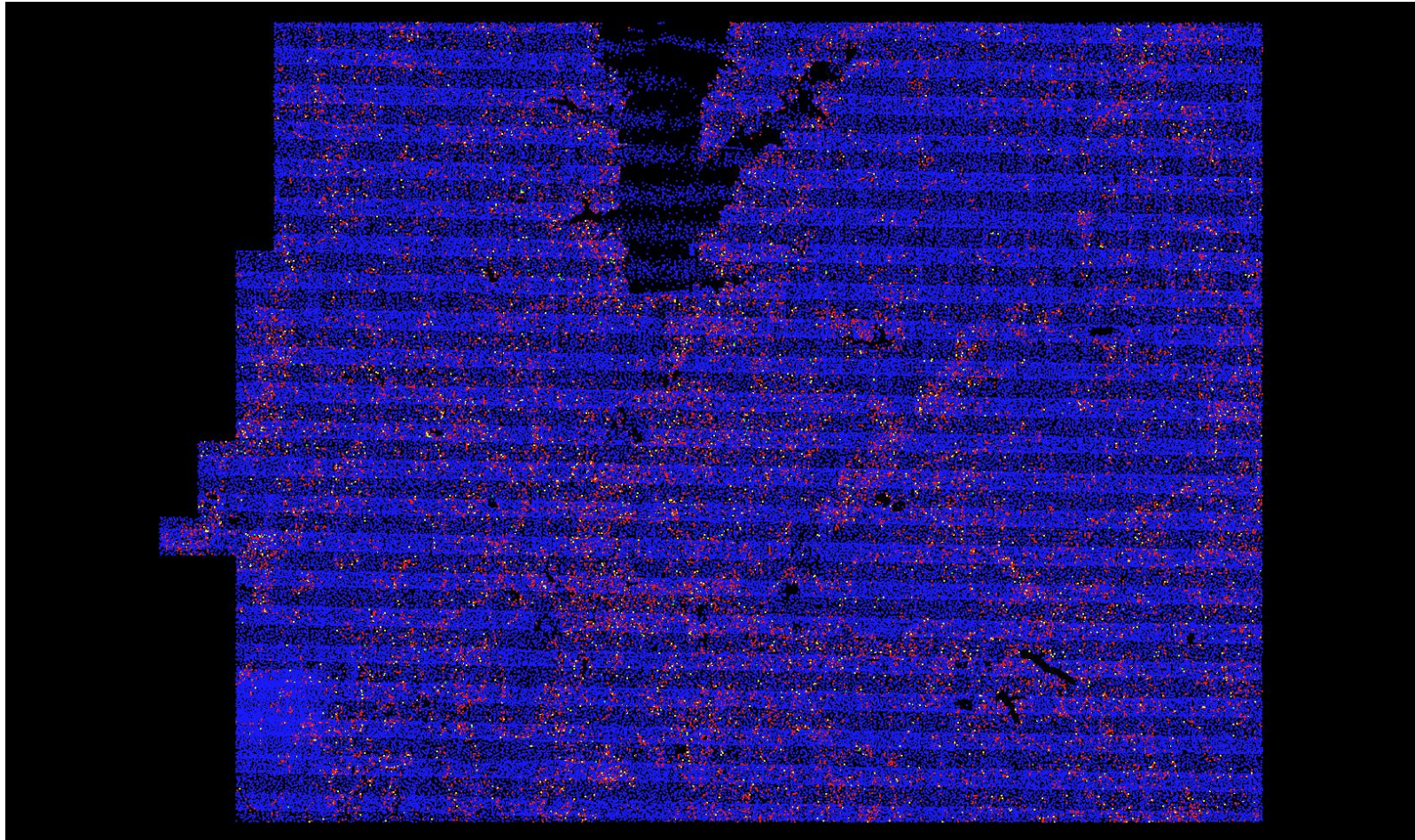
File	First return	Second return	Third return	Other return	Total points
08700515.las	3,599,449	594,490	76,624	3,021	4,273,584
08700520.las	3,902,906	485,796	53,529	1,755	4,443,986
08700525.las	3,629,493	300,894	35,380	1,191	3,966,958
08700530.las	3,591,049	770,857	94,764	3,597	4,460,267
08750430.las	3,792,988	282,423	37,303	1,757	4,114,471
08750435.las	3,675,438	182,885	26,967	1,314	3,886,604
08750440.las	3,686,446	243,594	49,157	3,412	3,982,609
08750445.las	3,733,426	781,957	143,148	8,266	4,666,797
08750450.las	3,890,563	502,477	93,554	5,617	4,492,211
08750455.las	3,838,690	691,825	124,370	7,445	4,662,330
08750460.las	3,834,021	603,151	91,032	4,861	4,533,065
08750465.las	3,557,367	947,646	128,244	5,503	4,638,760
08750470.las	3,871,818	904,992	141,948	7,247	4,926,005
08750475.las	3,849,187	564,746	95,559	5,666	4,515,158
08750480.las	3,863,343	886,789	126,884	6,053	4,883,069
08750485.las	3,669,524	853,517	124,274	6,056	4,653,371
08750490.las	3,666,995	721,672	99,175	4,484	4,492,326
08750495.las	3,652,515	643,648	76,508	2,913	4,375,584
08750500.las	3,859,406	468,238	65,805	2,967	4,396,416
08750505.las	3,514,761	150,204	24,651	1,303	3,690,919
08750510.las	3,540,991	300,223	41,907	1,867	3,884,988
08750515.las	3,529,763	222,580	32,216	1,445	3,786,004
08750520.las	3,738,016	134,370	17,901	766	3,891,053
08750525.las	3,683,383	116,772	12,206	409	3,812,770
08750530.las	3,852,820	62,803	9,277	469	3,925,369
Total	1,992,670,517	268,366,531	43,101,670	2,349,407	2,306,488,125

1.1 Report on Multiple Discrete Returns (Tiled Data) - All Returns

The purpose of this section is to show a graphic of LiDAR tiled data points colored by all returns. Blank tiles can indicate a collection or processing problem dealing with LiDAR return attribute information.

[Data Source - E:\Franklin_County\las](#)

[Result Path - E:\Franklin_County\QAQC\1_1\ColorByReturns_Classified.jpg](#)

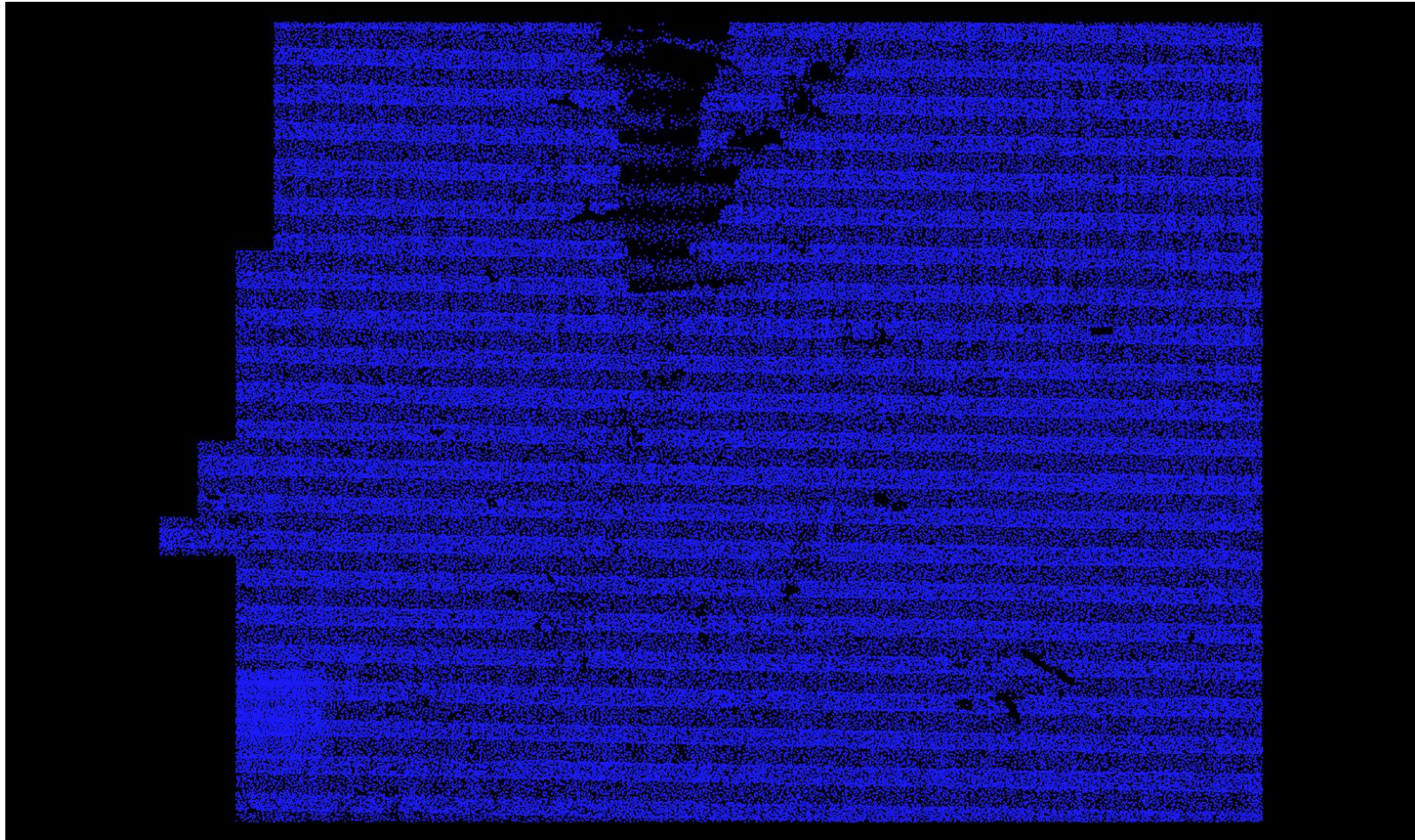


1.1 Report on Multiple Discrete Returns (Tiled Data) - First Returns

The purpose of this section is to show a graphic of LiDAR tiled data points colored by first returns. Blank tiles can indicate a collection or processing problem dealing with LiDAR return attribute information.

[Data Source - E:\Franklin_County\las](#)

[Result Path - E:\Franklin_County\QAQC\1_1\ColorByReturns_Classified_FirstReturns.jpg](#)

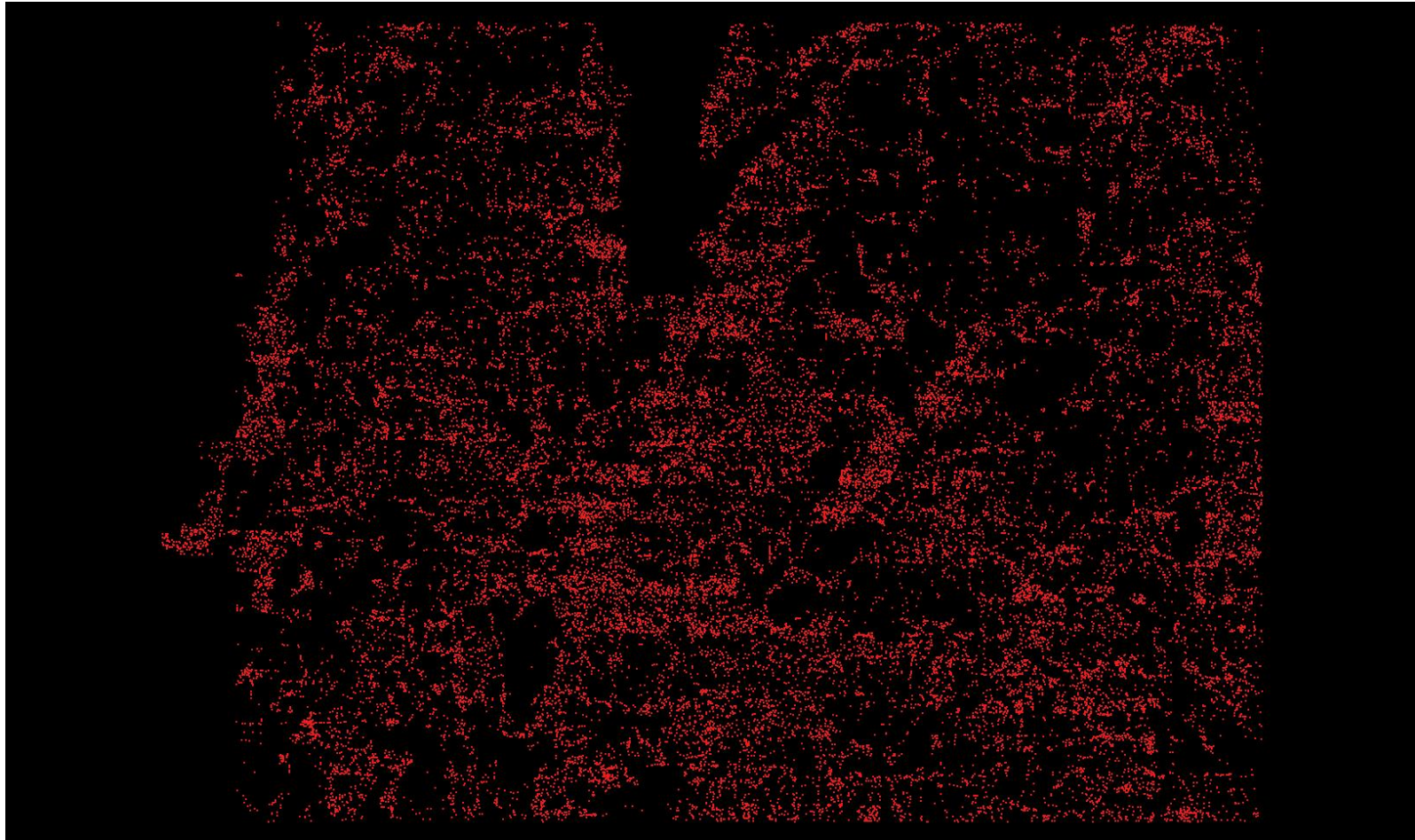


1.1 Report on Multiple Discrete Returns (Tiled Data) - Second Returns

The purpose of this section is to show a graphic of LiDAR tiled data points colored by second returns. Blank tiles can indicate a collection or processing problem dealing with LiDAR return attribute information.

[Data Source - E:\Franklin_County\las](#)

[Result Path - E:\Franklin_County\QAQC\1_1\ColorByReturns_Classified_SecondReturns.jpg](#)

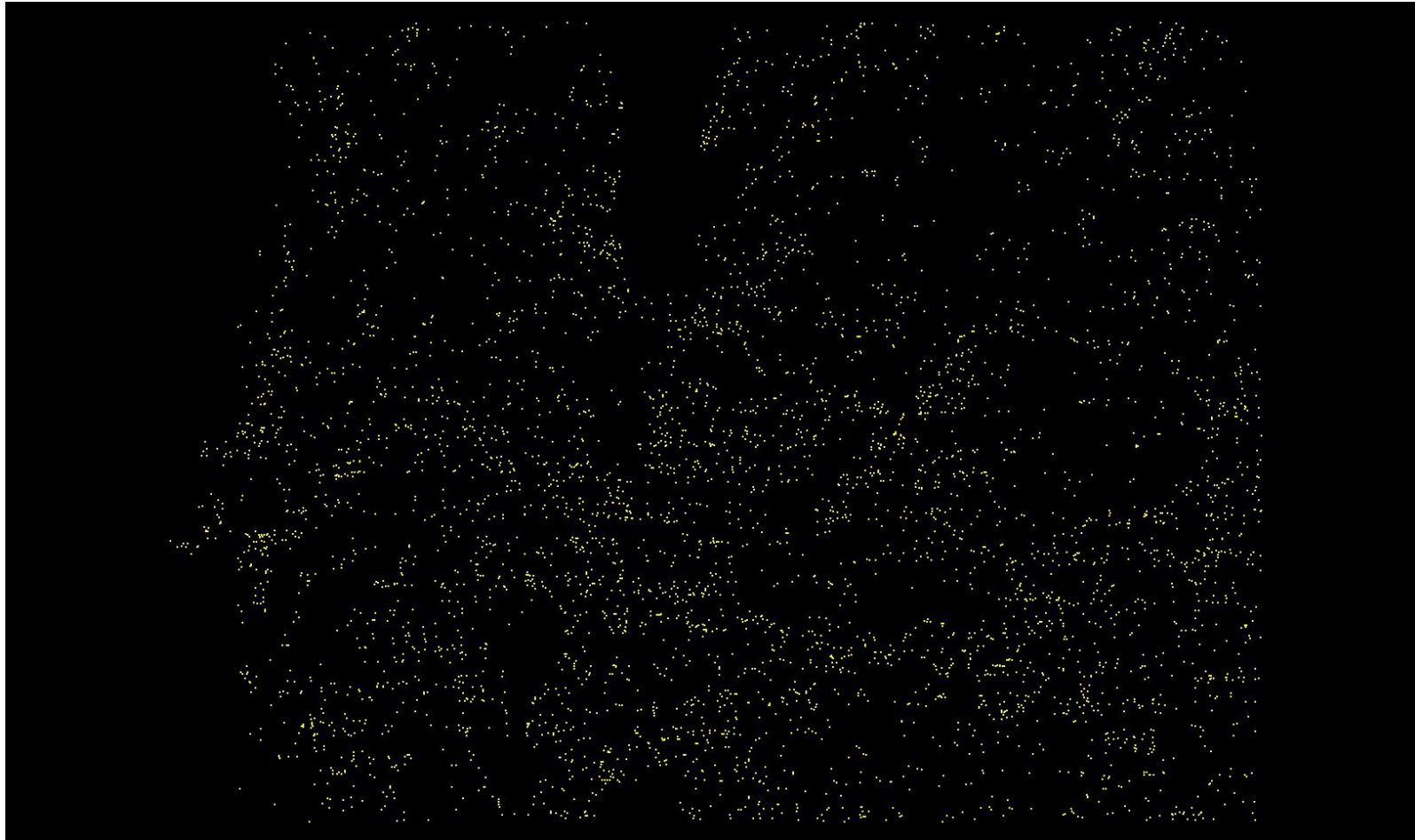


1.1 Report on Multiple Discrete Returns (Tiled Data) - Third Returns

The purpose of this section is to show a graphic of LiDAR tiled data points colored by third returns. Blank tiles can indicate a collection or processing problem dealing with LiDAR return attribute information.

[Data Source - E:\Franklin_County\las](#)

[Result Path - E:\Franklin_County\QAQC\1_1\ColorByReturns_Classified_ThirdReturns.jpg](#)



1.1 Report on Multiple Discrete Returns (Tiled Data) - Other Returns

The purpose of this section is to show a graphic of LiDAR tiled data points colored by fourth or other returns. Blank tiles can indicate a collection or processing problem dealing with LiDAR return attribute information.

[Data Source - E:\Franklin_County\las](#)

[Result Path - E:\Franklin_County\QAQC\1_1\ColorByReturns_Classified_OtherReturns.jpg](#)



1.2 Report on Intensity Values (Swath Data)

The USGS LiDAR Base Specification Version 1.0 requires: "Intensity values are required for each return. The values are to be recorded in the .las files in their native radiometric resolution."

The purpose of this section is to report on the presence and quantities of LiDAR intensity in the LAS swath data. It is important to understand that 8-bit intensity LiDAR systems have a valid intensity range from 0-255, and 12-bit intensity LiDAR systems have a valid intensity range from 0-4095.

[Boresighted Files - E:\Franklin_County\swath](#)

File	Minimum	Maximum	Mean	Median	Mode
140417_224329_1-1.las	00	255	24	24	04
140417_224329_1-2.las	00	255	25	26	04
140417_230025_1-1.las	00	255	29	32	04
140417_230025_1-2.las	00	255	28	31	04
140417_231322_1-1.las	00	255	30	33	04
140417_231322_1-2.las	00	255	30	33	04
140417_232632_1-1.las	00	255	29	32	04
140417_232632_1-2.las	00	255	32	35	39
140417_233933_1-1.las	00	255	31	34	04
140417_233933_1-2.las	00	255	30	33	04
140417_235212_1-1.las	00	255	30	33	04
140417_235212_1-2.las	00	255	31	34	04
140418_000524_1-1.las	00	255	28	30	04
140418_000524_1-2.las	00	255	28	30	04
140418_001909_1-1.las	00	255	25	27	04
140418_001909_1-2.las	00	255	29	30	04
140418_003250_1-1.las	00	255	29	30	04
140418_003250_1-2.las	00	255	25	26	04
140418_004640_1-1.las	00	255	28	30	04
140418_004640_1-2.las	00	255	28	31	04
140418_010058_1-1.las	00	255	28	31	04
140418_010058_1-2.las	00	255	28	29	04
140418_011447_1-1.las	00	255	26	27	04
140418_011447_1-2.las	00	255	28	30	04
140418_012827_1-1.las	00	255	28	29	04
140418_012827_1-2.las	00	255	27	28	04
140418_014215_1-1.las	00	255	28	29	04

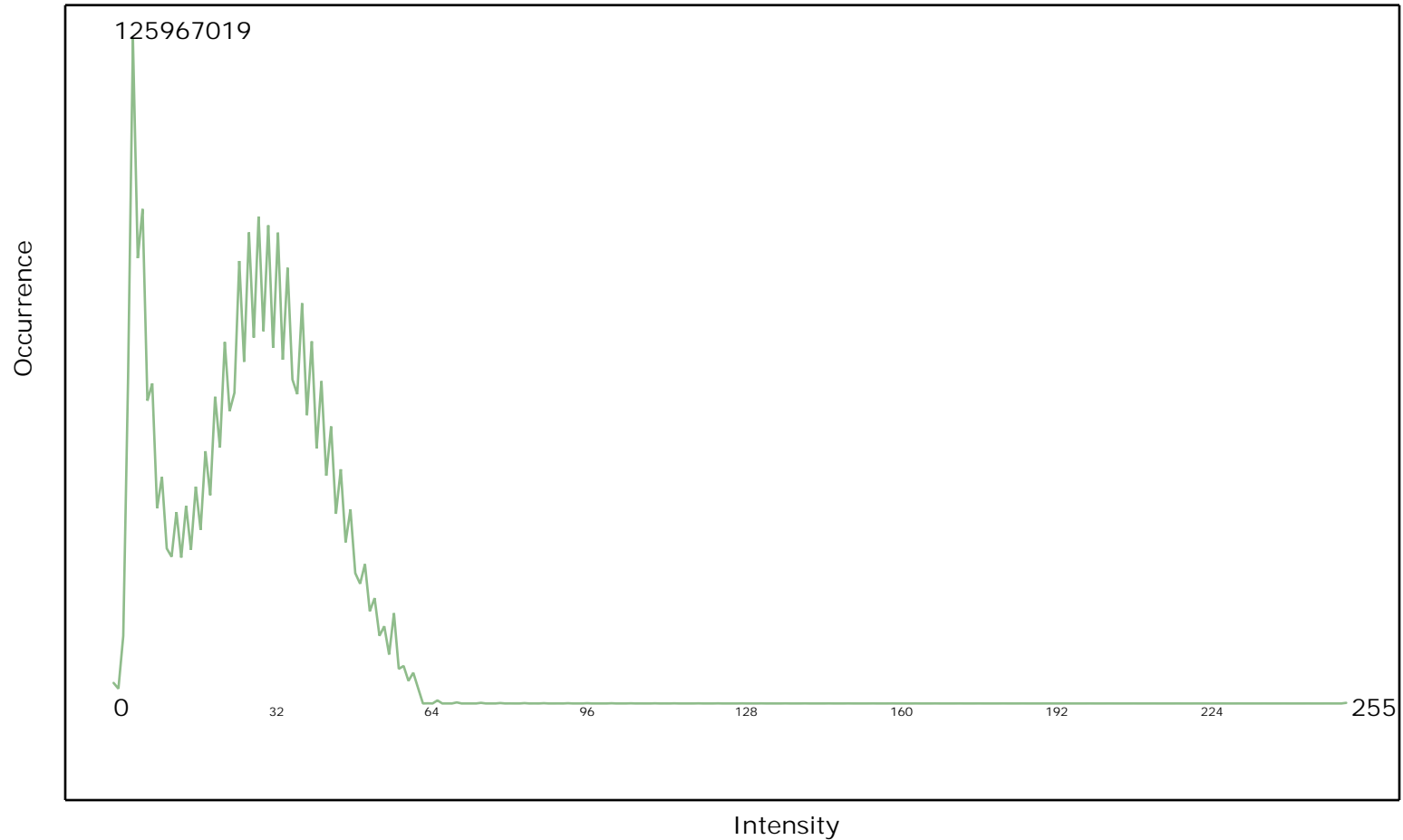
1.2 Report on Intensity (Swath Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
140418_014215_1-2.las	00	255	29	30	04
140418_020434_1.las	00	255	26	26	04
140418_145120_1.las	00	255	23	24	04
140418_150350_1-1.las	00	255	25	26	04
140418_150350_1-2.las	00	255	26	28	28
140418_151646_1-1.las	00	255	26	28	04
140418_151646_1-2.las	00	255	26	28	28
140418_152909_1-1.las	00	255	26	28	04
140418_152909_1-2.las	00	255	28	29	28
140418_154201_1-1.las	00	255	25	27	04
140418_154201_1-2.las	00	255	27	28	30
140418_155420_1-1.las	00	255	25	27	26
140418_155420_1-2.las	00	255	27	28	28
140418_160651_1-1.las	00	255	25	26	26
140418_160651_1-2.las	00	255	26	28	26
140418_161920_1-1.las	00	255	25	26	04
140418_161920_1-2.las	00	255	26	27	26
140418_163158_1-1.las	00	255	25	27	26
140418_163158_1-2.las	00	255	26	27	26
140418_164429_1-1.las	00	255	25	26	04
140418_164429_1-2.las	00	255	27	28	26
140418_165715_1-1.las	00	255	25	27	28
140418_165715_1-2.las	00	255	28	30	28
140418_171610_1.las	00	255	22	22	04
Average	00	255	27	29	04

1.2 Report on Intensity Values (Swath Data)

The purpose of this section is to show a frequency distribution chart of intensities throughout all of the LiDAR swath files. It is important to understand that 8-bit intensity LiDAR systems have a valid intensity range from 0-255, and 12-bit intensity LiDAR systems have a valid intensity range from 0-4095.

[Data Source - E:\Franklin_County\swath](#)

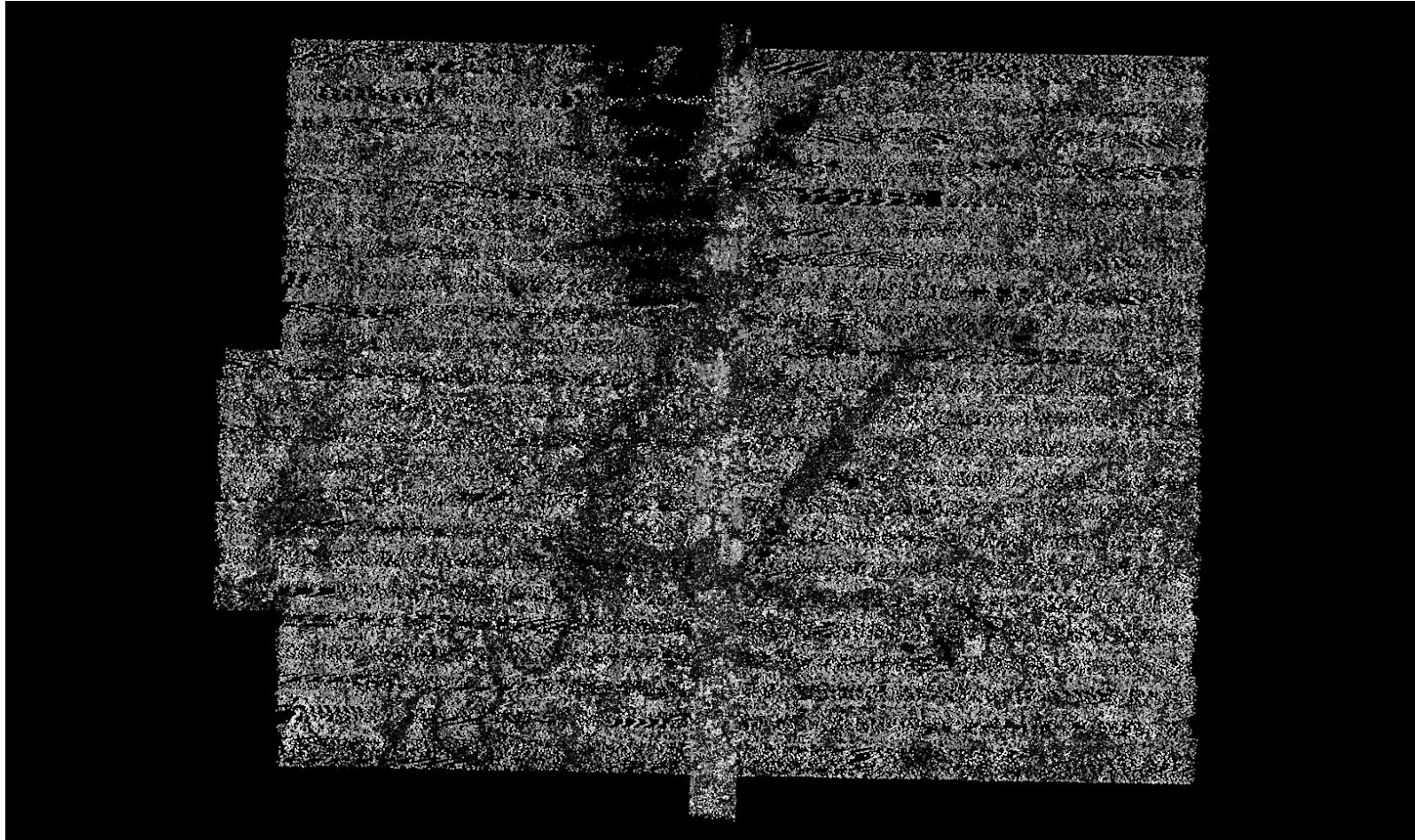


1.2 Report on Intensity Values (Swath Data)

The purpose of this section is to show a graphic of LiDAR swath data points colored by intensity. Blank flight lines can indicate a collection or processing problem dealing with LiDAR intensity attribute information.

[Data Source - E:\Franklin_County\swath](E:\Franklin_County\swath)

[Result Path - E:\Franklin_County\QAQC\1_2\ColorByIntensity_Boresighted.jpg](E:\Franklin_County\QAQC\1_2\ColorByIntensity_Boresighted.jpg)



1.2 Report on Intensity Values (Tiled Data)

The purpose of this section is to report on the presence and quantities of LiDAR intensity in the LAS tiled data. It is important to understand that 8-bit intensity LiDAR systems have a valid intensity range from 0-255, and 12-bit intensity LiDAR systems have a valid intensity range from 0-4095.

[Classified Files - E:\Franklin_County\las](#)

File	Minimum	Maximum	Mean	Median	Mode
07350465.las	00	139	24	26	04
07400465.las	00	255	15	10	04
07400470.las	00	255	22	22	04
07400475.las	00	255	27	28	04
07450430.las	00	255	38	41	45
07450435.las	00	255	37	37	34
07450440.las	00	255	30	30	30
07450445.las	00	255	28	30	32
07450450.las	00	255	32	32	30
07450455.las	00	85	29	31	32
07450460.las	00	139	22	22	04
07450465.las	00	107	18	14	04
07450470.las	00	255	28	28	26
07450475.las	00	255	25	26	04
07450480.las	00	255	19	17	04
07450485.las	00	143	25	27	04
07450490.las	00	255	22	23	04
07450495.las	00	255	25	27	04
07450500.las	00	255	29	30	30
07500430.las	00	255	32	33	32
07500435.las	00	255	31	34	36
07500440.las	00	255	29	31	30
07500445.las	00	255	30	32	34
07500450.las	00	193	33	35	34
07500455.las	00	255	34	35	30
07500460.las	00	255	28	29	28
07500465.las	00	255	27	28	04
07500470.las	00	188	28	30	04
07500475.las	00	255	33	34	30

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
07500480.las	00	255	27	28	04
07500485.las	00	255	31	33	30
07500490.las	00	255	20	20	04
07500495.las	00	255	25	27	26
07500500.las	00	255	23	25	04
07500505.las	00	89	24	26	26
07500510.las	00	255	30	30	26
07500515.las	00	255	29	30	26
07500520.las	00	255	25	26	04
07500525.las	00	255	25	26	26
07500530.las	00	148	27	27	26
07550430.las	00	175	27	30	04
07550435.las	00	255	27	30	04
07550440.las	00	255	26	28	04
07550445.las	00	255	33	36	41
07550450.las	00	255	37	38	39
07550455.las	00	255	35	36	30
07550460.las	00	255	32	32	28
07550465.las	00	255	32	32	32
07550470.las	00	255	29	31	04
07550475.las	00	255	29	31	04
07550480.las	00	255	31	32	32
07550485.las	00	255	30	31	30
07550490.las	00	255	29	30	30
07550495.las	00	255	28	29	28
07550500.las	00	233	28	28	26
07550505.las	00	255	25	27	04
07550510.las	00	255	23	25	04
07550515.las	00	255	21	23	04
07550520.las	00	255	20	21	04
07550525.las	00	255	25	27	04
07550530.las	00	255	26	28	28
07600430.las	00	255	28	32	04

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
07600435.las	00	184	25	28	04
07600440.las	00	255	28	31	04
07600445.las	00	255	29	31	04
07600450.las	00	255	32	35	04
07600455.las	00	255	30	32	04
07600460.las	00	255	31	32	28
07600465.las	00	255	33	34	30
07600470.las	00	255	30	31	30
07600475.las	00	255	29	31	04
07600480.las	00	255	29	31	04
07600485.las	00	255	28	30	04
07600490.las	00	255	27	28	04
07600495.las	00	255	27	29	28
07600500.las	00	255	29	31	28
07600505.las	00	255	28	29	30
07600510.las	00	255	27	28	28
07600515.las	00	255	28	29	26
07600520.las	00	255	25	27	04
07600525.las	00	255	27	28	26
07600530.las	00	255	27	28	26
07650430.las	00	255	27	30	04
07650435.las	00	255	29	33	04
07650440.las	00	255	30	33	39
07650445.las	00	255	28	32	04
07650450.las	00	255	28	31	04
07650455.las	00	255	29	31	04
07650460.las	00	255	29	30	30
07650465.las	00	255	32	33	26
07650470.las	00	255	32	33	30
07650475.las	00	255	31	32	04
07650480.las	00	255	31	32	04
07650485.las	00	255	30	31	04
07650490.las	00	82	29	31	30

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
07650495.las	00	255	31	32	28
07650500.las	00	255	29	30	30
07650505.las	00	196	29	31	30
07650510.las	00	255	30	32	28
07650515.las	00	255	27	29	26
07650520.las	00	255	29	31	28
07650525.las	00	255	27	29	26
07650530.las	00	206	24	26	04
07700430.las	00	255	27	31	04
07700435.las	00	193	27	29	04
07700440.las	00	255	28	31	04
07700445.las	00	255	26	28	04
07700450.las	00	255	27	30	04
07700455.las	00	255	27	29	04
07700460.las	00	255	28	29	30
07700465.las	00	224	29	31	04
07700470.las	00	255	30	31	30
07700475.las	00	255	29	30	04
07700480.las	00	255	25	26	04
07700485.las	00	255	27	28	04
07700490.las	00	255	26	28	04
07700495.las	00	238	29	30	28
07700500.las	00	255	31	32	30
07700505.las	00	255	32	33	28
07700510.las	00	255	30	31	26
07700515.las	00	255	28	30	28
07700520.las	00	255	29	31	26
07700525.las	00	255	27	29	26
07700530.las	00	193	30	31	28
07750430.las	00	255	25	27	04
07750435.las	00	255	27	30	04
07750440.las	00	255	27	30	34
07750445.las	00	255	27	29	04

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
07750450.las	00	255	28	29	04
07750455.las	00	255	31	32	28
07750460.las	00	255	28	29	04
07750465.las	00	255	28	30	04
07750470.las	00	255	29	30	04
07750475.las	00	255	26	24	04
07750480.las	00	255	27	28	04
07750485.las	00	255	30	31	30
07750490.las	00	255	28	30	30
07750495.las	00	255	27	28	28
07750500.las	00	255	25	27	04
07750505.las	00	255	30	32	28
07750510.las	00	255	27	29	28
07750515.las	00	255	25	26	04
07750520.las	00	255	25	26	04
07750525.las	00	255	27	28	23
07750530.las	00	255	26	27	26
07800430.las	00	255	27	29	04
07800435.las	00	139	31	33	34
07800440.las	00	255	25	27	04
07800445.las	00	255	33	36	39
07800450.las	00	255	36	37	43
07800455.las	00	255	29	30	28
07800460.las	00	255	25	26	04
07800465.las	00	255	29	32	04
07800470.las	00	255	26	28	04
07800475.las	00	255	25	25	04
07800480.las	00	255	28	30	04
07800485.las	00	224	27	29	04
07800490.las	00	255	27	29	04
07800495.las	00	255	25	28	04
07800500.las	00	255	28	30	28
07800505.las	00	255	30	31	30

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
07800510.las	00	255	24	25	04
07800515.las	00	255	28	28	26
07800520.las	00	255	22	23	04
07800525.las	00	255	31	31	28
07800530.las	00	255	27	29	26
07850430.las	00	255	23	21	04
07850435.las	00	255	28	32	04
07850440.las	00	255	29	32	04
07850445.las	00	255	26	29	04
07850450.las	00	255	25	27	04
07850455.las	00	255	17	15	04
07850460.las	00	255	17	14	04
07850465.las	00	255	30	32	04
07850470.las	00	255	22	21	04
07850475.las	00	255	28	30	04
07850480.las	00	255	31	33	30
07850485.las	00	255	32	33	30
07850490.las	00	255	31	32	30
07850495.las	00	255	28	30	04
07850500.las	00	255	30	32	28
07850505.las	00	255	20	20	04
07850510.las	00	255	24	26	04
07850515.las	00	255	27	28	26
07850520.las	00	255	23	24	04
07850525.las	00	255	20	21	04
07850530.las	00	143	25	26	30
07900430.las	00	255	31	33	39
07900435.las	00	255	24	24	04
07900440.las	00	255	33	34	34
07900445.las	00	255	31	35	04
07900450.las	00	255	25	27	04
07900455.las	00	76	15	10	04
07900460.las	00	255	17	13	04

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
07900465.las	00	148	19	15	04
07900470.las	00	255	18	15	04
07900475.las	00	255	18	15	04
07900480.las	00	255	26	26	04
07900485.las	00	131	30	30	30
07900490.las	00	255	30	31	28
07900495.las	00	255	23	24	04
07900500.las	00	255	24	25	04
07900505.las	00	255	15	11	04
07900510.las	00	255	17	13	04
07900515.las	00	255	22	24	04
07900520.las	00	255	18	14	04
07900525.las	00	255	20	21	04
07900530.las	00	255	21	20	04
07950430.las	00	80	35	36	34
07950435.las	00	202	30	34	04
07950440.las	00	255	30	33	34
07950445.las	00	255	33	36	34
07950450.las	00	255	31	33	34
07950455.las	00	255	20	17	04
07950460.las	00	255	21	20	04
07950465.las	00	255	29	31	04
07950470.las	00	255	24	24	04
07950475.las	00	211	20	18	04
07950480.las	00	255	22	21	04
07950485.las	00	157	26	27	04
07950490.las	00	255	28	29	23
07950495.las	00	255	23	25	04
07950500.las	00	255	17	12	04
07950505.las	00	255	14	09	04
07950510.las	00	255	13	10	04
07950515.las	00	255	14	10	04
07950520.las	00	255	18	13	04

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
07950525.las	00	255	17	12	04
07950530.las	00	255	27	14	04
08000430.las	00	255	31	33	34
08000435.las	00	255	28	31	04
08000440.las	00	255	29	32	04
08000445.las	00	255	29	33	04
08000450.las	00	255	30	32	04
08000455.las	00	255	21	19	04
08000460.las	00	255	25	25	04
08000465.las	00	255	30	32	04
08000470.las	00	255	30	32	04
08000475.las	00	255	24	24	04
08000480.las	00	255	23	21	04
08000485.las	00	184	22	20	04
08000490.las	00	255	19	18	04
08000495.las	00	255	19	17	04
08000500.las	00	255	13	10	04
08000505.las	00	255	13	09	04
08000510.las	00	255	16	11	04
08000515.las	00	255	12	09	04
08000520.las	00	255	30	14	04
08000525.las	00	255	22	14	04
08000530.las	00	255	35	19	04
08050430.las	00	255	28	31	04
08050435.las	00	255	28	31	04
08050440.las	00	255	23	20	04
08050445.las	00	255	25	23	04
08050450.las	00	255	25	25	04
08050455.las	00	255	17	14	04
08050460.las	00	255	22	20	04
08050465.las	00	255	30	32	04
08050470.las	00	255	31	32	30
08050475.las	00	255	24	24	04

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08050480.las	00	255	25	25	04
08050485.las	00	255	27	28	04
08050490.las	00	255	22	23	04
08050495.las	00	255	18	16	04
08050500.las	00	255	17	14	04
08050505.las	00	255	18	15	04
08050510.las	00	255	19	13	04
08050515.las	00	255	16	12	04
08050520.las	00	255	21	19	04
08050525.las	00	255	16	13	04
08050530.las	00	255	28	17	04
08100430.las	00	255	29	33	04
08100435.las	00	255	29	33	04
08100440.las	00	255	27	29	04
08100445.las	00	255	25	23	04
08100450.las	00	255	25	23	04
08100455.las	00	255	19	17	04
08100460.las	00	255	27	29	04
08100465.las	00	255	28	30	26
08100470.las	00	255	28	30	04
08100475.las	00	255	28	29	04
08100480.las	00	255	23	20	04
08100485.las	00	255	27	27	04
08100490.las	00	255	23	23	04
08100495.las	00	255	21	21	04
08100500.las	00	255	18	15	04
08100505.las	00	255	25	26	28
08100510.las	00	255	22	20	04
08100515.las	00	255	18	15	04
08100520.las	00	255	21	23	04
08100525.las	00	148	24	26	04
08100530.las	00	255	24	26	04
08150430.las	00	255	30	33	04

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08150435.las	00	255	33	36	39
08150440.las	00	255	30	33	04
08150445.las	00	255	27	26	04
08150450.las	00	255	24	23	04
08150455.las	00	80	25	27	04
08150460.las	00	255	24	25	04
08150465.las	00	251	27	29	04
08150470.las	00	255	32	33	28
08150475.las	00	255	27	28	04
08150480.las	00	255	24	21	04
08150485.las	00	255	24	21	04
08150490.las	00	255	27	28	28
08150495.las	00	255	26	28	04
08150500.las	00	255	23	25	04
08150505.las	00	255	23	23	04
08150510.las	00	255	23	24	04
08150515.las	00	255	22	22	04
08150520.las	00	255	22	21	04
08150525.las	00	255	21	23	04
08150530.las	00	255	27	29	26
08200430.las	00	255	29	33	04
08200435.las	00	255	29	33	04
08200440.las	00	255	26	29	04
08200445.las	00	255	30	33	04
08200450.las	00	255	21	18	04
08200455.las	00	255	27	29	04
08200460.las	00	255	29	31	04
08200465.las	00	255	23	24	04
08200470.las	00	255	21	19	04
08200475.las	00	255	31	32	30
08200480.las	00	255	26	27	04
08200485.las	00	255	27	28	04
08200490.las	00	255	28	30	30

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08200495.las	00	255	26	28	04
08200500.las	00	255	30	31	30
08200505.las	00	255	28	30	32
08200510.las	00	255	28	29	28
08200515.las	00	255	27	28	26
08200520.las	00	255	21	22	04
08200525.las	00	255	18	15	04
08200530.las	00	255	20	22	04
08250430.las	00	255	30	34	04
08250435.las	00	255	28	32	04
08250440.las	00	255	36	37	36
08250445.las	00	255	32	34	34
08250450.las	00	255	23	24	04
08250455.las	00	255	33	34	30
08250460.las	00	255	32	33	30
08250465.las	00	179	33	34	30
08250470.las	00	255	18	14	04
08250475.las	00	255	17	13	04
08250480.las	00	255	26	27	04
08250485.las	00	255	30	31	28
08250490.las	00	255	24	25	04
08250495.las	00	255	28	30	04
08250500.las	00	255	27	29	28
08250505.las	00	255	27	28	26
08250510.las	00	255	26	27	28
08250515.las	00	98	27	28	26
08250520.las	00	255	31	31	30
08250525.las	00	125	23	25	04
08250530.las	00	255	18	18	04
08300430.las	00	255	31	34	39
08300435.las	00	255	30	33	39
08300440.las	00	255	35	37	39
08300445.las	00	255	37	40	41

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08300450.las	00	255	25	26	04
08300455.las	00	85	34	35	32
08300460.las	00	166	34	35	30
08300465.las	00	255	28	30	30
08300470.las	00	255	28	30	04
08300475.las	00	233	21	21	04
08300480.las	00	255	19	17	04
08300485.las	00	255	30	30	30
08300490.las	00	255	26	28	28
08300495.las	00	255	25	28	04
08300500.las	00	255	29	30	30
08300505.las	00	255	29	30	26
08300510.las	00	166	29	29	28
08300515.las	00	255	27	28	23
08300520.las	00	255	29	30	26
08300525.las	00	255	26	28	32
08300530.las	00	255	25	27	28
08350430.las	00	255	33	34	34
08350435.las	00	255	32	34	34
08350440.las	00	255	35	38	39
08350445.las	00	255	28	30	04
08350450.las	00	255	24	25	04
08350455.las	00	255	32	32	30
08350460.las	00	255	34	36	32
08350465.las	00	255	28	30	04
08350470.las	00	255	26	27	04
08350475.las	00	255	28	29	04
08350480.las	00	255	26	27	04
08350485.las	00	112	18	16	04
08350490.las	00	255	26	28	30
08350495.las	00	255	26	28	28
08350500.las	00	255	30	31	36
08350505.las	00	179	31	31	26

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08350510.las	00	255	28	29	26
08350515.las	00	255	28	29	26
08350520.las	00	255	29	30	26
08350525.las	00	255	28	29	28
08350530.las	00	255	25	27	30
08400430.las	00	255	29	32	04
08400435.las	00	255	32	35	36
08400440.las	00	255	32	36	04
08400445.las	00	255	30	32	04
08400450.las	00	255	27	28	04
08400455.las	00	220	29	30	28
08400460.las	00	255	33	35	32
08400465.las	00	255	30	33	04
08400470.las	00	255	31	33	04
08400475.las	00	255	26	27	04
08400480.las	00	255	35	36	34
08400485.las	00	157	25	26	04
08400490.las	00	255	19	19	04
08400495.las	00	255	27	29	34
08400500.las	00	255	28	30	30
08400505.las	00	255	32	33	28
08400510.las	00	184	29	30	28
08400515.las	00	255	28	29	26
08400520.las	00	255	27	29	28
08400525.las	00	255	29	30	28
08400530.las	00	255	25	26	26
08450430.las	00	255	32	34	34
08450435.las	00	255	32	35	39
08450440.las	00	255	28	31	04
08450445.las	00	255	22	20	04
08450450.las	00	255	25	24	04
08450455.las	00	255	25	26	04
08450460.las	00	255	24	24	04

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08450465.las	00	255	34	36	34
08450470.las	00	255	35	37	32
08450475.las	00	255	32	33	32
08450480.las	00	255	30	31	30
08450485.las	00	255	32	32	30
08450490.las	00	255	25	26	23
08450495.las	00	255	24	26	26
08450500.las	00	255	29	31	30
08450505.las	00	255	29	30	26
08450510.las	00	255	28	29	26
08450515.las	00	94	28	29	26
08450520.las	00	255	28	29	28
08450525.las	00	224	28	29	30
08450530.las	00	255	26	28	28
08500430.las	00	255	31	34	34
08500435.las	00	255	35	38	39
08500440.las	00	255	34	37	41
08500445.las	00	255	31	35	04
08500450.las	00	255	29	31	04
08500455.las	00	175	24	24	04
08500460.las	00	255	30	32	04
08500465.las	00	255	28	30	04
08500470.las	00	255	35	37	30
08500475.las	00	255	33	34	30
08500480.las	00	255	32	32	28
08500485.las	00	255	35	34	28
08500490.las	00	71	26	27	26
08500495.las	00	255	22	24	26
08500500.las	00	255	29	30	26
08500505.las	00	255	29	30	23
08500510.las	00	255	31	31	30
08500515.las	00	255	28	29	26
08500520.las	00	255	26	27	26

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08500525.las	00	255	26	28	26
08500530.las	00	255	29	30	28
08550430.las	00	255	31	35	39
08550435.las	00	255	31	34	04
08550440.las	00	255	28	31	04
08550445.las	00	255	26	26	04
08550450.las	00	255	33	36	04
08550455.las	00	255	28	30	04
08550460.las	00	255	29	30	04
08550465.las	00	255	31	33	04
08550470.las	00	255	35	37	34
08550475.las	00	255	34	35	30
08550480.las	00	255	33	34	28
08550485.las	00	255	29	31	28
08550490.las	00	255	23	24	04
08550495.las	00	255	23	24	04
08550500.las	00	255	26	28	26
08550505.las	00	112	22	24	04
08550510.las	00	251	27	28	28
08550515.las	00	255	26	27	26
08550520.las	00	255	23	24	04
08550525.las	00	255	27	28	23
08550530.las	00	255	29	30	28
08600430.las	00	255	26	28	04
08600435.las	00	255	31	34	04
08600440.las	00	255	32	36	04
08600445.las	00	255	29	33	04
08600450.las	00	255	33	37	04
08600455.las	00	255	30	32	04
08600460.las	00	255	33	34	30
08600465.las	00	255	28	30	04
08600470.las	00	255	33	35	30
08600475.las	00	255	34	35	34

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08600480.las	00	255	31	32	32
08600485.las	00	255	30	31	32
08600490.las	00	255	25	26	04
08600495.las	00	255	26	27	26
08600500.las	00	255	25	27	04
08600505.las	00	255	28	29	23
08600510.las	00	255	25	26	04
08600515.las	00	255	25	26	28
08600520.las	00	255	21	21	04
08600525.las	00	255	23	25	04
08600530.las	00	255	25	27	04
08650430.las	00	255	27	29	04
08650435.las	00	255	29	32	04
08650440.las	00	255	36	39	39
08650445.las	00	255	37	41	43
08650450.las	00	255	35	38	41
08650455.las	00	255	33	34	34
08650460.las	00	255	30	32	04
08650465.las	00	255	29	32	04
08650470.las	00	255	28	30	04
08650475.las	00	255	36	36	28
08650480.las	00	255	35	36	30
08650485.las	00	255	31	31	30
08650490.las	00	255	29	30	28
08650495.las	00	255	30	32	30
08650500.las	00	255	26	27	04
08650505.las	00	185	25	27	23
08650510.las	00	255	26	27	28
08650515.las	00	255	26	27	26
08650520.las	00	255	28	30	28
08650525.las	00	255	25	27	04
08650530.las	00	255	21	22	04
08700430.las	00	255	30	34	04

1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08700435.las	00	255	35	37	36
08700440.las	00	193	33	36	39
08700445.las	00	255	33	36	04
08700450.las	00	255	33	36	39
08700455.las	00	255	30	31	04
08700460.las	00	255	27	29	04
08700465.las	00	136	29	31	04
08700470.las	00	255	25	27	04
08700475.las	00	255	31	32	28
08700480.las	00	255	27	28	04
08700485.las	00	255	28	30	04
08700490.las	00	255	29	30	28
08700495.las	00	255	28	30	30
08700500.las	00	255	26	28	04
08700505.las	00	202	23	24	04
08700510.las	00	255	26	27	28
08700515.las	00	255	23	25	04
08700520.las	00	255	25	27	26
08700525.las	00	255	27	29	28
08700530.las	00	255	23	24	04
08750430.las	00	255	35	38	39
08750435.las	00	255	34	36	39
08750440.las	00	255	33	35	36
08750445.las	00	255	30	33	04
08750450.las	00	255	32	35	04
08750455.las	00	255	28	30	04
08750460.las	00	255	30	32	04
08750465.las	00	255	26	28	04
08750470.las	00	255	28	30	04
08750475.las	00	255	29	31	04
08750480.las	00	255	26	27	04
08750485.las	00	148	26	27	04
08750490.las	00	255	27	29	04

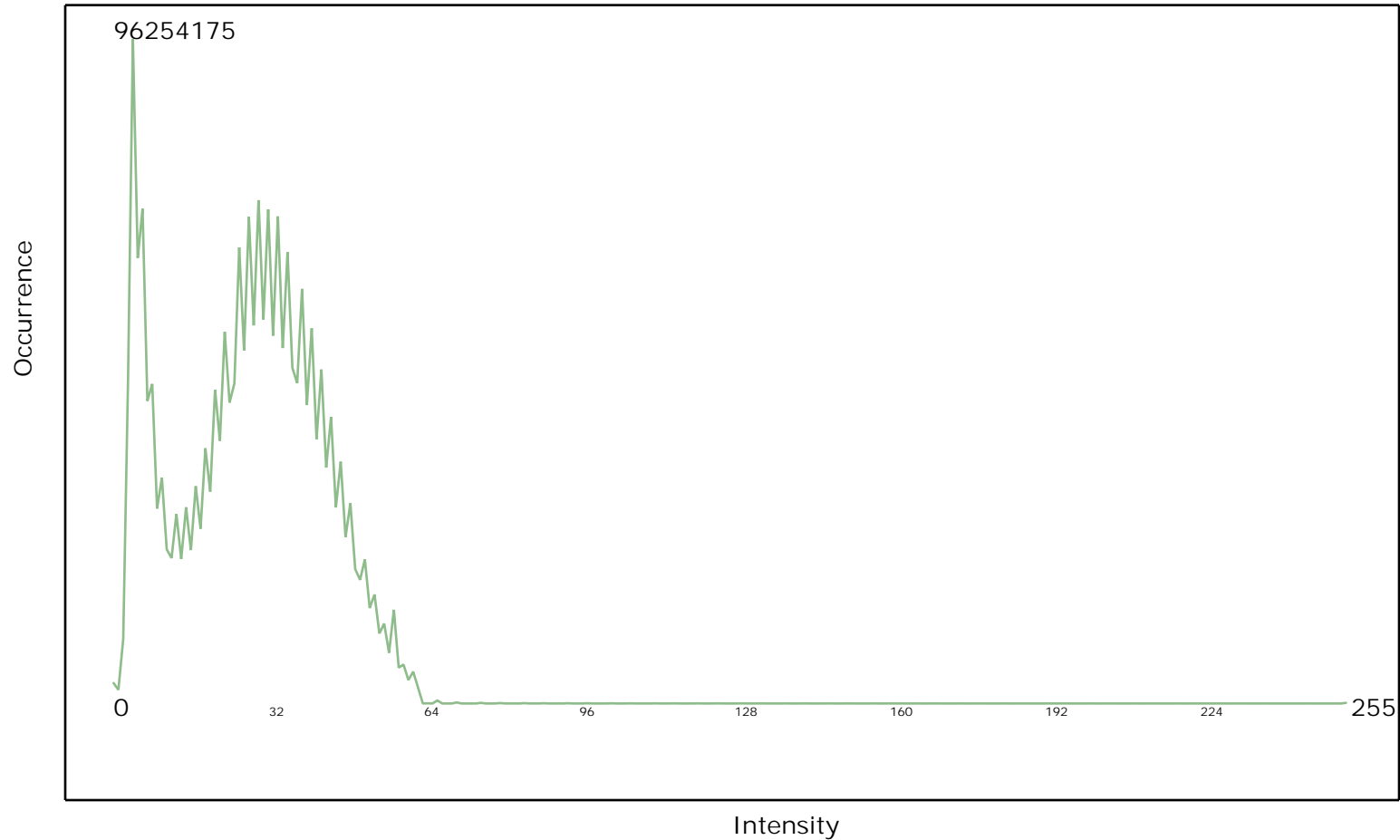
1.2 Report on Intensity (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
08750495.las	00	255	26	28	04
08750500.las	00	255	28	29	30
08750505.las	00	255	27	28	28
08750510.las	00	255	25	27	26
08750515.las	00	255	28	29	28
08750520.las	00	255	29	30	28
08750525.las	00	148	31	32	26
08750530.las	00	255	31	32	26
Average	00	255	27	29	04

1.2 Report on Intensity Values (Tiled Data)

The purpose of this section is to show a frequency distribution chart of intensities throughout all of the LiDAR tiled files. It is important to understand that 8-bit intensity LiDAR systems have a valid intensity range from 0-255, and 12-bit intensity LiDAR systems have a valid intensity range from 0-4095.

[Data Source - E:\Franklin County\las](#)

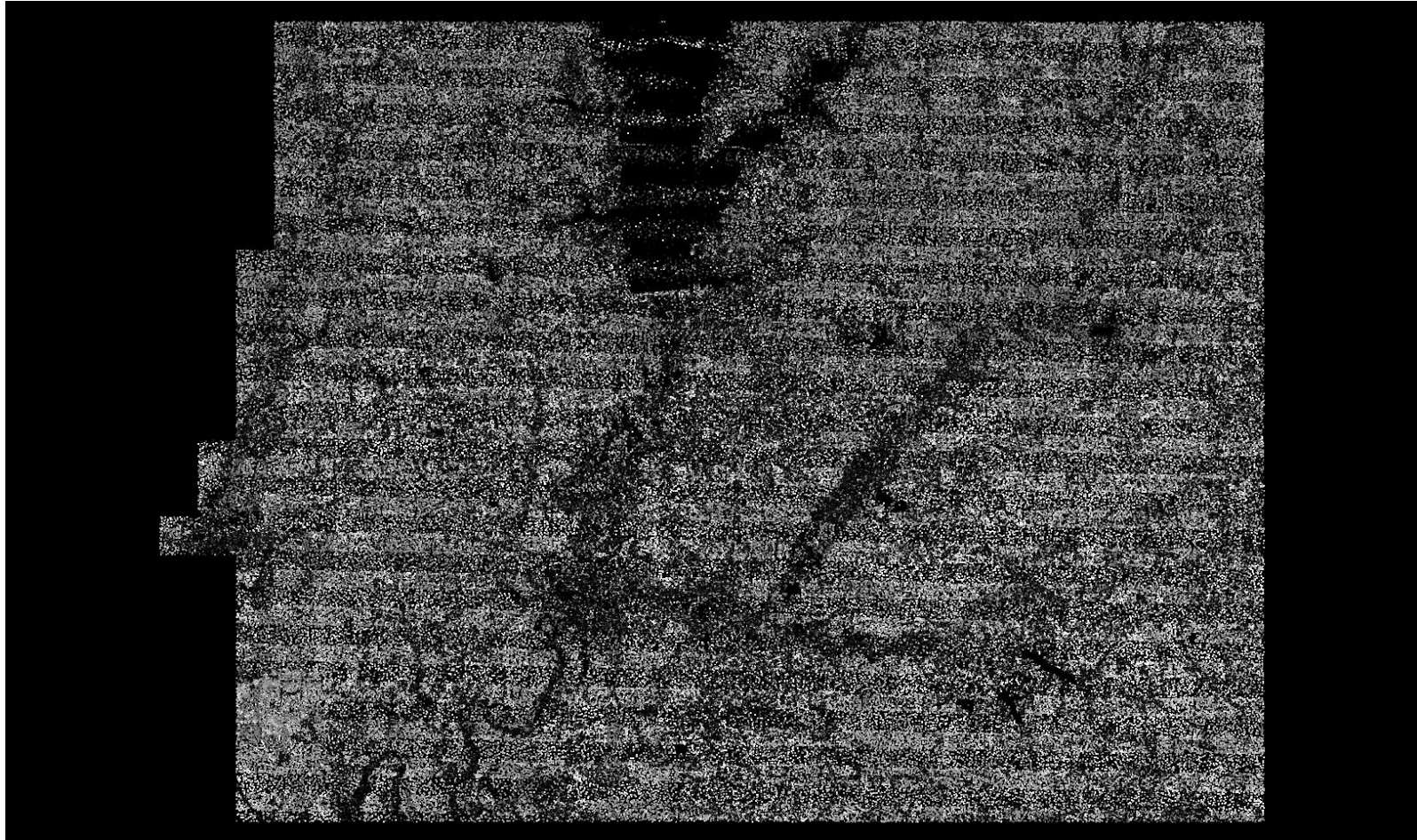


1.2 Report on Intensity Values (Tiled Data)

The purpose of this section is to show a graphic of LiDAR tiled data points colored by intensity. Blank tiles can indicate a processing problem dealing with LiDAR intensity attribute information.

[Data Source - E:\Franklin_County\las](#)

[Result Path - E:\Franklin_County\QAQC\1_2\ColorByIntensity_Classified.jpg](#)



1.3 Report on Point Density and Nominal Pulse Spacing (NPS) (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "An NPS of 2 meters or less is required. Dependent on the local terrain and land cover conditions in the project area, a greater point density may be required on specific projects. Assessment of the NPS will be made against single swath, first-return only data, located within the geometrically usable center portion (typically 90 percent) of each swath, acceptable data voids excluded. NPS will be calculated as the square root of the average area per point. Average along-track and cross-track point spacing should be comparable (within 10 percent)."

The purpose of this section is to report on the LiDAR point density and nominal point spacing by swath file. Averages by swath files (not including overlap), project boundary polygons (including swath overlap), and aggregate project boundary polygons (including swath overlap) are reported.

[Boresighted Files - E:\Franklin County\swath](#)

Units: US Survey Feet

File	Number of First Returns	Area of Swath	Point Density	NPS
140417_224329_1-1.las	56,491,313	577,454,544	0.10/1.08	3.20/0.98
140417_224329_1-2.las	26,099,398	254,128,464	0.10/1.08	3.12/0.95
140417_230025_1-1.las	61,179,955	647,577,216	0.09/0.97	3.25/0.99
140417_230025_1-2.las	37,206,355	361,897,488	0.10/1.08	3.12/0.95
140417_231322_1-1.las	59,633,251	587,399,760	0.10/1.08	3.14/0.96
140417_231322_1-2.las	42,036,717	431,891,712	0.10/1.08	3.21/0.98
140417_232632_1-1.las	60,227,676	591,575,472	0.10/1.08	3.13/0.95
140417_232632_1-2.las	42,239,625	428,469,120	0.10/1.08	3.18/0.97
140417_233933_1-1.las	59,762,113	581,344,560	0.10/1.08	3.12/0.95
140417_233933_1-2.las	42,676,332	429,631,920	0.10/1.08	3.17/0.97
140417_235212_1-1.las	60,365,007	613,521,648	0.10/1.08	3.19/0.97
140417_235212_1-2.las	39,817,169	388,398,960	0.10/1.08	3.12/0.95
140418_000524_1-1.las	57,319,166	557,909,712	0.10/1.08	3.12/0.95
140418_000524_1-2.las	51,755,398	515,333,952	0.10/1.08	3.16/0.96
140418_001909_1-1.las	57,615,565	576,528,480	0.10/1.08	3.16/0.96
140418_001909_1-2.las	50,888,611	501,482,016	0.10/1.08	3.14/0.96
140418_003250_1-1.las	58,984,022	550,055,664	0.11/1.18	3.05/0.93
140418_003250_1-2.las	53,703,303	534,564,144	0.10/1.08	3.16/0.96
140418_004640_1-1.las	59,392,337	599,292,000	0.10/1.08	3.18/0.97
140418_004640_1-2.las	48,755,275	490,749,120	0.10/1.08	3.17/0.97
140418_010058_1-1.las	57,825,746	540,930,096	0.11/1.18	3.06/0.93
140418_010058_1-2.las	56,106,788	543,475,152	0.10/1.08	3.11/0.95
140418_011447_1-1.las	57,505,102	586,103,472	0.10/1.08	3.19/0.97
140418_011447_1-2.las	50,589,685	506,010,672	0.10/1.08	3.16/0.96
140418_012827_1-1.las	59,117,871	557,329,392	0.11/1.18	3.07/0.94

1.3 Report on Point Density and NPS (Swath Data) - continued

File	Number of First Returns	Area of Swath	Point Density	NPS
140418_012827_1-2.las	54,177,123	527,454,000	0.10/1.08	3.12/0.95
140418_014215_1-1.las	59,980,454	619,881,552	0.10/1.08	3.21/0.98
140418_014215_1-2.las	46,653,956	468,990,864	0.10/1.08	3.17/0.97
140418_020434_1.las	54,353,982	539,622,144	0.10/1.08	3.15/0.96
140418_145120_1.las	32,363,727	325,139,040	0.10/1.08	3.17/0.97
140418_150350_1-1.las	60,663,693	607,602,672	0.10/1.08	3.16/0.96
140418_150350_1-2.las	41,700,770	412,894,944	0.10/1.08	3.15/0.96
140418_151646_1-1.las	60,150,626	611,288,352	0.10/1.08	3.19/0.97
140418_151646_1-2.las	39,096,865	393,000,336	0.10/1.08	3.17/0.97
140418_152909_1-1.las	62,082,262	633,775,392	0.10/1.08	3.20/0.98
140418_152909_1-2.las	36,619,141	370,033,920	0.10/1.08	3.18/0.97
140418_154201_1-1.las	62,164,386	651,031,776	0.10/1.08	3.24/0.99
140418_154201_1-2.las	33,495,889	341,053,488	0.10/1.08	3.19/0.97
140418_155420_1-1.las	63,521,519	658,087,488	0.10/1.08	3.22/0.98
140418_155420_1-2.las	32,753,755	323,571,600	0.10/1.08	3.14/0.96
140418_160651_1-1.las	63,149,269	674,688,096	0.09/0.97	3.27/1.00
140418_160651_1-2.las	28,147,096	290,508,192	0.10/1.08	3.21/0.98
140418_161920_1-1.las	61,993,799	634,456,080	0.10/1.08	3.20/0.98
140418_161920_1-2.las	32,780,450	326,129,040	0.10/1.08	3.15/0.96
140418_163158_1-1.las	63,231,216	658,332,864	0.10/1.08	3.23/0.98
140418_163158_1-2.las	28,709,279	289,732,896	0.10/1.08	3.18/0.97
140418_164429_1-1.las	61,806,416	628,658,064	0.10/1.08	3.19/0.97
140418_164429_1-2.las	30,739,928	309,682,800	0.10/1.08	3.17/0.97
140418_165715_1-1.las	62,309,731	642,199,392	0.10/1.08	3.21/0.98
140418_165715_1-2.las	28,286,065	273,057,840	0.10/1.08	3.11/0.95
140418_171610_1.las	32,057,684	328,893,552	0.10/1.08	3.20/0.98
Average			0.10/1.08	3.17/0.97
			pp Square US Survey Feet/ pp Square Meter	US Survey Feet/ Meter
0	2,154,782,956	14,124,999,989	0.15/1.61	2.56/0.78
Aggregate	2,154,782,956	14,124,999,989	0.15/1.61	2.56/0.78
			pp Square US Survey Feet/ pp Square Meter	US Survey Feet/ Meter

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data)

The USGS LiDAR Base Specification Version 1.0 states: "In general, the target NPS for a project should not be achieved through swath overlap or multiple passes. Such collection techniques may be permitted with prior approval."

The purpose of this section is to report on the LiDAR point density and nominal point spacing by tiled file. Point densities and NPS by tile are calculated by including any overlapping swath data within each tile. These statistics are for tiled LAS files. Not all LAS files fill tiles completely, especially along project boundaries. This may skew the calculated density and NPS values for partially filled tiles.

[Classified Files - E:\Franklin County\las](#)

Units: US Survey Feet

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
07350465	3,742,795	25,000,000	0.15/1.61	2.58/0.79
07400465	3,417,156	24,999,998	0.14/1.51	2.71/0.83
07400470	3,005,874	24,999,998	0.12/1.29	2.88/0.88
07400475	3,655,696	25,000,000	0.15/1.61	2.62/0.80
07450430	3,178,696	25,000,002	0.13/1.40	2.80/0.85
07450435	4,707,955	25,000,000	0.19/2.05	2.30/0.70
07450440	6,938,113	25,000,002	0.28/3.01	1.90/0.58
07450445	6,861,207	25,000,000	0.27/2.91	1.91/0.58
07450450	3,460,832	25,000,002	0.14/1.51	2.69/0.82
07450455	3,847,974	25,000,000	0.15/1.61	2.55/0.78
07450460	3,520,189	25,000,002	0.14/1.51	2.67/0.81
07450465	3,666,081	25,000,000	0.15/1.61	2.61/0.80
07450470	3,592,074	25,000,000	0.14/1.51	2.64/0.80
07450475	3,698,505	25,000,002	0.15/1.61	2.60/0.79
07450480	3,453,777	25,000,000	0.14/1.51	2.69/0.82
07450485	3,728,674	25,000,002	0.15/1.61	2.59/0.79
07450490	3,396,972	25,000,000	0.14/1.51	2.71/0.83
07450495	3,543,825	25,000,002	0.14/1.51	2.66/0.81
07450500	3,566,045	25,000,000	0.14/1.51	2.65/0.81
07500430	3,549,041	25,000,000	0.14/1.51	2.65/0.81
07500435	4,755,253	24,999,998	0.19/2.05	2.29/0.70
07500440	6,708,603	25,000,000	0.27/2.91	1.93/0.59
07500445	6,946,512	24,999,998	0.28/3.01	1.90/0.58
07500450	3,594,123	25,000,000	0.14/1.51	2.64/0.80
07500455	3,785,383	24,999,998	0.15/1.61	2.57/0.78
07500460	3,523,619	25,000,000	0.14/1.51	2.66/0.81

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
07500465	3,634,646	24,999,998	0.15/1.61	2.62/0.80
07500470	3,530,469	24,999,998	0.14/1.51	2.66/0.81
07500475	3,945,638	25,000,000	0.16/1.72	2.52/0.77
07500480	3,725,257	24,999,998	0.15/1.61	2.59/0.79
07500485	3,604,633	25,000,000	0.14/1.51	2.63/0.80
07500490	3,325,390	24,999,998	0.13/1.40	2.74/0.84
07500495	3,443,205	25,000,000	0.14/1.51	2.70/0.82
07500500	3,387,229	24,999,998	0.14/1.51	2.72/0.83
07500505	3,622,333	25,000,000	0.15/1.61	2.63/0.80
07500510	3,688,999	24,999,998	0.15/1.61	2.60/0.79
07500515	3,781,155	25,000,000	0.15/1.61	2.57/0.78
07500520	3,603,246	24,999,998	0.14/1.51	2.63/0.80
07500525	3,524,188	25,000,000	0.14/1.51	2.66/0.81
07500530	3,532,995	24,999,998	0.14/1.51	2.66/0.81
07550430	3,288,440	25,000,002	0.13/1.40	2.76/0.84
07550435	3,950,793	25,000,000	0.16/1.72	2.52/0.77
07550440	4,385,688	25,000,002	0.18/1.94	2.39/0.73
07550445	4,611,719	25,000,000	0.18/1.94	2.33/0.71
07550450	3,592,395	25,000,002	0.14/1.51	2.64/0.80
07550455	3,967,956	25,000,000	0.16/1.72	2.51/0.77
07550460	3,590,486	25,000,002	0.14/1.51	2.64/0.80
07550465	3,875,180	25,000,000	0.16/1.72	2.54/0.77
07550470	3,604,245	25,000,000	0.14/1.51	2.63/0.80
07550475	3,571,616	25,000,002	0.14/1.51	2.65/0.81
07550480	3,404,438	25,000,000	0.14/1.51	2.71/0.83
07550485	3,844,641	25,000,002	0.15/1.61	2.55/0.78
07550490	3,694,392	25,000,000	0.15/1.61	2.60/0.79
07550495	3,524,149	25,000,002	0.14/1.51	2.66/0.81
07550500	3,587,295	25,000,000	0.14/1.51	2.64/0.80
07550505	3,640,171	25,000,002	0.15/1.61	2.62/0.80
07550510	3,513,956	25,000,000	0.14/1.51	2.67/0.81

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
07550515	3,574,035	25,000,002	0.14/1.51	2.65/0.81
07550520	3,603,341	25,000,000	0.14/1.51	2.63/0.80
07550525	3,699,169	25,000,002	0.15/1.61	2.60/0.79
07550530	3,679,092	25,000,000	0.15/1.61	2.61/0.80
07600430	3,091,665	25,000,000	0.12/1.29	2.84/0.87
07600435	3,442,688	24,999,998	0.14/1.51	2.70/0.82
07600440	3,512,917	25,000,000	0.14/1.51	2.67/0.81
07600445	3,796,987	24,999,998	0.15/1.61	2.57/0.78
07600450	3,625,433	25,000,000	0.15/1.61	2.63/0.80
07600455	3,853,565	24,999,998	0.15/1.61	2.55/0.78
07600460	3,648,802	25,000,000	0.15/1.61	2.62/0.80
07600465	3,731,238	24,999,998	0.15/1.61	2.59/0.79
07600470	3,584,872	24,999,998	0.14/1.51	2.64/0.80
07600475	4,041,166	25,000,000	0.16/1.72	2.49/0.76
07600480	3,699,248	24,999,998	0.15/1.61	2.60/0.79
07600485	3,538,147	25,000,000	0.14/1.51	2.66/0.81
07600490	3,760,668	24,999,998	0.15/1.61	2.58/0.79
07600495	3,698,065	25,000,000	0.15/1.61	2.60/0.79
07600500	3,541,783	24,999,998	0.14/1.51	2.66/0.81
07600505	3,689,509	25,000,000	0.15/1.61	2.60/0.79
07600510	3,524,663	24,999,998	0.14/1.51	2.66/0.81
07600515	3,435,275	25,000,000	0.14/1.51	2.70/0.82
07600520	3,578,191	24,999,998	0.14/1.51	2.64/0.80
07600525	3,663,800	25,000,000	0.15/1.61	2.61/0.80
07600530	3,636,015	24,999,998	0.15/1.61	2.62/0.80
07650430	3,156,985	25,000,000	0.13/1.40	2.81/0.86
07650435	3,630,904	24,999,998	0.15/1.61	2.62/0.80
07650440	3,449,876	25,000,000	0.14/1.51	2.69/0.82
07650445	3,424,218	24,999,998	0.14/1.51	2.70/0.82
07650450	3,605,746	25,000,000	0.14/1.51	2.63/0.80
07650455	3,650,472	24,999,998	0.15/1.61	2.62/0.80

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
07650460	3,548,203	25,000,000	0.14/1.51	2.65/0.81
07650465	3,902,125	24,999,998	0.16/1.72	2.53/0.77
07650470	3,688,361	24,999,998	0.15/1.61	2.60/0.79
07650475	3,593,708	25,000,000	0.14/1.51	2.64/0.80
07650480	3,571,609	24,999,998	0.14/1.51	2.65/0.81
07650485	3,478,034	25,000,000	0.14/1.51	2.68/0.82
07650490	3,819,216	24,999,998	0.15/1.61	2.56/0.78
07650495	3,691,248	25,000,000	0.15/1.61	2.60/0.79
07650500	3,713,686	24,999,998	0.15/1.61	2.60/0.79
07650505	3,815,618	25,000,000	0.15/1.61	2.56/0.78
07650510	3,534,684	24,999,998	0.14/1.51	2.66/0.81
07650515	3,710,107	25,000,000	0.15/1.61	2.60/0.79
07650520	3,556,353	24,999,998	0.14/1.51	2.65/0.81
07650525	3,775,659	25,000,000	0.15/1.61	2.57/0.78
07650530	3,808,712	24,999,998	0.15/1.61	2.56/0.78
07700430	2,909,019	25,000,002	0.12/1.29	2.93/0.89
07700435	3,089,658	25,000,000	0.12/1.29	2.85/0.87
07700440	3,146,837	25,000,002	0.13/1.40	2.82/0.86
07700445	3,437,950	25,000,000	0.14/1.51	2.70/0.82
07700450	3,444,421	25,000,002	0.14/1.51	2.69/0.82
07700455	3,714,317	25,000,000	0.15/1.61	2.59/0.79
07700460	3,546,707	25,000,002	0.14/1.51	2.66/0.81
07700465	3,787,464	25,000,000	0.15/1.61	2.57/0.78
07700470	3,531,980	25,000,000	0.14/1.51	2.66/0.81
07700475	3,804,035	25,000,002	0.15/1.61	2.56/0.78
07700480	3,647,199	25,000,000	0.15/1.61	2.62/0.80
07700485	3,620,419	25,000,002	0.15/1.61	2.63/0.80
07700490	3,748,986	25,000,000	0.15/1.61	2.58/0.79
07700495	3,675,760	25,000,002	0.15/1.61	2.61/0.80
07700500	3,616,126	25,000,000	0.15/1.61	2.63/0.80
07700505	3,640,434	25,000,002	0.15/1.61	2.62/0.80

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
07700510	3,632,538	25,000,000	0.15/1.61	2.62/0.80
07700515	3,490,573	25,000,002	0.14/1.51	2.68/0.82
07700520	3,626,796	25,000,000	0.15/1.61	2.63/0.80
07700525	3,811,982	25,000,002	0.15/1.61	2.56/0.78
07700530	3,588,121	25,000,000	0.14/1.51	2.64/0.80
07750430	3,202,340	25,000,000	0.13/1.40	2.79/0.85
07750435	3,249,526	24,999,998	0.13/1.40	2.77/0.84
07750440	3,274,418	25,000,000	0.13/1.40	2.76/0.84
07750445	3,533,181	24,999,998	0.14/1.51	2.66/0.81
07750450	3,597,947	25,000,000	0.14/1.51	2.64/0.80
07750455	3,903,341	24,999,998	0.16/1.72	2.53/0.77
07750460	3,495,831	25,000,000	0.14/1.51	2.67/0.81
07750465	3,849,452	24,999,998	0.15/1.61	2.55/0.78
07750470	3,477,161	24,999,998	0.14/1.51	2.68/0.82
07750475	3,710,634	25,000,000	0.15/1.61	2.60/0.79
07750480	3,759,518	24,999,998	0.15/1.61	2.58/0.79
07750485	3,693,213	25,000,000	0.15/1.61	2.60/0.79
07750490	3,718,547	24,999,998	0.15/1.61	2.59/0.79
07750495	3,691,633	25,000,000	0.15/1.61	2.60/0.79
07750500	3,428,321	24,999,998	0.14/1.51	2.70/0.82
07750505	3,744,945	25,000,000	0.15/1.61	2.58/0.79
07750510	3,390,047	24,999,998	0.14/1.51	2.72/0.83
07750515	3,687,406	25,000,000	0.15/1.61	2.60/0.79
07750520	3,517,497	24,999,998	0.14/1.51	2.67/0.81
07750525	3,553,561	25,000,000	0.14/1.51	2.65/0.81
07750530	3,510,022	24,999,998	0.14/1.51	2.67/0.81
07800430	3,390,833	25,000,002	0.14/1.51	2.72/0.83
07800435	3,649,901	25,000,000	0.15/1.61	2.62/0.80
07800440	3,347,978	25,000,002	0.13/1.40	2.73/0.83
07800445	3,510,452	25,000,000	0.14/1.51	2.67/0.81
07800450	3,448,291	25,000,002	0.14/1.51	2.69/0.82

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
07800455	3,458,131	25,000,000	0.14/1.51	2.69/0.82
07800460	3,404,722	25,000,002	0.14/1.51	2.71/0.83
07800465	3,775,516	25,000,000	0.15/1.61	2.57/0.78
07800470	3,752,020	25,000,000	0.15/1.61	2.58/0.79
07800475	3,672,077	25,000,002	0.15/1.61	2.61/0.80
07800480	3,767,332	25,000,000	0.15/1.61	2.58/0.79
07800485	3,654,504	25,000,002	0.15/1.61	2.62/0.80
07800490	3,557,579	25,000,000	0.14/1.51	2.65/0.81
07800495	3,671,068	25,000,002	0.15/1.61	2.61/0.80
07800500	3,523,190	25,000,000	0.14/1.51	2.66/0.81
07800505	3,643,077	25,000,002	0.15/1.61	2.62/0.80
07800510	3,426,642	25,000,000	0.14/1.51	2.70/0.82
07800515	3,565,407	25,000,002	0.14/1.51	2.65/0.81
07800520	3,508,386	25,000,000	0.14/1.51	2.67/0.81
07800525	3,879,172	25,000,002	0.16/1.72	2.54/0.77
07800530	3,366,289	25,000,000	0.14/1.51	2.73/0.83
07850430	3,216,108	25,000,000	0.13/1.40	2.79/0.85
07850435	3,681,738	24,999,998	0.15/1.61	2.61/0.80
07850440	3,427,531	25,000,000	0.14/1.51	2.70/0.82
07850445	3,488,337	24,999,998	0.14/1.51	2.68/0.82
07850450	3,099,591	25,000,000	0.12/1.29	2.84/0.87
07850455	2,902,176	24,999,998	0.12/1.29	2.94/0.90
07850460	3,057,712	25,000,000	0.12/1.29	2.86/0.87
07850465	3,700,113	24,999,998	0.15/1.61	2.60/0.79
07850470	3,560,425	24,999,998	0.14/1.51	2.65/0.81
07850475	3,618,764	25,000,000	0.15/1.61	2.63/0.80
07850480	3,703,379	24,999,998	0.15/1.61	2.60/0.79
07850485	3,702,528	25,000,000	0.15/1.61	2.60/0.79
07850490	3,654,137	24,999,998	0.15/1.61	2.62/0.80
07850495	3,683,122	25,000,000	0.15/1.61	2.61/0.80
07850500	3,697,290	24,999,998	0.15/1.61	2.60/0.79

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
07850505	3,503,741	25,000,000	0.14/1.51	2.67/0.81
07850510	3,454,505	24,999,998	0.14/1.51	2.69/0.82
07850515	3,354,974	25,000,000	0.13/1.40	2.73/0.83
07850520	2,871,542	24,999,998	0.12/1.29	2.95/0.90
07850525	3,481,827	25,000,000	0.14/1.51	2.68/0.82
07850530	3,502,131	24,999,998	0.14/1.51	2.67/0.81
07900430	3,433,969	25,000,002	0.14/1.51	2.70/0.82
07900435	3,865,391	25,000,000	0.16/1.72	2.54/0.77
07900440	3,589,381	25,000,002	0.14/1.51	2.64/0.80
07900445	3,620,878	25,000,000	0.15/1.61	2.63/0.80
07900450	3,168,390	25,000,002	0.13/1.40	2.81/0.86
07900455	3,053,011	25,000,000	0.12/1.29	2.86/0.87
07900460	3,217,750	25,000,002	0.13/1.40	2.79/0.85
07900465	3,559,909	25,000,000	0.14/1.51	2.65/0.81
07900470	3,439,022	25,000,000	0.14/1.51	2.70/0.82
07900475	3,494,950	25,000,002	0.14/1.51	2.68/0.82
07900480	3,307,687	25,000,000	0.13/1.40	2.75/0.84
07900485	3,647,837	25,000,002	0.15/1.61	2.62/0.80
07900490	3,665,934	25,000,000	0.15/1.61	2.61/0.80
07900495	3,790,934	25,000,002	0.15/1.61	2.57/0.78
07900500	3,727,105	25,000,000	0.15/1.61	2.59/0.79
07900505	2,590,992	25,000,002	0.10/1.08	3.11/0.95
07900510	3,105,866	25,000,000	0.12/1.29	2.84/0.87
07900515	3,432,940	25,000,002	0.14/1.51	2.70/0.82
07900520	3,134,351	25,000,000	0.13/1.40	2.82/0.86
07900525	3,199,672	25,000,002	0.13/1.40	2.80/0.85
07900530	2,010,688	25,000,000	0.08/0.86	3.53/1.08
07950430	3,407,358	25,000,000	0.14/1.51	2.71/0.83
07950435	3,603,791	24,999,998	0.14/1.51	2.63/0.80
07950440	3,501,559	25,000,000	0.14/1.51	2.67/0.81
07950445	3,560,638	24,999,998	0.14/1.51	2.65/0.81

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
07950450	3,571,390	25,000,000	0.14/1.51	2.65/0.81
07950455	3,538,776	24,999,998	0.14/1.51	2.66/0.81
07950460	3,388,363	25,000,000	0.14/1.51	2.72/0.83
07950465	3,598,531	24,999,998	0.14/1.51	2.64/0.80
07950470	3,426,085	24,999,998	0.14/1.51	2.70/0.82
07950475	3,379,569	25,000,000	0.14/1.51	2.72/0.83
07950480	2,736,079	24,999,998	0.11/1.18	3.02/0.92
07950485	3,374,098	25,000,000	0.14/1.51	2.72/0.83
07950490	3,258,034	24,999,998	0.13/1.40	2.77/0.84
07950495	3,276,139	25,000,000	0.13/1.40	2.76/0.84
07950500	1,740,536	24,999,998	0.07/0.75	3.79/1.16
07950505	1,163,367	25,000,000	0.05/0.54	4.64/1.41
07950510	1,168,181	24,999,998	0.05/0.54	4.63/1.41
07950515	1,315,277	25,000,000	0.05/0.54	4.36/1.33
07950520	1,313,833	24,999,998	0.05/0.54	4.36/1.33
07950525	988,537	25,000,000	0.04/0.43	5.03/1.53
07950530	521,204	24,999,998	0.02/0.22	6.93/2.11
08000430	3,356,483	25,000,002	0.13/1.40	2.73/0.83
08000435	3,594,653	25,000,000	0.14/1.51	2.64/0.80
08000440	3,488,612	25,000,002	0.14/1.51	2.68/0.82
08000445	3,619,711	25,000,000	0.15/1.61	2.63/0.80
08000450	3,639,471	25,000,002	0.15/1.61	2.62/0.80
08000455	3,543,722	25,000,000	0.14/1.51	2.66/0.81
08000460	3,633,080	25,000,002	0.15/1.61	2.62/0.80
08000465	3,638,510	25,000,000	0.15/1.61	2.62/0.80
08000470	3,732,944	25,000,000	0.15/1.61	2.59/0.79
08000475	3,748,948	25,000,002	0.15/1.61	2.58/0.79
08000480	3,447,504	25,000,000	0.14/1.51	2.69/0.82
08000485	3,125,011	25,000,002	0.13/1.40	2.83/0.86
08000490	3,149,903	25,000,000	0.13/1.40	2.82/0.86
08000495	2,742,257	25,000,002	0.11/1.18	3.02/0.92

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08000500	1,169,589	25,000,000	0.05/0.54	4.62/1.41
08000505	970,487	25,000,002	0.04/0.43	5.08/1.55
08000510	1,111,204	25,000,000	0.04/0.43	4.74/1.44
08000515	714,302	25,000,002	0.03/0.32	5.92/1.80
08000520	532,442	25,000,000	0.02/0.22	6.85/2.09
08000525	348,059	25,000,002	0.01/0.11	8.48/2.58
08000530	442,844	25,000,000	0.02/0.22	7.51/2.29
08050430	3,573,168	25,000,000	0.14/1.51	2.65/0.81
08050435	3,929,520	24,999,998	0.16/1.72	2.52/0.77
08050440	3,528,558	25,000,000	0.14/1.51	2.66/0.81
08050445	3,490,010	24,999,998	0.14/1.51	2.68/0.82
08050450	3,490,615	25,000,000	0.14/1.51	2.68/0.82
08050455	3,234,489	24,999,998	0.13/1.40	2.78/0.85
08050460	3,668,620	25,000,000	0.15/1.61	2.61/0.80
08050465	3,881,010	24,999,998	0.16/1.72	2.54/0.77
08050470	3,788,326	24,999,998	0.15/1.61	2.57/0.78
08050475	3,563,230	25,000,000	0.14/1.51	2.65/0.81
08050480	3,714,914	24,999,998	0.15/1.61	2.59/0.79
08050485	3,641,005	25,000,000	0.15/1.61	2.62/0.80
08050490	3,577,995	24,999,998	0.14/1.51	2.64/0.80
08050495	3,513,626	25,000,000	0.14/1.51	2.67/0.81
08050500	2,392,174	24,999,998	0.10/1.08	3.23/0.98
08050505	2,555,838	25,000,000	0.10/1.08	3.13/0.95
08050510	1,157,839	24,999,998	0.05/0.54	4.65/1.42
08050515	1,860,421	25,000,000	0.07/0.75	3.67/1.12
08050520	2,702,650	24,999,998	0.11/1.18	3.04/0.93
08050525	1,323,291	25,000,000	0.05/0.54	4.35/1.33
08050530	744,972	24,999,998	0.03/0.32	5.79/1.76
08100430	3,413,239	25,000,002	0.14/1.51	2.71/0.83
08100435	3,830,443	25,000,000	0.15/1.61	2.56/0.78
08100440	3,436,867	25,000,002	0.14/1.51	2.70/0.82

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08100445	3,562,313	25,000,000	0.14/1.51	2.65/0.81
08100450	3,404,717	25,000,002	0.14/1.51	2.71/0.83
08100455	3,588,028	25,000,000	0.14/1.51	2.64/0.80
08100460	3,606,504	25,000,002	0.14/1.51	2.63/0.80
08100465	3,751,556	25,000,000	0.15/1.61	2.58/0.79
08100470	3,729,023	25,000,000	0.15/1.61	2.59/0.79
08100475	3,731,396	25,000,002	0.15/1.61	2.59/0.79
08100480	3,721,217	25,000,000	0.15/1.61	2.59/0.79
08100485	3,580,547	25,000,002	0.14/1.51	2.64/0.80
08100490	3,624,072	25,000,000	0.15/1.61	2.63/0.80
08100495	3,683,356	25,000,002	0.15/1.61	2.61/0.80
08100500	3,136,204	25,000,000	0.13/1.40	2.82/0.86
08100505	3,745,242	25,000,002	0.15/1.61	2.58/0.79
08100510	3,173,311	25,000,000	0.13/1.40	2.81/0.86
08100515	1,718,665	25,000,002	0.07/0.75	3.81/1.16
08100520	2,636,093	25,000,000	0.11/1.18	3.08/0.94
08100525	3,363,006	25,000,002	0.14/1.51	2.73/0.83
08100530	3,393,387	25,000,000	0.14/1.51	2.71/0.83
08150430	3,842,487	25,000,000	0.15/1.61	2.55/0.78
08150435	3,595,741	24,999,998	0.14/1.51	2.64/0.80
08150440	3,558,119	25,000,000	0.14/1.51	2.65/0.81
08150445	3,720,852	24,999,998	0.15/1.61	2.59/0.79
08150450	3,546,588	25,000,000	0.14/1.51	2.66/0.81
08150455	3,299,228	24,999,998	0.13/1.40	2.75/0.84
08150460	2,805,974	25,000,000	0.11/1.18	2.99/0.91
08150465	3,425,585	24,999,998	0.14/1.51	2.70/0.82
08150470	3,633,433	24,999,998	0.15/1.61	2.62/0.80
08150475	3,821,716	25,000,000	0.15/1.61	2.56/0.78
08150480	3,743,697	24,999,998	0.15/1.61	2.58/0.79
08150485	3,636,085	25,000,000	0.15/1.61	2.62/0.80
08150490	3,688,624	24,999,998	0.15/1.61	2.60/0.79

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08150495	3,812,070	25,000,000	0.15/1.61	2.56/0.78
08150500	3,590,627	24,999,998	0.14/1.51	2.64/0.80
08150505	3,217,195	25,000,000	0.13/1.40	2.79/0.85
08150510	3,653,093	24,999,998	0.15/1.61	2.62/0.80
08150515	3,194,865	25,000,000	0.13/1.40	2.80/0.85
08150520	2,143,958	24,999,998	0.09/0.97	3.42/1.04
08150525	3,070,472	25,000,000	0.12/1.29	2.85/0.87
08150530	3,517,355	24,999,998	0.14/1.51	2.67/0.81
08200430	3,393,348	25,000,002	0.14/1.51	2.71/0.83
08200435	3,722,583	25,000,000	0.15/1.61	2.59/0.79
08200440	3,692,471	25,000,002	0.15/1.61	2.60/0.79
08200445	3,602,678	25,000,000	0.14/1.51	2.63/0.80
08200450	3,556,340	25,000,002	0.14/1.51	2.65/0.81
08200455	3,689,909	25,000,000	0.15/1.61	2.60/0.79
08200460	3,427,745	25,000,002	0.14/1.51	2.70/0.82
08200465	3,637,631	25,000,000	0.15/1.61	2.62/0.80
08200470	3,517,397	25,000,000	0.14/1.51	2.67/0.81
08200475	3,582,501	25,000,002	0.14/1.51	2.64/0.80
08200480	3,552,157	25,000,000	0.14/1.51	2.65/0.81
08200485	3,633,841	25,000,002	0.15/1.61	2.62/0.80
08200490	3,731,498	25,000,000	0.15/1.61	2.59/0.79
08200495	3,808,474	25,000,002	0.15/1.61	2.56/0.78
08200500	3,825,046	25,000,000	0.15/1.61	2.56/0.78
08200505	3,835,705	25,000,002	0.15/1.61	2.55/0.78
08200510	3,623,664	25,000,000	0.15/1.61	2.63/0.80
08200515	3,616,612	25,000,002	0.15/1.61	2.63/0.80
08200520	2,879,053	25,000,000	0.12/1.29	2.95/0.90
08200525	1,674,869	25,000,002	0.07/0.75	3.86/1.18
08200530	3,497,559	25,000,000	0.14/1.51	2.67/0.81
08250430	3,874,178	25,000,000	0.16/1.72	2.54/0.77
08250435	3,684,832	24,999,998	0.15/1.61	2.61/0.80

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08250440	3,635,967	25,000,000	0.15/1.61	2.62/0.80
08250445	3,722,728	24,999,998	0.15/1.61	2.59/0.79
08250450	3,403,310	25,000,000	0.14/1.51	2.71/0.83
08250455	3,797,219	24,999,998	0.15/1.61	2.57/0.78
08250460	3,840,512	25,000,000	0.15/1.61	2.55/0.78
08250465	3,668,267	24,999,998	0.15/1.61	2.61/0.80
08250470	3,416,282	24,999,998	0.14/1.51	2.71/0.83
08250475	3,432,120	25,000,000	0.14/1.51	2.70/0.82
08250480	3,423,718	24,999,998	0.14/1.51	2.70/0.82
08250485	3,694,756	25,000,000	0.15/1.61	2.60/0.79
08250490	2,982,799	24,999,998	0.12/1.29	2.90/0.88
08250495	3,641,378	25,000,000	0.15/1.61	2.62/0.80
08250500	3,627,953	24,999,998	0.15/1.61	2.63/0.80
08250505	3,567,651	25,000,000	0.14/1.51	2.65/0.81
08250510	3,747,685	24,999,998	0.15/1.61	2.58/0.79
08250515	3,793,183	25,000,000	0.15/1.61	2.57/0.78
08250520	3,538,737	24,999,998	0.14/1.51	2.66/0.81
08250525	3,549,965	25,000,000	0.14/1.51	2.65/0.81
08250530	3,241,936	24,999,998	0.13/1.40	2.78/0.85
08300430	3,662,758	25,000,002	0.15/1.61	2.61/0.80
08300435	3,642,914	25,000,000	0.15/1.61	2.62/0.80
08300440	3,708,986	25,000,002	0.15/1.61	2.60/0.79
08300445	3,667,949	25,000,000	0.15/1.61	2.61/0.80
08300450	3,488,670	25,000,002	0.14/1.51	2.68/0.82
08300455	3,850,941	25,000,000	0.15/1.61	2.55/0.78
08300460	3,897,758	25,000,002	0.16/1.72	2.53/0.77
08300465	3,811,126	25,000,000	0.15/1.61	2.56/0.78
08300470	3,391,019	25,000,000	0.14/1.51	2.72/0.83
08300475	3,633,853	25,000,002	0.15/1.61	2.62/0.80
08300480	3,519,517	25,000,000	0.14/1.51	2.67/0.81
08300485	3,503,765	25,000,002	0.14/1.51	2.67/0.81

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08300490	3,226,975	25,000,000	0.13/1.40	2.78/0.85
08300495	3,678,473	25,000,002	0.15/1.61	2.61/0.80
08300500	3,634,275	25,000,000	0.15/1.61	2.62/0.80
08300505	3,772,920	25,000,002	0.15/1.61	2.57/0.78
08300510	3,703,787	25,000,000	0.15/1.61	2.60/0.79
08300515	3,873,431	25,000,002	0.16/1.72	2.54/0.77
08300520	3,762,914	25,000,000	0.15/1.61	2.58/0.79
08300525	3,786,053	25,000,002	0.15/1.61	2.57/0.78
08300530	3,559,464	25,000,000	0.14/1.51	2.65/0.81
08350430	3,744,695	25,000,000	0.15/1.61	2.58/0.79
08350435	3,825,024	24,999,998	0.15/1.61	2.56/0.78
08350440	3,649,591	25,000,000	0.15/1.61	2.62/0.80
08350445	3,679,705	24,999,998	0.15/1.61	2.61/0.80
08350450	3,504,104	25,000,000	0.14/1.51	2.67/0.81
08350455	3,759,419	24,999,998	0.15/1.61	2.58/0.79
08350460	3,860,725	25,000,000	0.15/1.61	2.55/0.78
08350465	3,730,764	24,999,998	0.15/1.61	2.59/0.79
08350470	3,811,885	24,999,998	0.15/1.61	2.56/0.78
08350475	3,752,263	25,000,000	0.15/1.61	2.58/0.79
08350480	3,614,516	24,999,998	0.15/1.61	2.63/0.80
08350485	3,718,326	25,000,000	0.15/1.61	2.59/0.79
08350490	3,677,319	24,999,998	0.15/1.61	2.61/0.80
08350495	3,798,016	25,000,000	0.15/1.61	2.57/0.78
08350500	3,746,417	24,999,998	0.15/1.61	2.58/0.79
08350505	3,714,560	25,000,000	0.15/1.61	2.59/0.79
08350510	3,703,492	24,999,998	0.15/1.61	2.60/0.79
08350515	3,552,486	25,000,000	0.14/1.51	2.65/0.81
08350520	3,851,283	24,999,998	0.15/1.61	2.55/0.78
08350525	3,882,482	25,000,000	0.16/1.72	2.54/0.77
08350530	3,639,794	24,999,998	0.15/1.61	2.62/0.80
08400430	3,625,267	25,000,002	0.15/1.61	2.63/0.80

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08400435	3,551,799	25,000,000	0.14/1.51	2.65/0.81
08400440	3,515,772	25,000,002	0.14/1.51	2.67/0.81
08400445	3,346,389	25,000,000	0.13/1.40	2.73/0.83
08400450	3,264,603	25,000,002	0.13/1.40	2.77/0.84
08400455	3,696,380	25,000,000	0.15/1.61	2.60/0.79
08400460	3,775,266	25,000,002	0.15/1.61	2.57/0.78
08400465	3,710,154	25,000,000	0.15/1.61	2.60/0.79
08400470	3,671,086	25,000,000	0.15/1.61	2.61/0.80
08400475	3,535,704	25,000,002	0.14/1.51	2.66/0.81
08400480	3,500,139	25,000,000	0.14/1.51	2.67/0.81
08400485	3,264,922	25,000,002	0.13/1.40	2.77/0.84
08400490	3,474,608	25,000,000	0.14/1.51	2.68/0.82
08400495	3,527,571	25,000,002	0.14/1.51	2.66/0.81
08400500	3,379,024	25,000,000	0.14/1.51	2.72/0.83
08400505	3,621,028	25,000,002	0.15/1.61	2.63/0.80
08400510	3,668,903	25,000,000	0.15/1.61	2.61/0.80
08400515	3,859,423	25,000,002	0.15/1.61	2.55/0.78
08400520	3,686,401	25,000,000	0.15/1.61	2.60/0.79
08400525	3,737,557	25,000,002	0.15/1.61	2.59/0.79
08400530	3,600,886	25,000,000	0.14/1.51	2.64/0.80
08450430	3,618,190	25,000,000	0.15/1.61	2.63/0.80
08450435	3,627,326	24,999,998	0.15/1.61	2.63/0.80
08450440	3,492,939	25,000,000	0.14/1.51	2.68/0.82
08450445	2,861,372	24,999,998	0.11/1.18	2.96/0.90
08450450	3,424,189	25,000,000	0.14/1.51	2.70/0.82
08450455	3,811,062	24,999,998	0.15/1.61	2.56/0.78
08450460	3,734,081	25,000,000	0.15/1.61	2.59/0.79
08450465	3,841,815	24,999,998	0.15/1.61	2.55/0.78
08450470	4,033,136	24,999,998	0.16/1.72	2.49/0.76
08450475	3,839,643	25,000,000	0.15/1.61	2.55/0.78
08450480	3,877,518	24,999,998	0.16/1.72	2.54/0.77

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08450485	3,810,567	25,000,000	0.15/1.61	2.56/0.78
08450490	3,563,237	24,999,998	0.14/1.51	2.65/0.81
08450495	3,435,714	25,000,000	0.14/1.51	2.70/0.82
08450500	3,558,673	24,999,998	0.14/1.51	2.65/0.81
08450505	3,719,111	25,000,000	0.15/1.61	2.59/0.79
08450510	3,706,295	24,999,998	0.15/1.61	2.60/0.79
08450515	3,742,037	25,000,000	0.15/1.61	2.59/0.79
08450520	3,651,900	24,999,998	0.15/1.61	2.62/0.80
08450525	3,535,690	25,000,000	0.14/1.51	2.66/0.81
08450530	3,914,339	24,999,998	0.16/1.72	2.53/0.77
08500430	3,559,419	25,000,002	0.14/1.51	2.65/0.81
08500435	3,697,949	25,000,000	0.15/1.61	2.60/0.79
08500440	3,665,480	25,000,002	0.15/1.61	2.61/0.80
08500445	3,204,087	25,000,000	0.13/1.40	2.79/0.85
08500450	3,039,833	25,000,002	0.12/1.29	2.87/0.87
08500455	3,639,414	25,000,000	0.15/1.61	2.62/0.80
08500460	3,731,498	25,000,002	0.15/1.61	2.59/0.79
08500465	3,642,097	25,000,000	0.15/1.61	2.62/0.80
08500470	3,758,495	25,000,000	0.15/1.61	2.58/0.79
08500475	3,743,488	25,000,002	0.15/1.61	2.58/0.79
08500480	3,758,270	25,000,000	0.15/1.61	2.58/0.79
08500485	3,758,559	25,000,002	0.15/1.61	2.58/0.79
08500490	3,498,112	25,000,000	0.14/1.51	2.67/0.81
08500495	3,479,287	25,000,002	0.14/1.51	2.68/0.82
08500500	3,491,920	25,000,000	0.14/1.51	2.68/0.82
08500505	3,728,955	25,000,002	0.15/1.61	2.59/0.79
08500510	3,433,104	25,000,000	0.14/1.51	2.70/0.82
08500515	3,662,770	25,000,002	0.15/1.61	2.61/0.80
08500520	3,830,485	25,000,000	0.15/1.61	2.56/0.78
08500525	3,743,984	25,000,002	0.15/1.61	2.58/0.79
08500530	3,842,319	25,000,000	0.15/1.61	2.55/0.78

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08550430	3,800,860	25,000,000	0.15/1.61	2.57/0.78
08550435	3,671,846	24,999,998	0.15/1.61	2.61/0.80
08550440	3,716,157	25,000,000	0.15/1.61	2.59/0.79
08550445	3,576,795	24,999,998	0.14/1.51	2.64/0.80
08550450	3,819,547	25,000,000	0.15/1.61	2.56/0.78
08550455	3,702,394	24,999,998	0.15/1.61	2.60/0.79
08550460	3,831,516	25,000,000	0.15/1.61	2.55/0.78
08550465	3,831,153	24,999,998	0.15/1.61	2.55/0.78
08550470	4,009,458	24,999,998	0.16/1.72	2.50/0.76
08550475	3,814,149	25,000,000	0.15/1.61	2.56/0.78
08550480	3,895,763	24,999,998	0.16/1.72	2.53/0.77
08550485	3,771,308	25,000,000	0.15/1.61	2.58/0.79
08550490	2,969,986	24,999,998	0.12/1.29	2.90/0.88
08550495	3,532,612	25,000,000	0.14/1.51	2.66/0.81
08550500	3,361,720	24,999,998	0.13/1.40	2.73/0.83
08550505	3,709,202	25,000,000	0.15/1.61	2.60/0.79
08550510	3,339,476	24,999,998	0.13/1.40	2.74/0.84
08550515	3,460,455	25,000,000	0.14/1.51	2.69/0.82
08550520	3,520,707	24,999,998	0.14/1.51	2.67/0.81
08550525	3,681,518	25,000,000	0.15/1.61	2.61/0.80
08550530	3,932,349	24,999,998	0.16/1.72	2.52/0.77
08600430	3,594,784	25,000,002	0.14/1.51	2.64/0.80
08600435	3,622,912	25,000,000	0.15/1.61	2.63/0.80
08600440	3,688,236	25,000,002	0.15/1.61	2.60/0.79
08600445	3,691,121	25,000,000	0.15/1.61	2.60/0.79
08600450	3,641,329	25,000,002	0.15/1.61	2.62/0.80
08600455	3,721,661	25,000,000	0.15/1.61	2.59/0.79
08600460	3,840,202	25,000,002	0.15/1.61	2.55/0.78
08600465	3,701,230	25,000,000	0.15/1.61	2.60/0.79
08600470	3,868,466	25,000,000	0.16/1.72	2.54/0.77
08600475	3,739,141	25,000,002	0.15/1.61	2.59/0.79

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08600480	3,815,393	25,000,000	0.15/1.61	2.56/0.78
08600485	3,750,383	25,000,002	0.15/1.61	2.58/0.79
08600490	3,558,435	25,000,000	0.14/1.51	2.65/0.81
08600495	3,713,763	25,000,002	0.15/1.61	2.60/0.79
08600500	3,376,186	25,000,000	0.14/1.51	2.72/0.83
08600505	3,606,659	25,000,002	0.14/1.51	2.63/0.80
08600510	3,615,355	25,000,000	0.15/1.61	2.63/0.80
08600515	3,541,533	25,000,002	0.14/1.51	2.66/0.81
08600520	3,632,264	25,000,000	0.15/1.61	2.62/0.80
08600525	3,294,104	25,000,002	0.13/1.40	2.76/0.84
08600530	3,625,250	25,000,000	0.15/1.61	2.63/0.80
08650430	3,661,949	25,000,000	0.15/1.61	2.61/0.80
08650435	3,792,066	24,999,998	0.15/1.61	2.57/0.78
08650440	3,746,192	25,000,000	0.15/1.61	2.58/0.79
08650445	3,821,082	24,999,998	0.15/1.61	2.56/0.78
08650450	3,734,121	25,000,000	0.15/1.61	2.59/0.79
08650455	3,766,900	24,999,998	0.15/1.61	2.58/0.79
08650460	3,789,201	25,000,000	0.15/1.61	2.57/0.78
08650465	3,730,878	24,999,998	0.15/1.61	2.59/0.79
08650470	3,839,282	24,999,998	0.15/1.61	2.55/0.78
08650475	3,875,904	25,000,000	0.16/1.72	2.54/0.77
08650480	3,906,477	24,999,998	0.16/1.72	2.53/0.77
08650485	3,862,805	25,000,000	0.16/1.72	2.54/0.77
08650490	3,603,409	24,999,998	0.14/1.51	2.63/0.80
08650495	3,881,542	25,000,000	0.16/1.72	2.54/0.77
08650500	3,809,782	24,999,998	0.15/1.61	2.56/0.78
08650505	3,545,022	25,000,000	0.14/1.51	2.66/0.81
08650510	3,637,250	24,999,998	0.15/1.61	2.62/0.80
08650515	3,523,287	25,000,000	0.14/1.51	2.66/0.81
08650520	3,744,985	24,999,998	0.15/1.61	2.58/0.79
08650525	3,656,936	25,000,000	0.15/1.61	2.62/0.80

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08650530	3,910,548	24,999,998	0.16/1.72	2.53/0.77
08700430	3,573,362	25,000,002	0.14/1.51	2.65/0.81
08700435	3,573,530	25,000,000	0.14/1.51	2.65/0.81
08700440	3,750,540	25,000,002	0.15/1.61	2.58/0.79
08700445	3,677,266	25,000,000	0.15/1.61	2.61/0.80
08700450	3,505,336	25,000,002	0.14/1.51	2.67/0.81
08700455	3,813,031	25,000,000	0.15/1.61	2.56/0.78
08700460	3,747,802	25,000,002	0.15/1.61	2.58/0.79
08700465	3,836,682	25,000,000	0.15/1.61	2.55/0.78
08700470	4,010,578	25,000,000	0.16/1.72	2.50/0.76
08700475	3,838,069	25,000,002	0.15/1.61	2.55/0.78
08700480	3,877,140	25,000,000	0.16/1.72	2.54/0.77
08700485	3,630,567	25,000,002	0.15/1.61	2.62/0.80
08700490	3,652,048	25,000,000	0.15/1.61	2.62/0.80
08700495	3,655,911	25,000,002	0.15/1.61	2.62/0.80
08700500	3,725,103	25,000,000	0.15/1.61	2.59/0.79
08700505	3,507,410	25,000,002	0.14/1.51	2.67/0.81
08700510	3,574,041	25,000,000	0.14/1.51	2.65/0.81
08700515	3,599,449	25,000,002	0.14/1.51	2.64/0.80
08700520	3,902,906	25,000,000	0.16/1.72	2.53/0.77
08700525	3,629,493	25,000,002	0.15/1.61	2.63/0.80
08700530	3,591,049	25,000,000	0.14/1.51	2.64/0.80
08750430	3,792,988	25,000,000	0.15/1.61	2.57/0.78
08750435	3,675,438	24,999,998	0.15/1.61	2.61/0.80
08750440	3,686,446	25,000,000	0.15/1.61	2.60/0.79
08750445	3,733,426	24,999,998	0.15/1.61	2.59/0.79
08750450	3,890,563	25,000,000	0.16/1.72	2.54/0.77
08750455	3,838,690	24,999,998	0.15/1.61	2.55/0.78
08750460	3,834,021	25,000,000	0.15/1.61	2.55/0.78
08750465	3,557,367	24,999,998	0.14/1.51	2.65/0.81
08750470	3,871,818	24,999,998	0.16/1.72	2.54/0.77

1.4 Report on Point Density and Nominal Pulse Spacing (NPS) (Tiled Data) - continued

File	Number of First Returns	Area of Tile	Point Density	Nominal Pulse Spacing (NPS)
08750475	3,849,187	25,000,000	0.15/1.61	2.55/0.78
08750480	3,863,343	24,999,998	0.16/1.72	2.54/0.77
08750485	3,669,524	25,000,000	0.15/1.61	2.61/0.80
08750490	3,666,995	24,999,998	0.15/1.61	2.61/0.80
08750495	3,652,515	25,000,000	0.15/1.61	2.62/0.80
08750500	3,859,406	24,999,998	0.15/1.61	2.55/0.78
08750505	3,514,761	25,000,000	0.14/1.51	2.67/0.81
08750510	3,540,991	24,999,998	0.14/1.51	2.66/0.81
08750515	3,529,763	25,000,000	0.14/1.51	2.66/0.81
08750520	3,738,016	24,999,998	0.15/1.61	2.59/0.79
08750525	3,683,383	25,000,000	0.15/1.61	2.61/0.80
08750530	3,852,820	24,999,998	0.15/1.61	2.55/0.78
Average			0.13/1.40	2.73/0.83

pp Square US Survey Feet/
pp Square Meter
US Survey Feet/
Meter

1.5 Report on Data Voids (Swath Data)

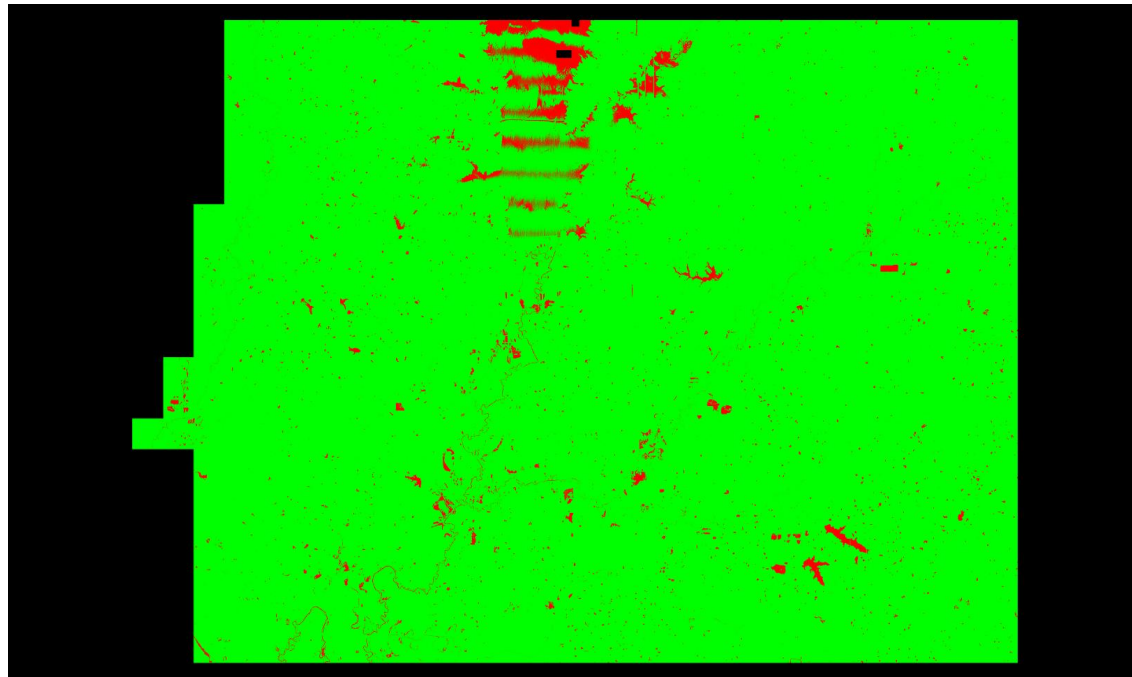
The USGS LiDAR Base Specification Version 1.0 states that: "Data voids within a single swath are not acceptable, except in the following circumstances:

- (1) where caused by water bodies.
- (2) where caused by areas of low near infra-red (NIR) reflectivity such as asphalt or composition roofing and
- (3) where appropriately filled-in by another swath."

The purpose of this section is to show graphically where possible LiDAR data voids are located. Data voids can be caused by a lack of coverage at the time of collection, water bodies not reflecting the laser beam back to the receiver, LiDAR occlusions caused by objects above ground like tall buildings, etc. Not all data voids are problematic. The intention of this test is to isolate the first example of LiDAR data voids - a lack of coverage at the time of collection. A close inspection must be done on the results to determine if the LiDAR coverage was collected and processed to meet the intended specifications.

[Data Source - E:\Franklin County\swath](#)

[E:\Franklin County\QAQC\1_5\Boresighted DataVoids_SingleFile.jp2](#)



Cell size: 12 US Survey Feet

Green: No data void (number of cells = 95,403,416)

Red: Data void (number of cells = 2,653,884)

Background Color: Null data

See JPG2000 file for full resolution results

1.6.1 Report on Spatial Distribution Verification

The USGS LiDAR Base Specification Version 1.0 states that: "The spatial distribution of geometrically usable points is expected to be uniform. Although it is understood that lidar instruments do not produce regularly gridded points, collections should be planned and executed to produce a first-return point cloud that approaches a regular lattice of points, rather than a collection of widely spaced high density profiles of the terrain. The uniformity of the point density throughout the dataset is important and will be assessed using the following steps:

- (1) Generating a density grid from the data with cell sizes equal to the design NPS times 2, using a radius equal to the design NPS
- (2) Ensuring at least 90 percent of the cells in the grid contain at least one lidar point.
- (3) The assessment is to be made against individual (single) swaths, using only the first-return points located within the geometrically usable center portion (typically 90 percent) of each swath.

Excluding acceptable data voids previously identified in this specification.

Note: This requirement may be relaxed in areas of substantial relief where it is impractical to maintain a consistent and uniform distribution.

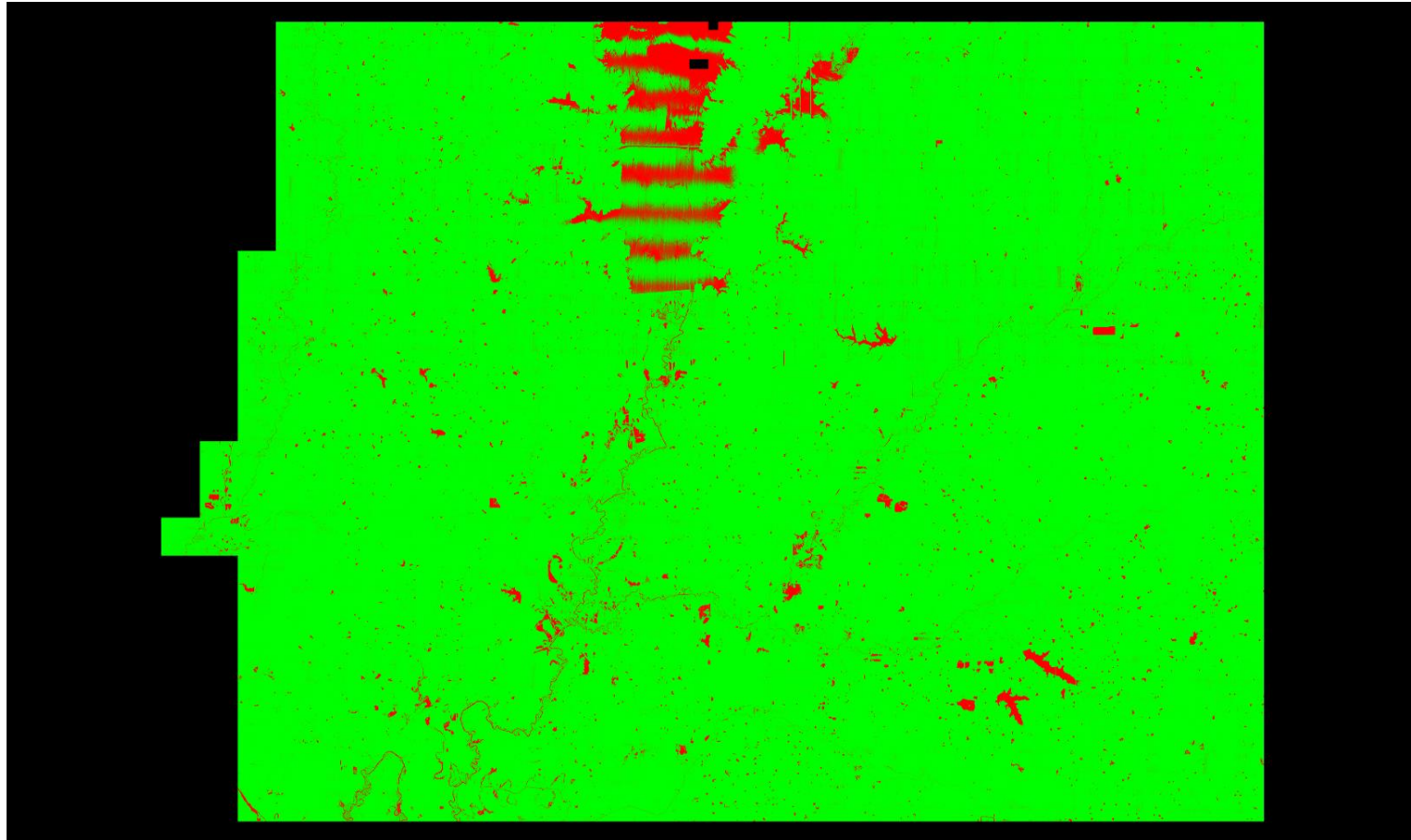
Note: The process described in this section relates only to the uniformity of the point distribution. It in no way relates to, nor can it be used for the assessment of point density or NPS."

The purpose of this section is to show graphically where unacceptable LiDAR spatial distributions are located. LiDAR spatial distribution can be affected by problems in flight planning (e.g., incorrect scan frequency / pulse rate pairing) or flight execution (e.g., strong headwinds or tailwinds), a lack of coverage at the time of collection, water bodies not reflecting the laser beam back to the receiver, LiDAR occlusions caused by objects above ground like tall buildings, etc. Not all LiDAR spatial distribution violations are truly problematic. The intention of this test is to isolate the first example of LiDAR spatial distribution violations - problems in flight planning or flight execution. A close inspection must be done on the results to determine if the LiDAR spatial distribution was collected and processed to meet the intended specifications.

[Data Source - E:\Franklin County\swath](#)

[E:\Franklin County\QAQC\1_6\Boresighted SpatialDistribution SingleFile.jp2](#)

1.6.1 Report on Spatial Distribution Verification - Continued



Cell size: 6 US Survey Feet

Green: Cells containing at least 1 first return LiDAR point(s) (number of cells = 376,289,110)

Red: Cells not containing at least 1 first return LiDAR point(s) (number of cells = 15,926,376)

Background Color: Null data

Percentage of cells in the grid that contain at least 1 first return LiDAR point(s) = 95.94% (Requirement is typically 90%)

See JPG2000 file for full resolution results

1.6.2 Report on Spatial Distribution Verification of Individual Swath

Swath	Percentage of Cells that Contain ≥ 1
140417_224329_1-1	86.72%
140417_224329_1-2	94.79%
140417_230025_1-1	93.65%
140417_230025_1-2	95.54%
140417_231322_1-1	95.53%
140417_231322_1-2	93.12%
140417_232632_1-1	94.15%
140417_232632_1-2	95.58%
140417_233933_1-1	94.47%
140417_233933_1-2	94.31%
140417_235212_1-1	94.64%
140417_235212_1-2	91.71%
140418_000524_1-1	93.05%
140418_000524_1-2	94.01%
140418_001909_1-1	93.23%
140418_001909_1-2	95.07%
140418_003250_1-1	95.53%
140418_003250_1-2	94.46%
140418_004640_1-1	94.59%
140418_004640_1-2	94.57%
140418_010058_1-1	95.86%
140418_010058_1-2	95.18%
140418_011447_1-1	94.00%
140418_011447_1-2	95.94%
140418_012827_1-1	96.51%
140418_012827_1-2	94.32%
140418_014215_1-1	94.29%
140418_014215_1-2	95.50%
140418_020434_1	94.64%
140418_145120_1	83.98%
140418_150350_1-1	92.87%
140418_150350_1-2	94.94%
140418_151646_1-1	91.84%
140418_151646_1-2	93.98%
140418_152909_1-1	89.47%
140418_152909_1-2	94.81%
140418_154201_1-1	88.17%
140418_154201_1-2	94.82%
140418_155420_1-1	87.66%
140418_155420_1-2	94.06%
140418_160651_1-1	86.18%
140418_160651_1-2	95.00%
140418_161920_1-1	85.49%
140418_161920_1-2	95.20%
140418_163158_1-1	87.89%
140418_163158_1-2	94.79%

1.6.1 Report on Spatial Distribution Verification of Individual Swath

Swath	Percentage of Cells that Contain ≥ 1
140418_164429_1-1	87.16%
140418_164429_1-2	95.27%
140418_165715_1-1	85.77%
140418_165715_1-2	95.45%
140418_171610_1	82.00%

1.8 Report on Vertical Accuracy (Tiled Data)

The USGS LiDAR Base Specification Version 1.0 states that: "Vertical Accuracy of the LiDAR data will be assessed and reported in accordance with the guidelines developed by the NDEP and subsequently adopted by the ASPRS.

(1) The minimum vertical accuracy requirement for the unclassified lidar point cloud, using the NDEP/ASPRS methodology, is listed below: . See:

http://www.ndep.gov/NDEP_Elevation_Guidelines_Ver1_10May2004.pdf

(2) Fundamental Vertical Accuracy (FVA) <= 24.5 centimeters (cm) Accuracyz (ACCz), 95 percent (12.5 cm Root Mean Square Error (RMSE)z).

(3) Accuracy for the LiDAR point cloud data is to be reported independently from accuracies of derivative products (i.e., DEMs). Point cloud data accuracy is to be tested against a TIN constructed from bare-earth LiDAR points.

Point cloud data accuracy is to be tested against a Triangulated Irregular Network (TIN) constructed from lidar points in clear and open areas. A clear and open area can be characterized with respect to topographic and ground cover variation such that a minimum of 5 times the NPS exists with less than 1/3 of the RMSEz deviation from a low-slope plane. Slopes that exceed 10 percent should be avoided. Ground that has been plowed or otherwise disturbed is not acceptable. All tested locations should be photographed showing the position of the tripod and the surrounding area ground condition."

The purpose of this section is to report on the fundamental vertical accuracy of the LiDAR data measured against surveyed ground check points.

This reports only the Fundamental Vertical Accuracy (FVA)

E:\Franklin_County\QAQC\1_8\Report_VerticalAccuracy.csv

Units: US Survey Feet (/Meter)

Requirement for Vertical Accuracy at the 95 confidence level: 0.8

Classified Data

<u>Control Points</u>	26
<u>Points with Coverage</u>	26
<u>Points With Required Accuracy</u>	26
<u>Percent of Points With Required Accuracy</u>	100.00%
<u>Average Z Error</u>	0.05/0.02
<u>Maximum Z Error</u>	0.45/0.14
<u>Median Z Error</u>	0.08/0.02
<u>Minimum Z Error</u>	-0.30/-0.09
<u>NSSDA Vertical Accuracy</u>	at the 95 confidence level 0.40/0.12 PASS
<u>Standard Deviation (sigma) of Z for Sample</u>	0.20/0.06
<u>RMSE of Z for Sample</u>	0.20/0.06 PASS
<u>FGDC/NSSDA/FEMA Contour Interval</u>	0.70/0.21
<u>ASPRS Contour Interval</u>	0.70/0.21
<u>NMAS Contour Interval</u>	0.70/0.21

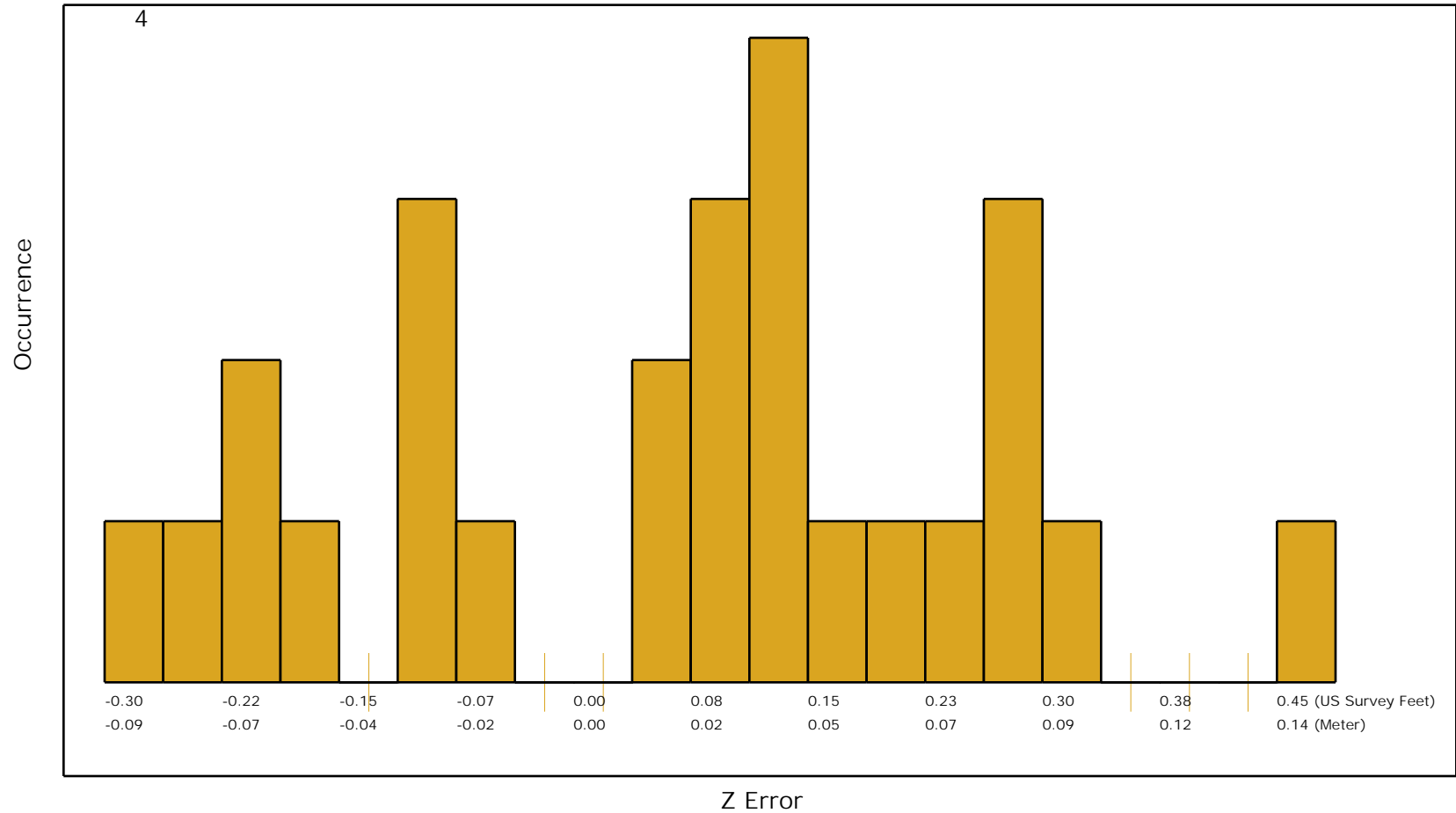
1.8 Report on Vertical Accuracy (Tiled Data) - continued

ID	X	Y	Z	Coverage	Z From LiDAR	Z Error
1002	763521.84	521707.30	455.00	True	455.05	0.05
1007	793648.43	521306.39	416.67	True	416.76	0.09
1011	794961.67	506836.55	428.21	True	428.08	-0.13
1016	767471.17	501954.60	461.95	True	461.75	-0.20
1021	756803.56	483015.46	421.44	True	421.54	0.10
1026	759047.57	463217.64	442.47	True	442.53	0.05
1031	772182.53	446909.06	385.08	True	384.85	-0.23
1037	807166.03	445064.92	410.22	True	410.34	0.12
1038	807166.05	445064.90	410.21	True	410.34	0.13
1044	796739.79	484895.40	387.59	True	387.35	-0.24
1049	800633.07	469979.83	407.24	True	407.48	0.24
1054	772182.41	446909.07	385.14	True	384.85	-0.30
1061	831220.36	446668.75	419.12	True	419.01	-0.11
1066	860483.85	441418.59	502.78	True	502.95	0.16
1070	871529.88	460556.52	522.28	True	522.54	0.26
1074	831377.61	465312.69	447.02	True	446.92	-0.10
1079	834245.38	478040.81	402.95	True	403.02	0.07
1083	866279.38	490681.62	427.62	True	427.55	-0.06
1087	866279.52	490681.60	427.81	True	427.56	-0.25
1090	866279.48	490681.64	427.49	True	427.56	0.07
1093	833338.99	508865.44	452.97	True	453.25	0.28
1100	866279.58	490681.61	427.45	True	427.56	0.12
2002	870427.96	498522.14	486.52	True	486.78	0.26
3001	871755.90	522888.13	510.20	True	510.51	0.31
4003	831322.45	528940.31	432.24	True	432.69	0.45
5001	866279.45	490681.61	427.36	True	427.56	0.20

1.8 Report on Vertical Accuracy (Tiled Data)

The purpose of this section is to show a frequency distribution chart of the the fundamental vertical accuracy of the LiDAR data measured against surveyed ground check points.

[Data Source - E:\Franklin County\las](#)



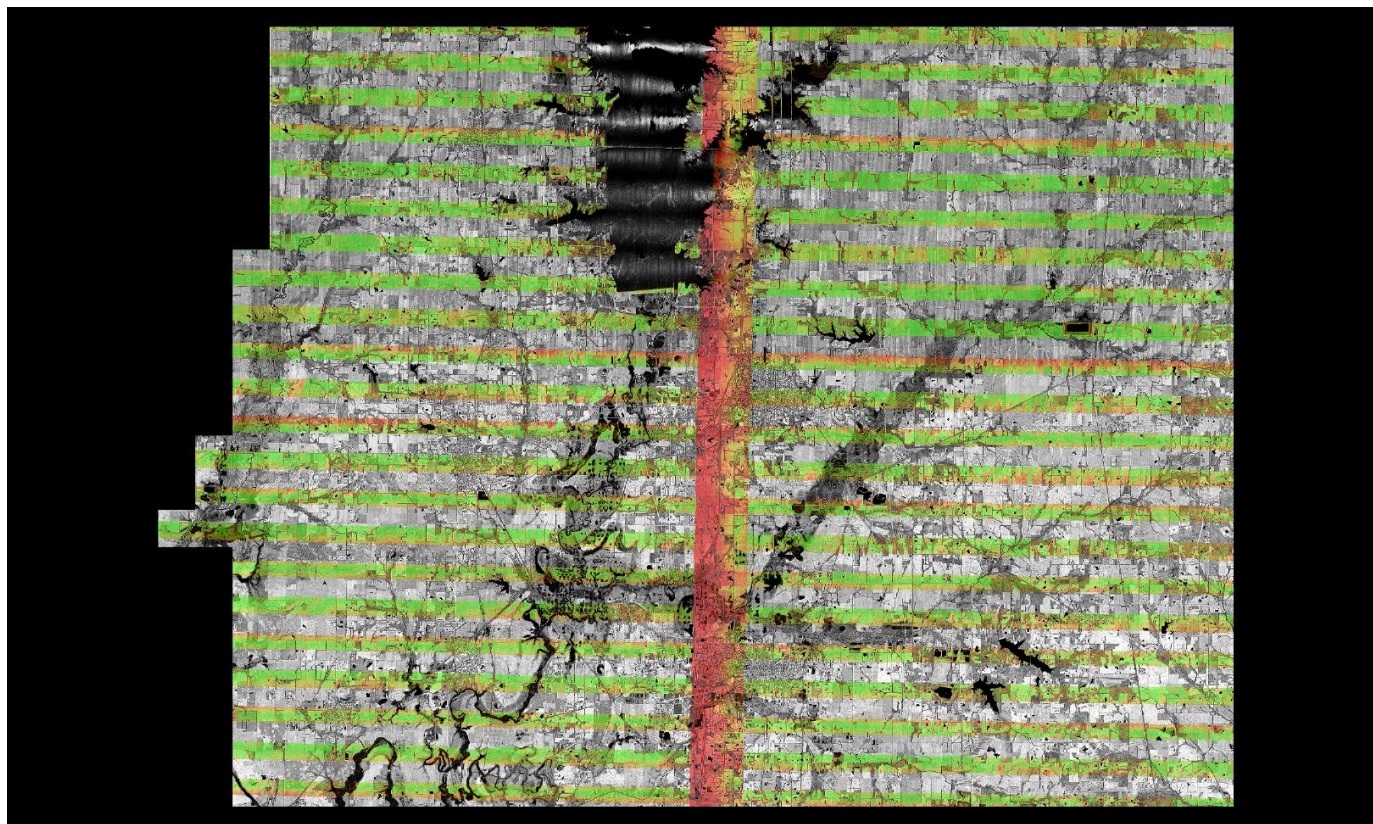
1.9.1 Report on Flight Line Separation (Relative Accuracy) per Project

The USGS LiDAR Base Specification Version 1.0 states that: "Relative accuracy within overlap between adjacent swaths: ≤ 10 cm RMSDz"

The purpose of this section is to show a graphic of the flight line separation raster for all of the data processed. This grid/image shows the vertical separation of flight lines by thematically coloring the separation magnitude on a color ramp based on absolute distance. This color thematic rendering is modulated by intensity to show land cover features. If there is no flight line overlap, the raster is displayed as grayscale intensity alone. The relative accuracy RMSDz is reported in the bottom left of this page.

[Data Source - E:\Franklin_County\swath](#)

[E:\Franklin_County\QAQC\1_9_1\Boresighted FlightlineSeparation SingleFile.jp2](#)



A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

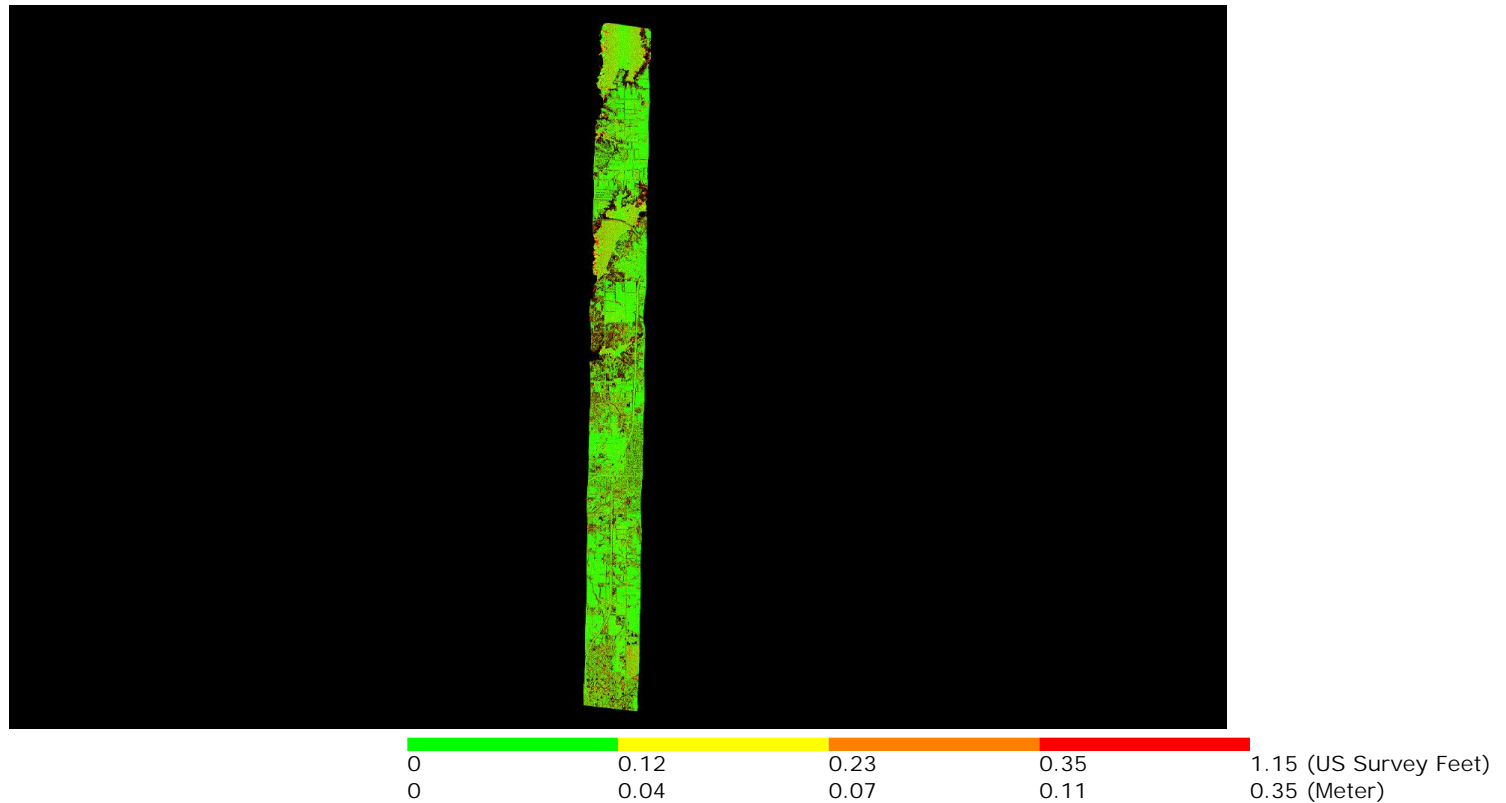
1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

The USGS LiDAR Base Specification Version 1.0 states that: "Relative accuracy within individual swaths: ≤ 7 cm RMSDz."

The purpose of this section is to show a graphic of the relative vertical accuracy within each flight line, individually. This is done by comparing the inbound and outbound scan lines to each other as two separate surfaces and then generating a vertical separation raster from their TIN deltas. This is displayed by thematically coloring the separation magnitude on a color ramp based on absolute distance. Good LiDAR data should have a consistent green coloration across the flight line (perpendicular to flight), ignoring warmer colorations due to above ground surface features. Small color variations are to be expected. The purpose of this test is to find problematic data indicated by warming color variation trends away from the center of the scan line. Flight lines that have inconsistent colorations from the center towards the edges of the flight line would highlight the possibility of a sensor or internal calibration problem, usually an incorrect encoder latency value. The relative accuracy RMSDz is reported in the bottom left of each page.

[Data Source - E:\Franklin_County\swath\140417_224329_1-1.las](E:\Franklin_County\swath\140417_224329_1-1.las)

E:\Franklin_County\QAQC\1_9_2\Individual_140417_224329_1-1.jp2

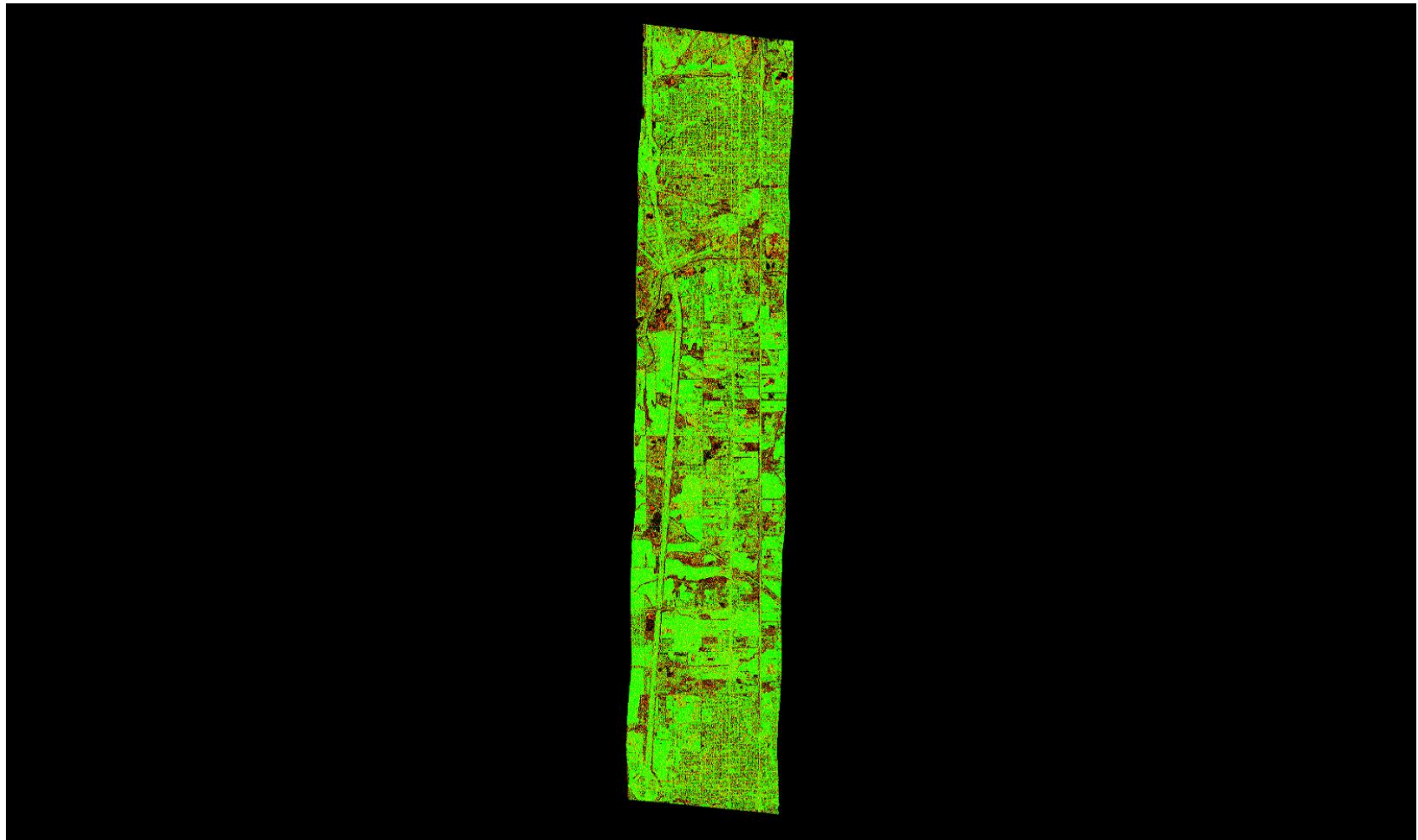


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_224329_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_224329_1-2.jp2](#)

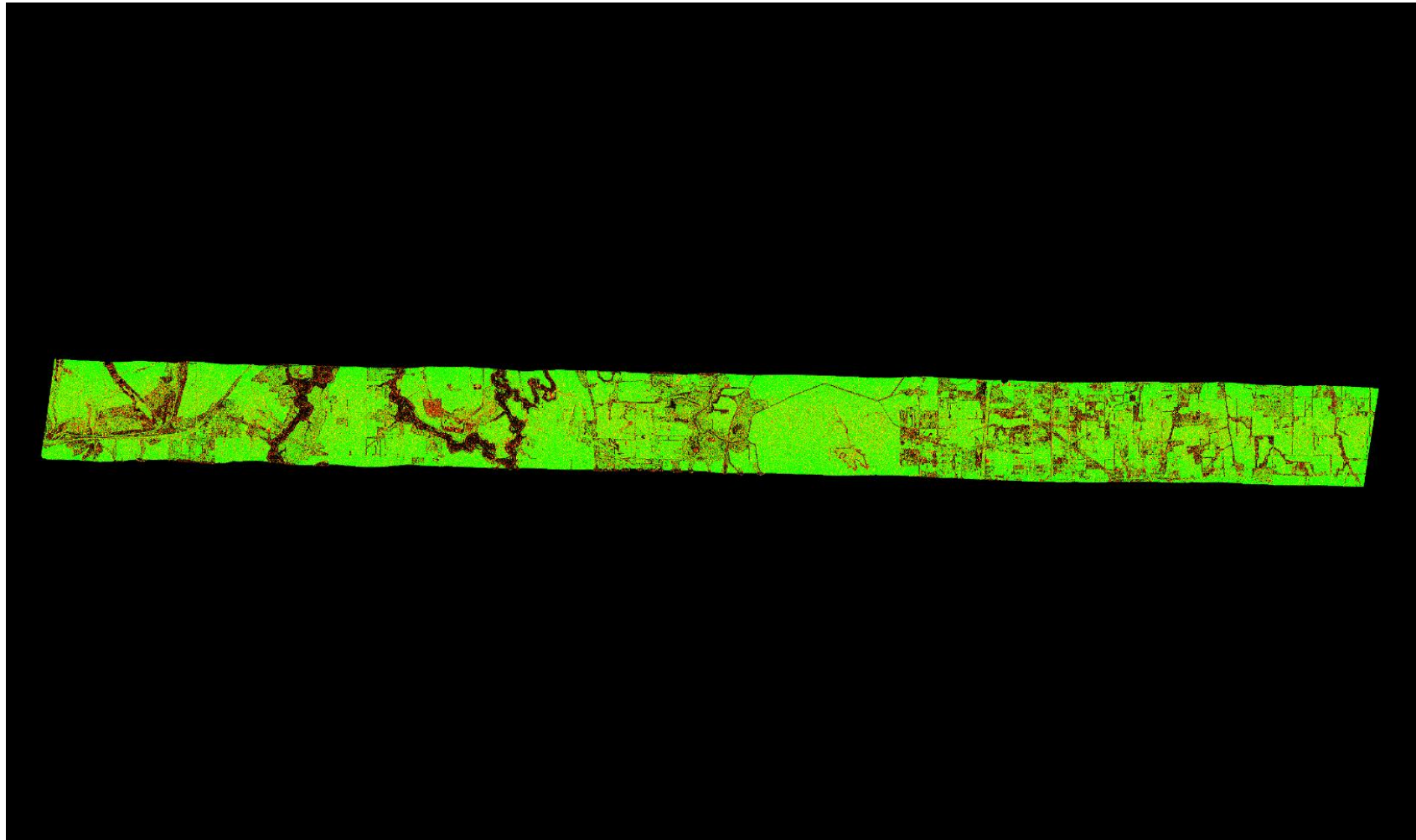


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_230025_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_230025_1-1.jp2](#)

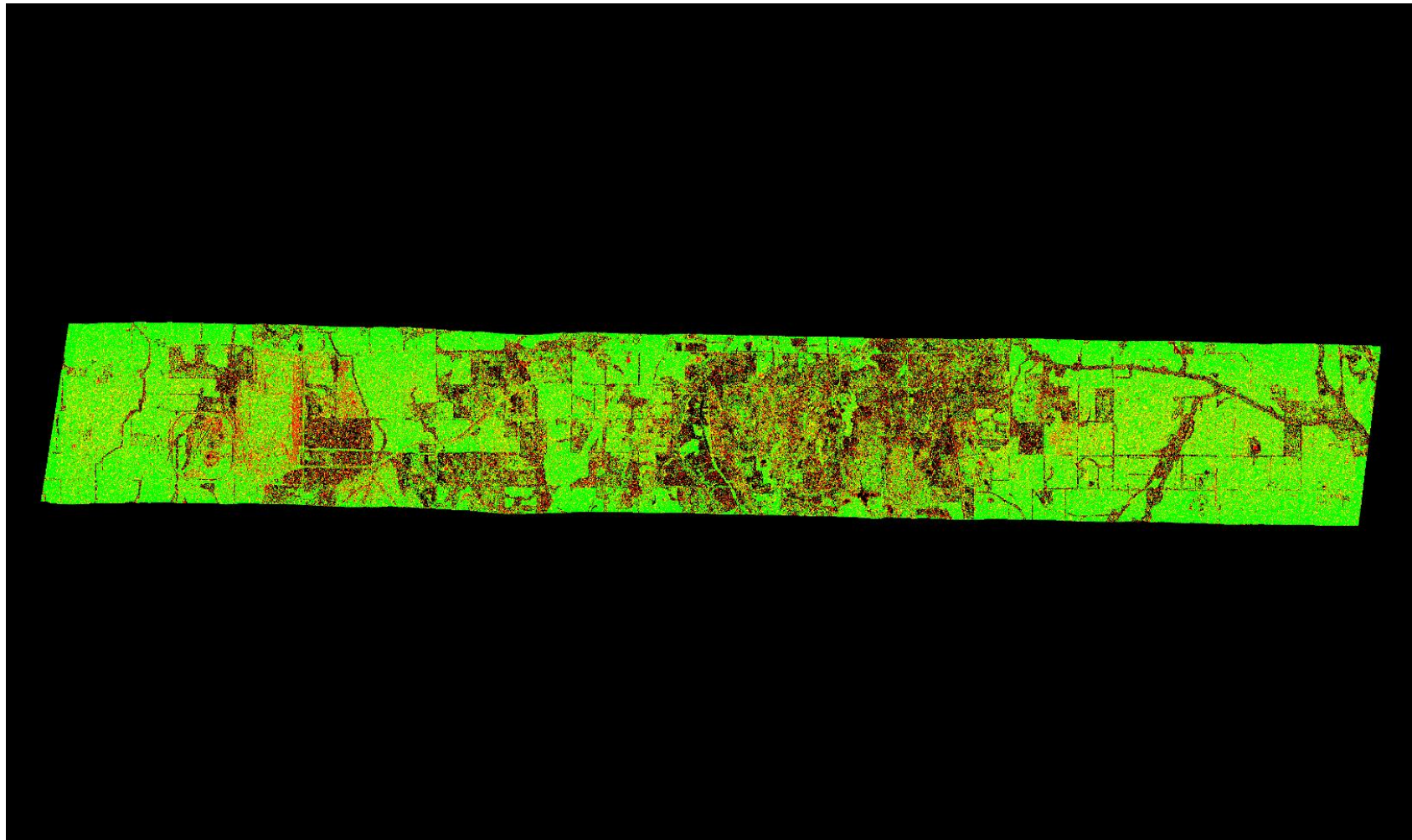


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_230025_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_230025_1-2.jp2](#)

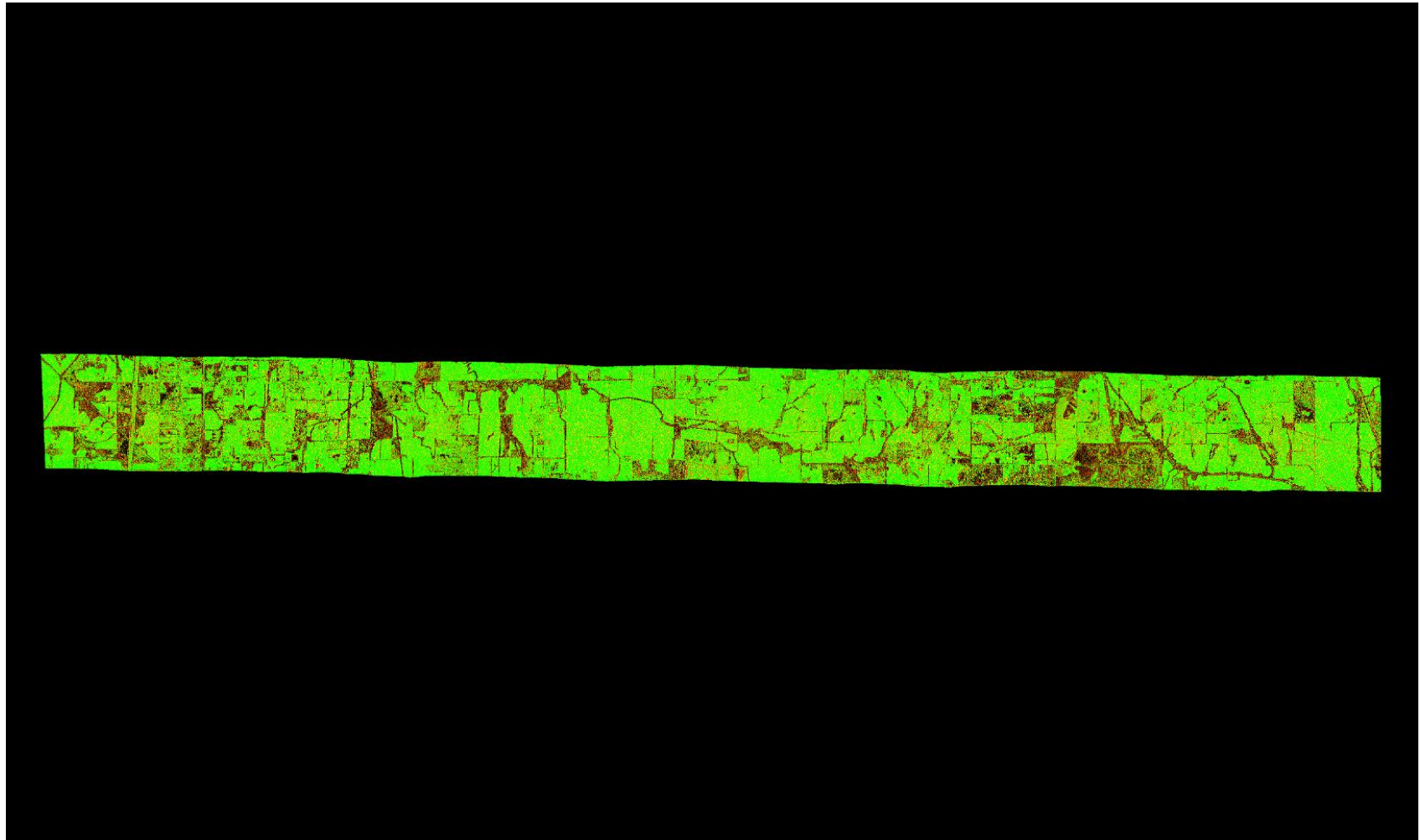


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_231322_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_231322_1-1.jp2](#)

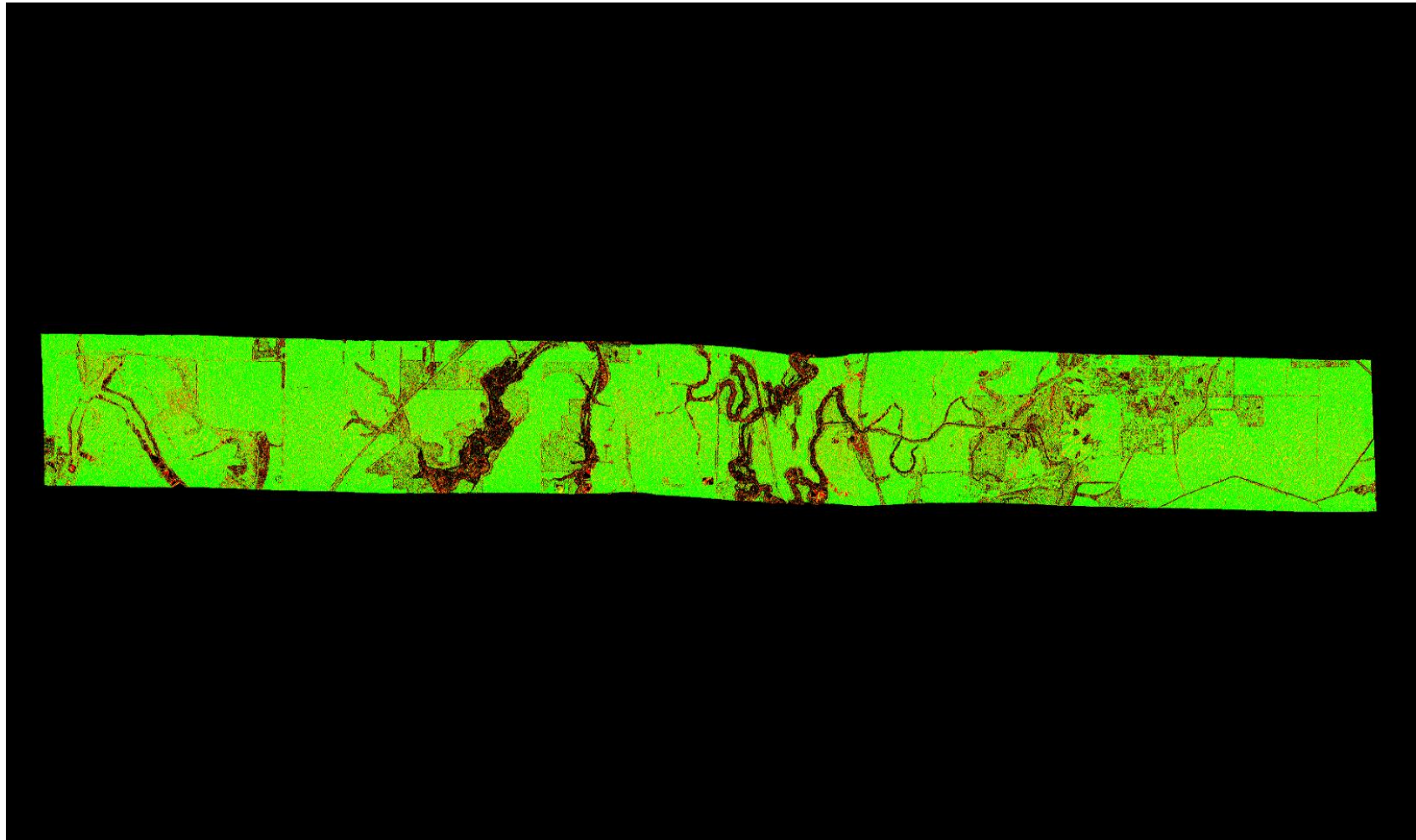


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_231322_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_231322_1-2.jp2](#)

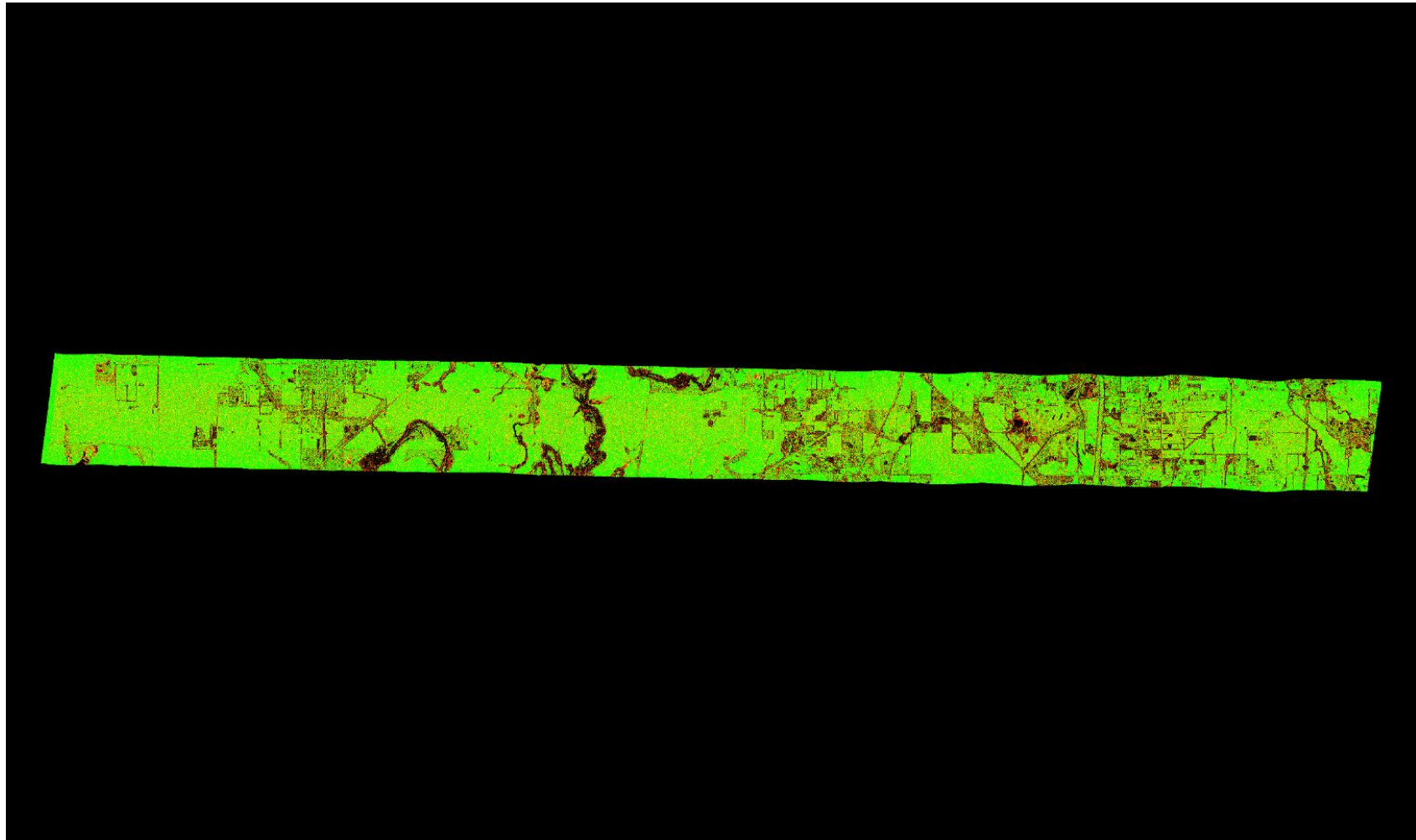


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_232632_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_232632_1-1.jp2](#)

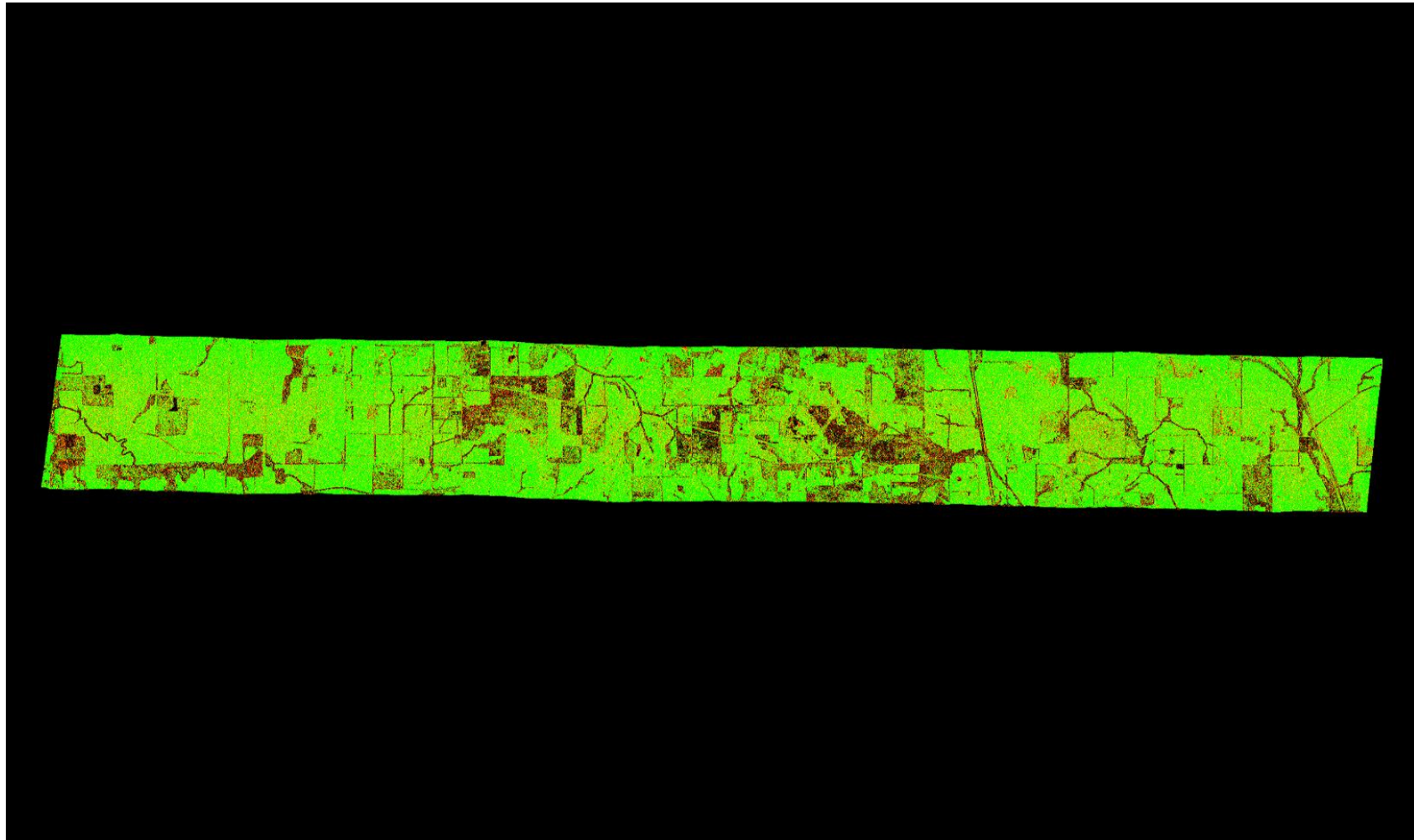


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_232632_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_232632_1-2.jp2](#)

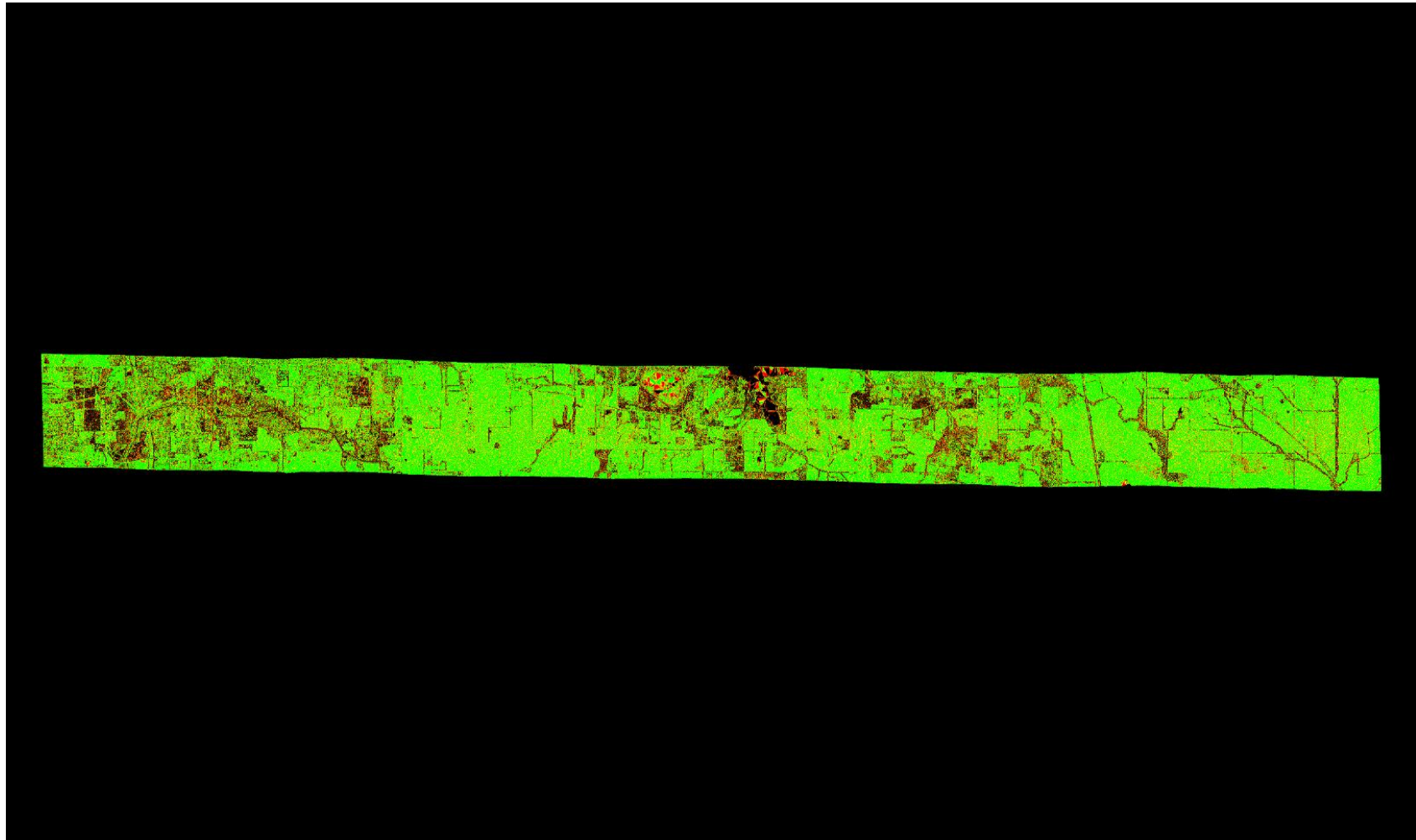


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_233933_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_233933_1-1.jp2](#)

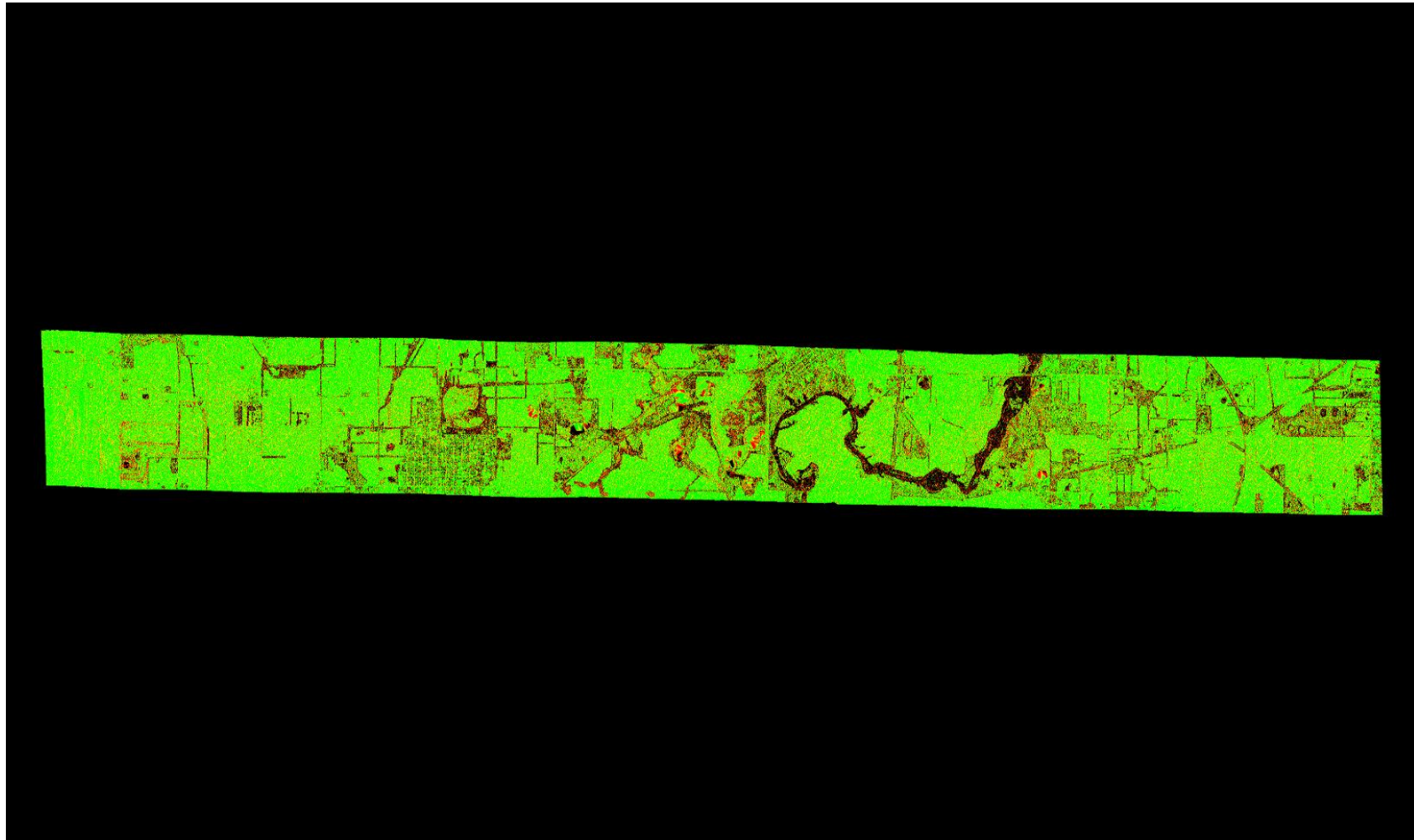


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_233933_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_233933_1-2.jp2](#)

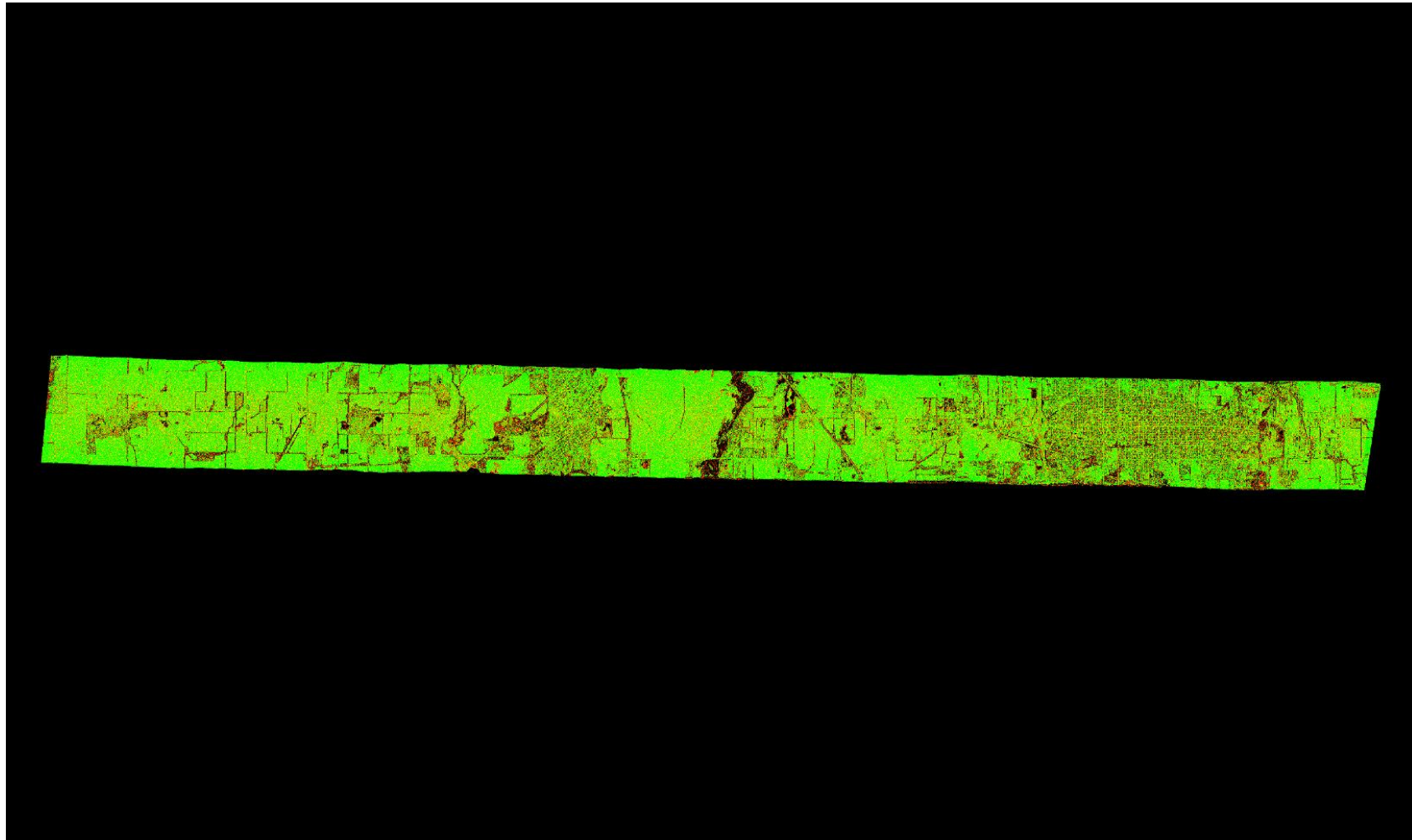


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_235212_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_235212_1-1.jp2](#)

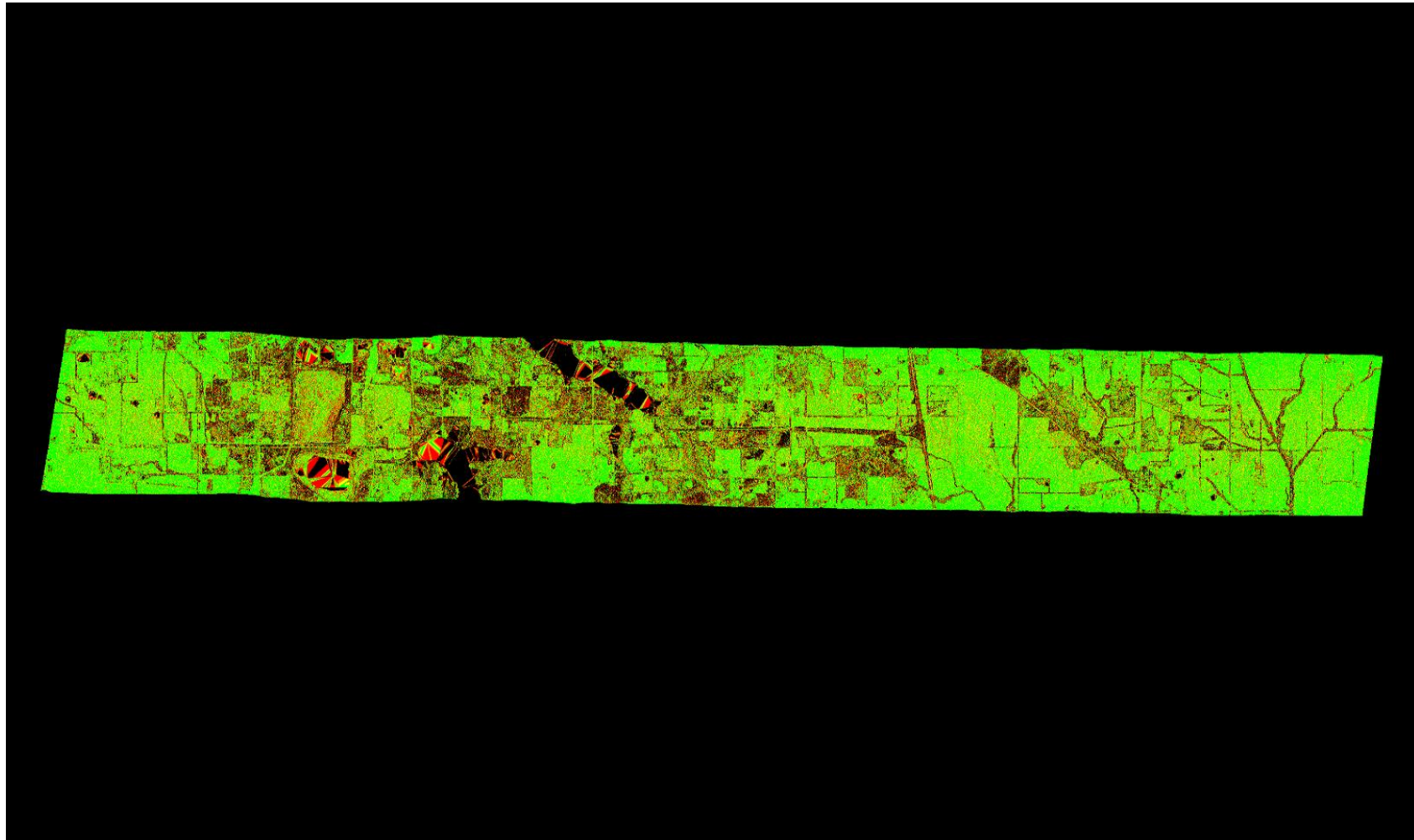


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140417_235212_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140417_235212_1-2.jp2](#)

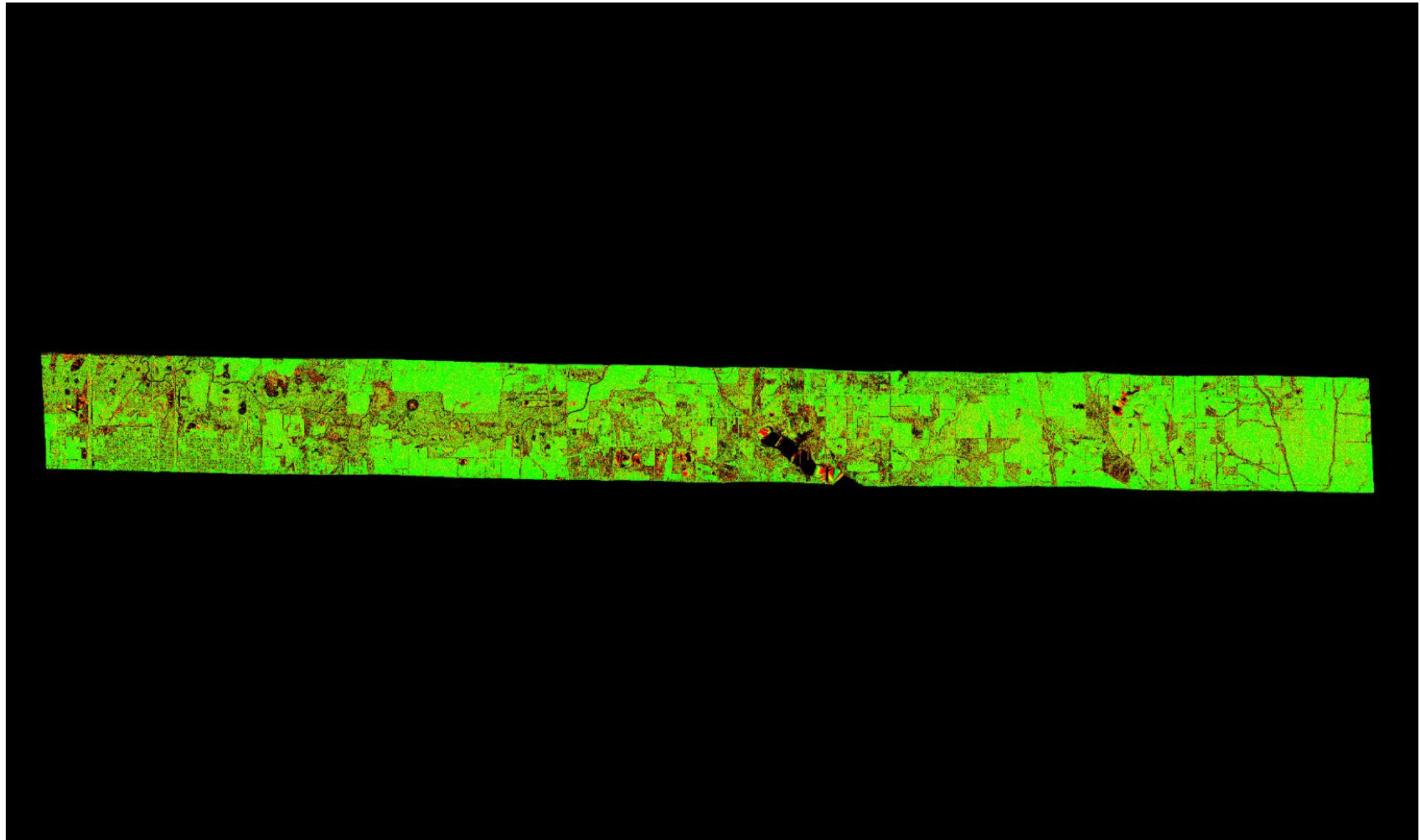


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_000524_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_000524_1-1.jp2](#)

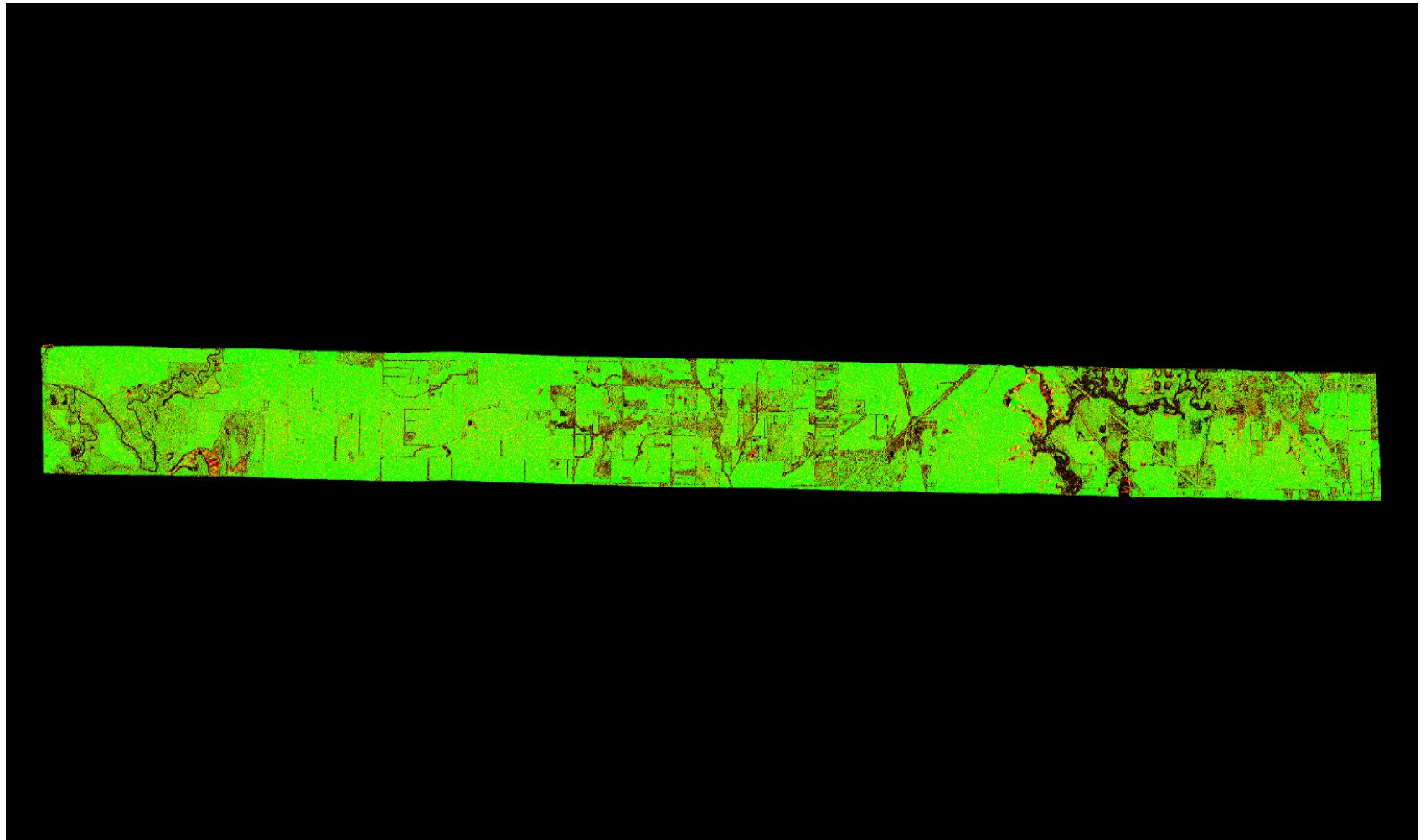


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_000524_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_000524_1-2.jp2](#)

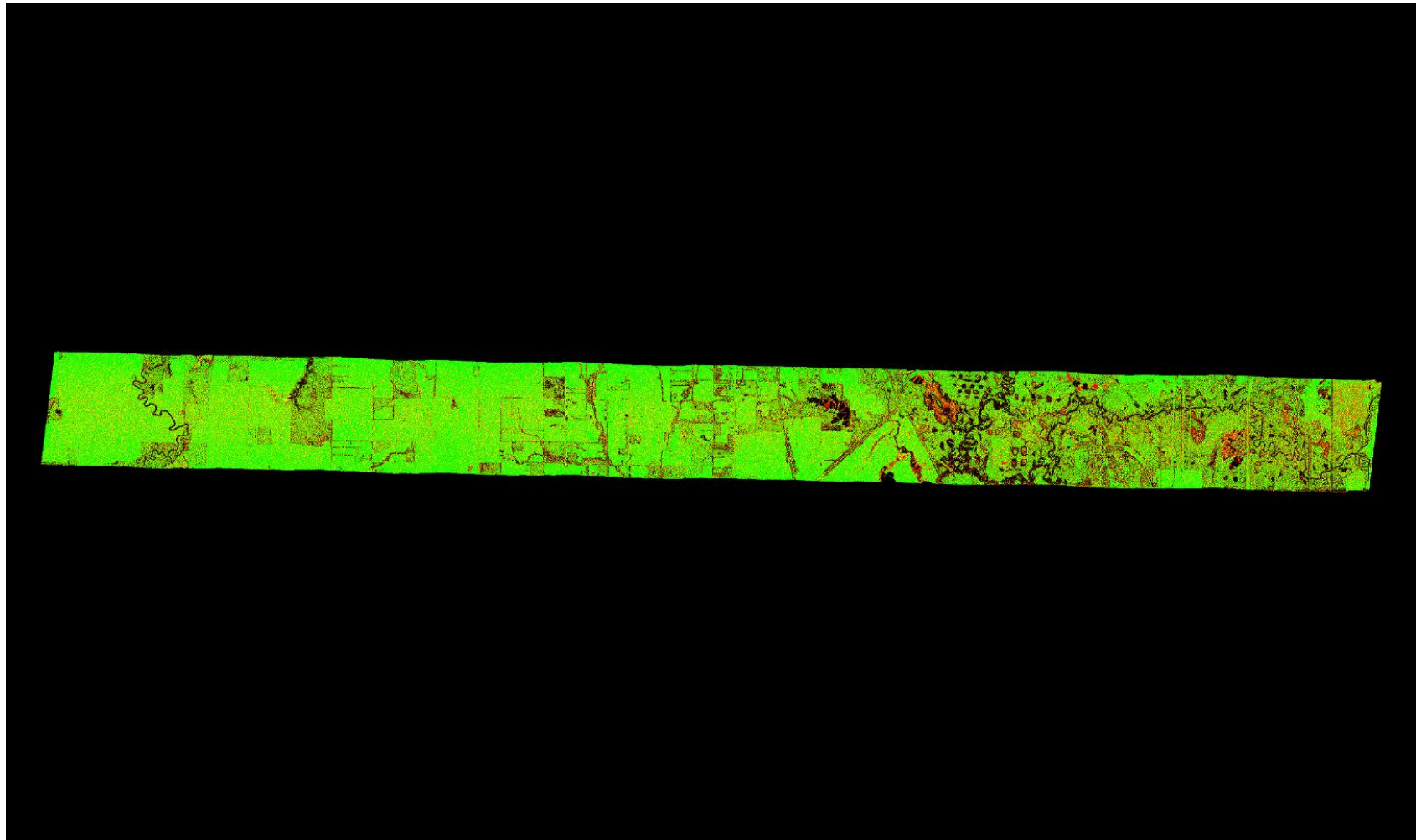


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_001909_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_001909_1-1.jp2](#)

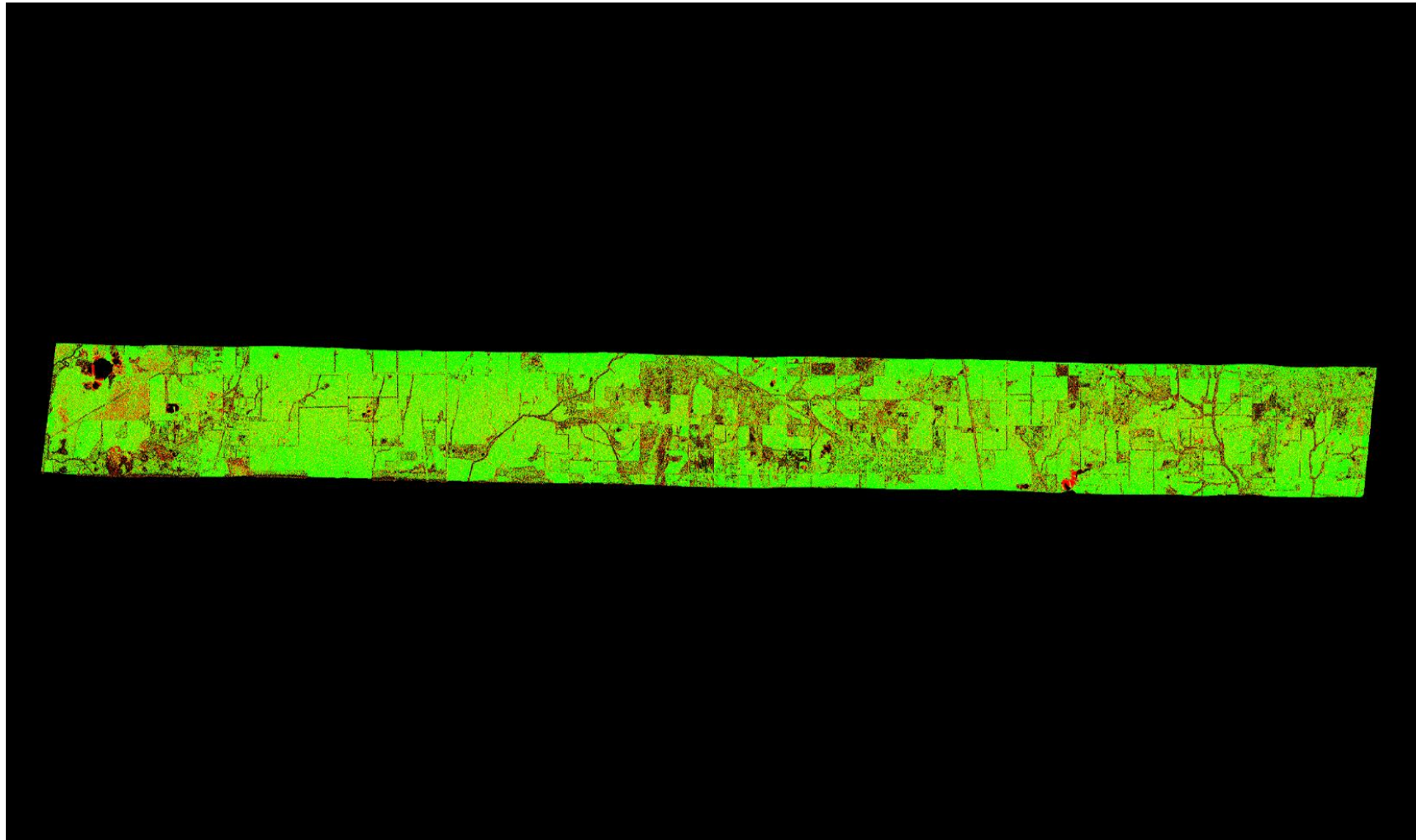


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_001909_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_001909_1-2.jp2](#)

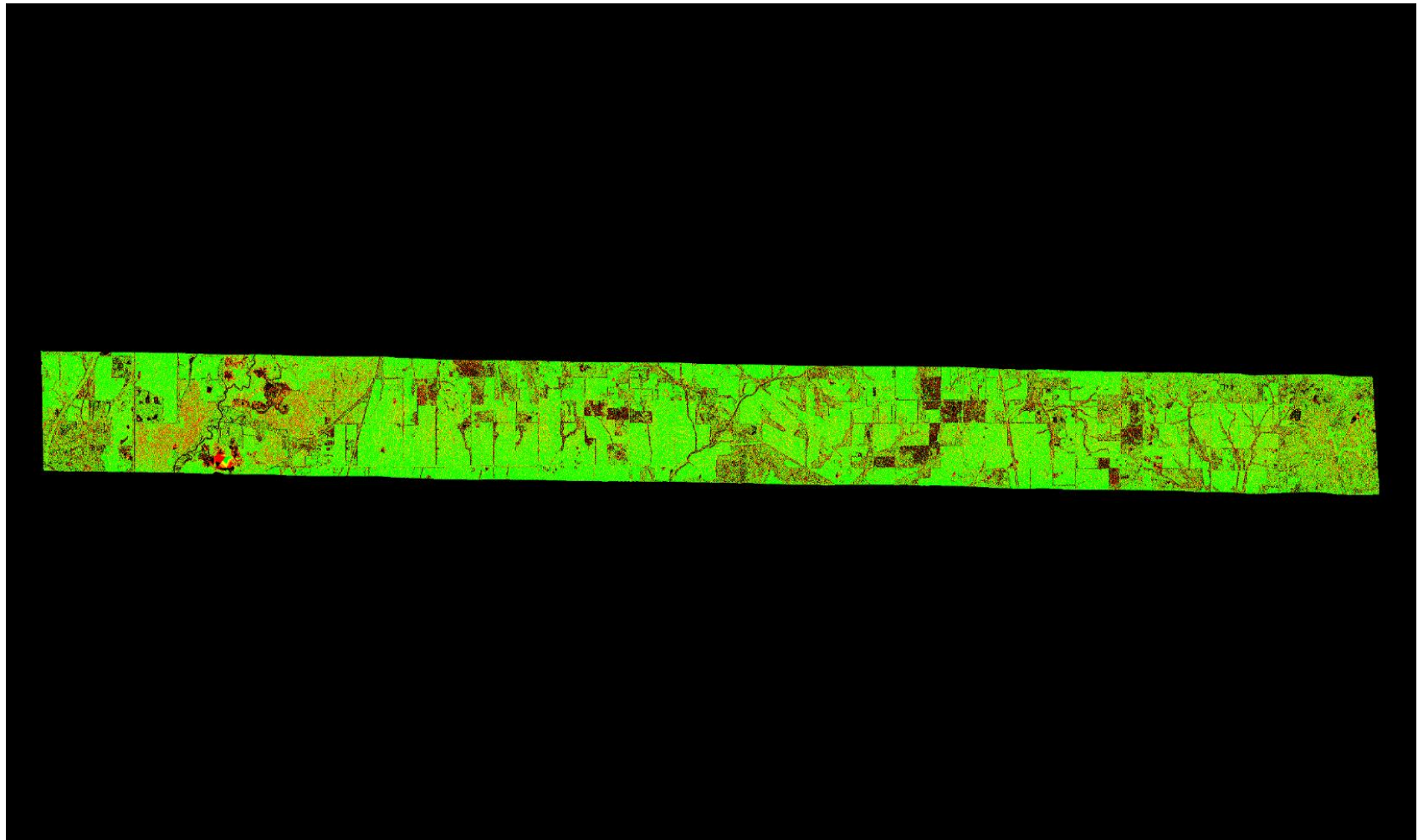


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_003250_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_003250_1-1.jp2](#)

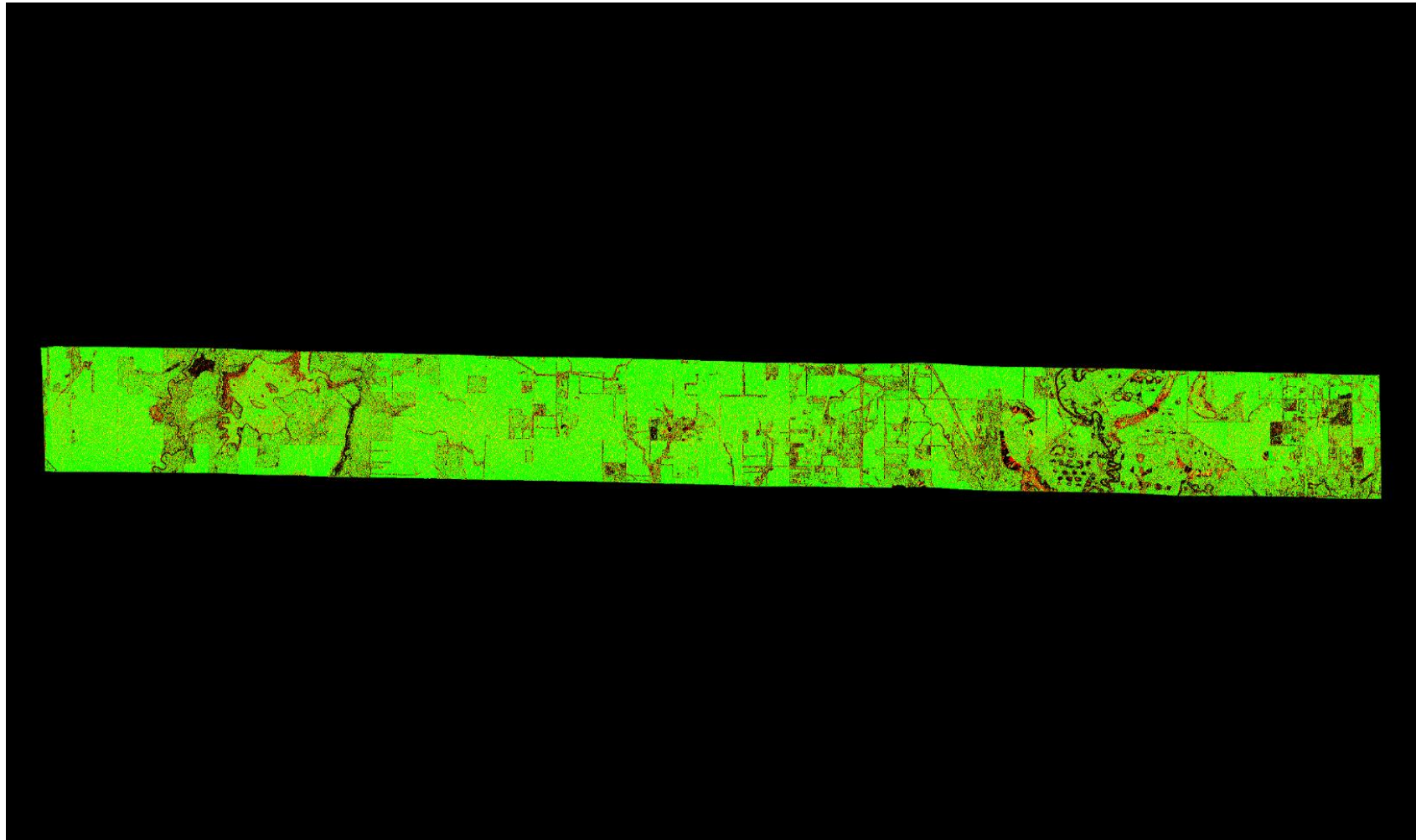


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_003250_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_003250_1-2.jp2](#)

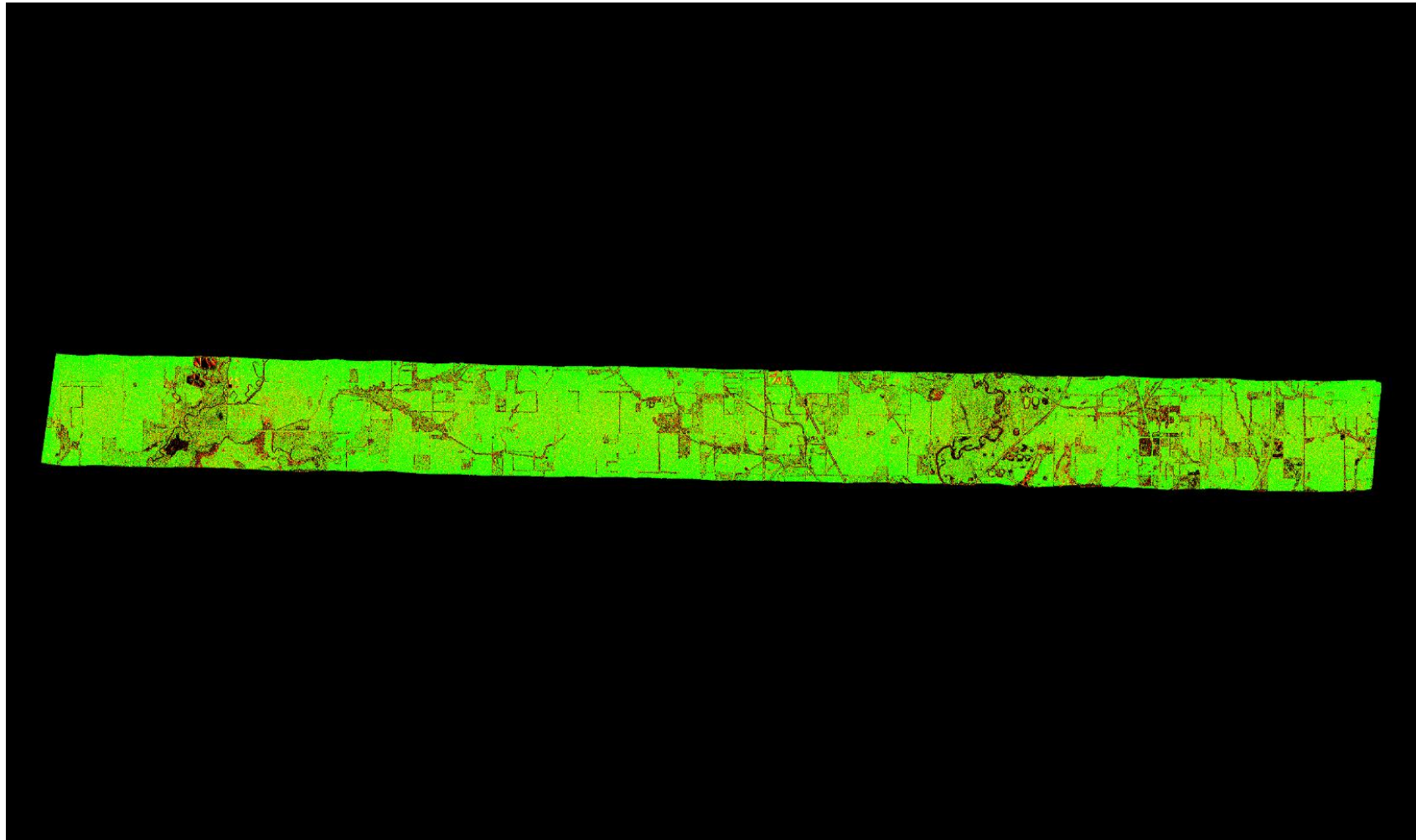


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_004640_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_004640_1-1.jp2](#)

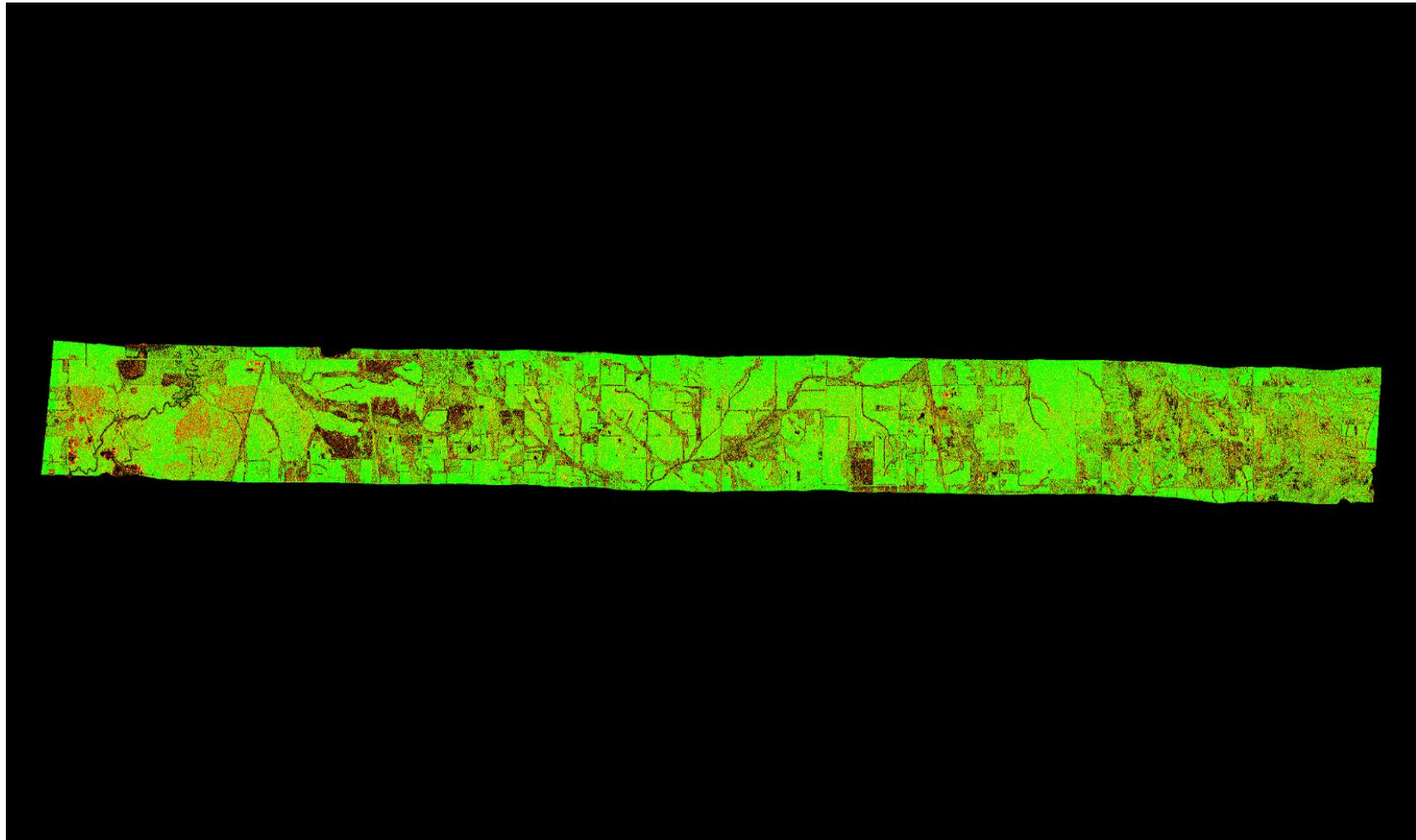


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_004640_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_004640_1-2.jp2](#)

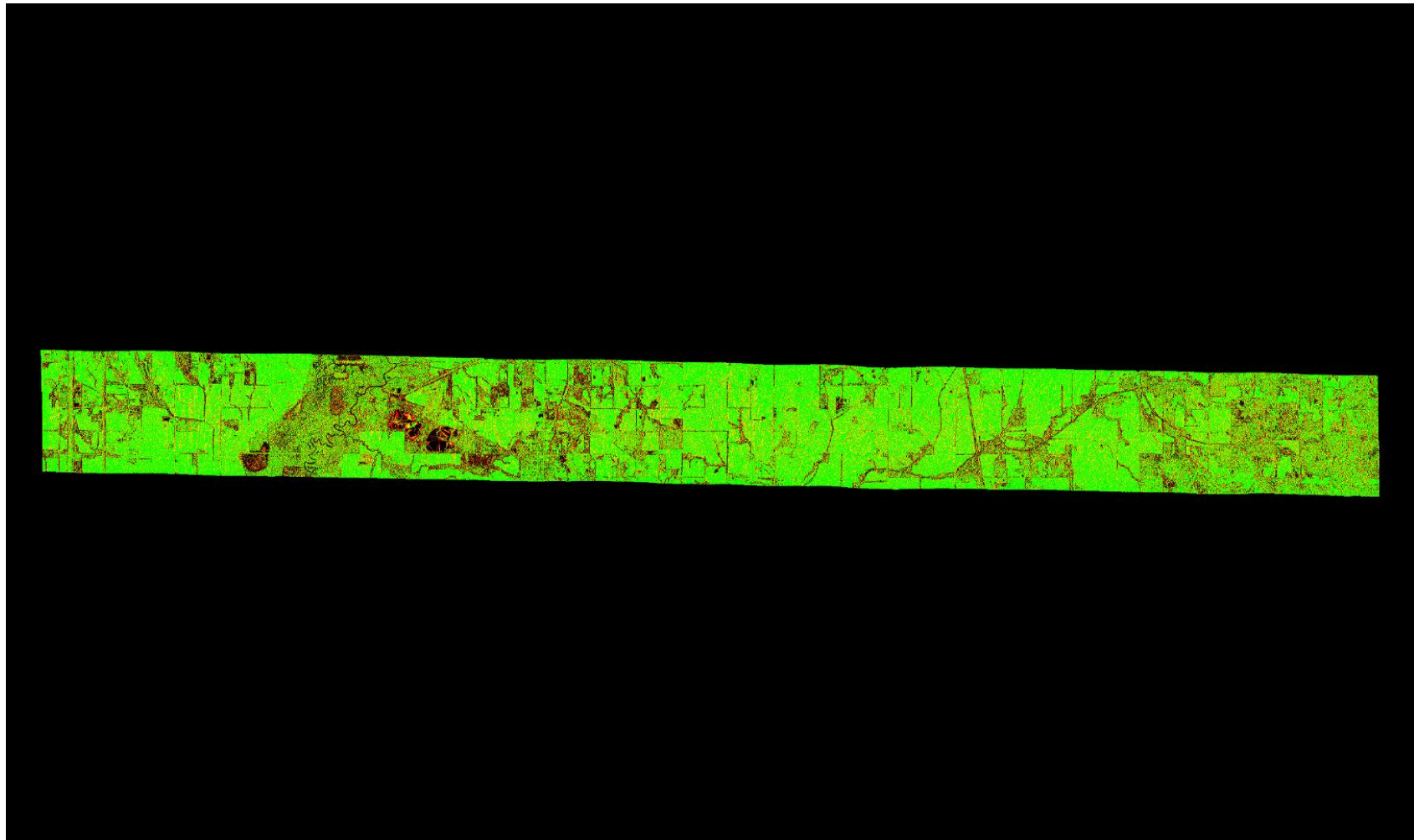


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_010058_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_010058_1-1.jp2](#)

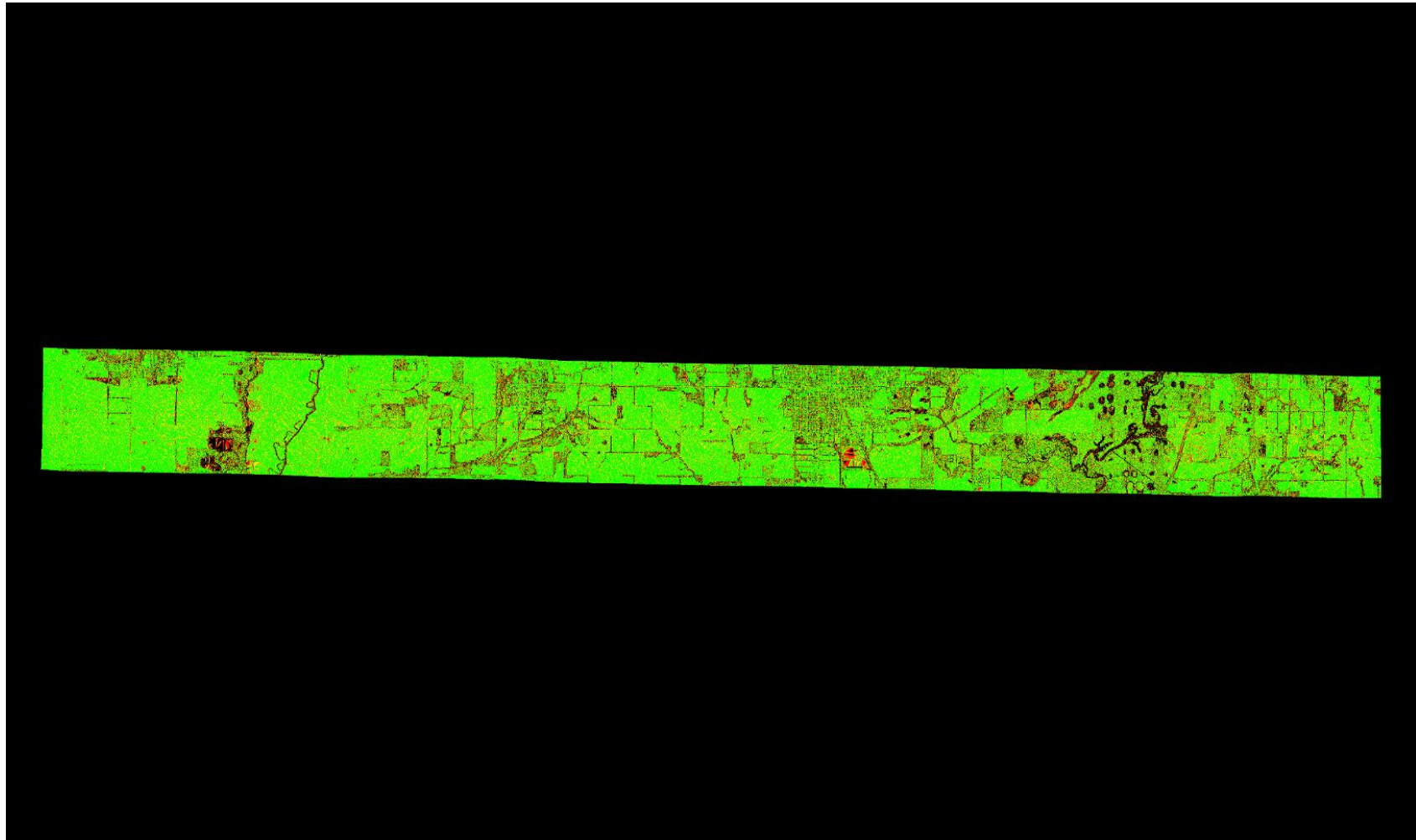


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_010058_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_010058_1-2.jp2](#)

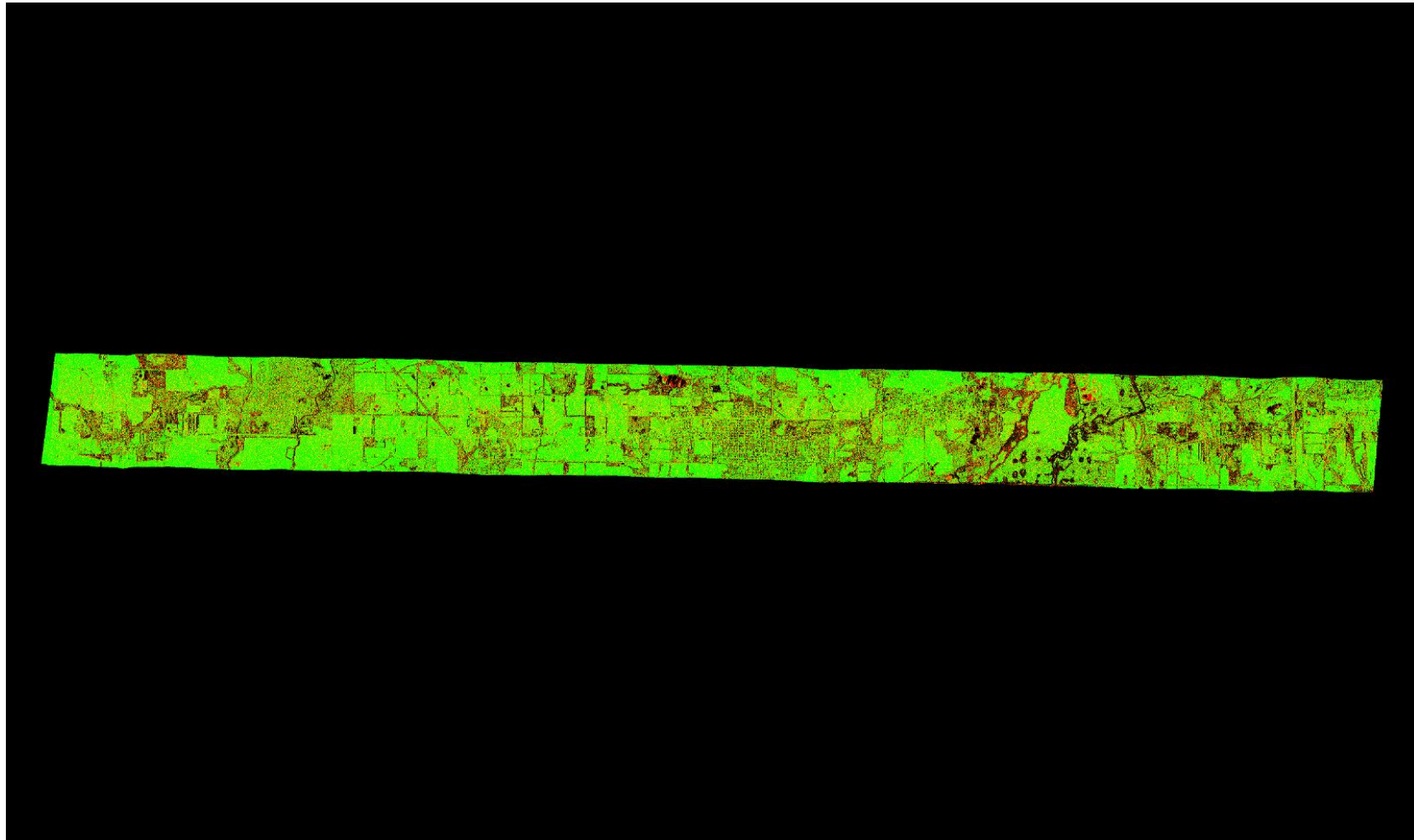


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_011447_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_011447_1-1.jp2](#)

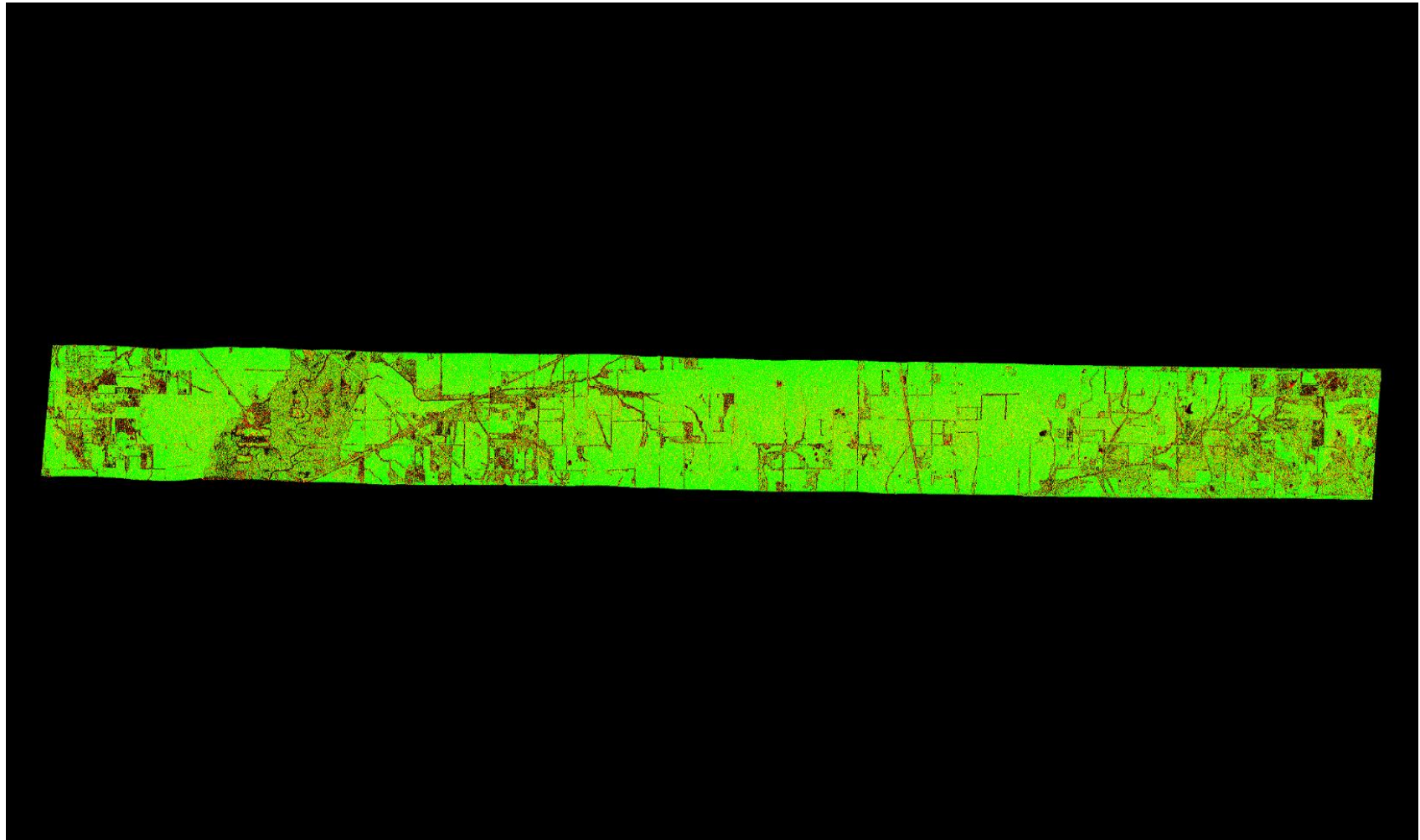


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_011447_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_011447_1-2.jp2](#)

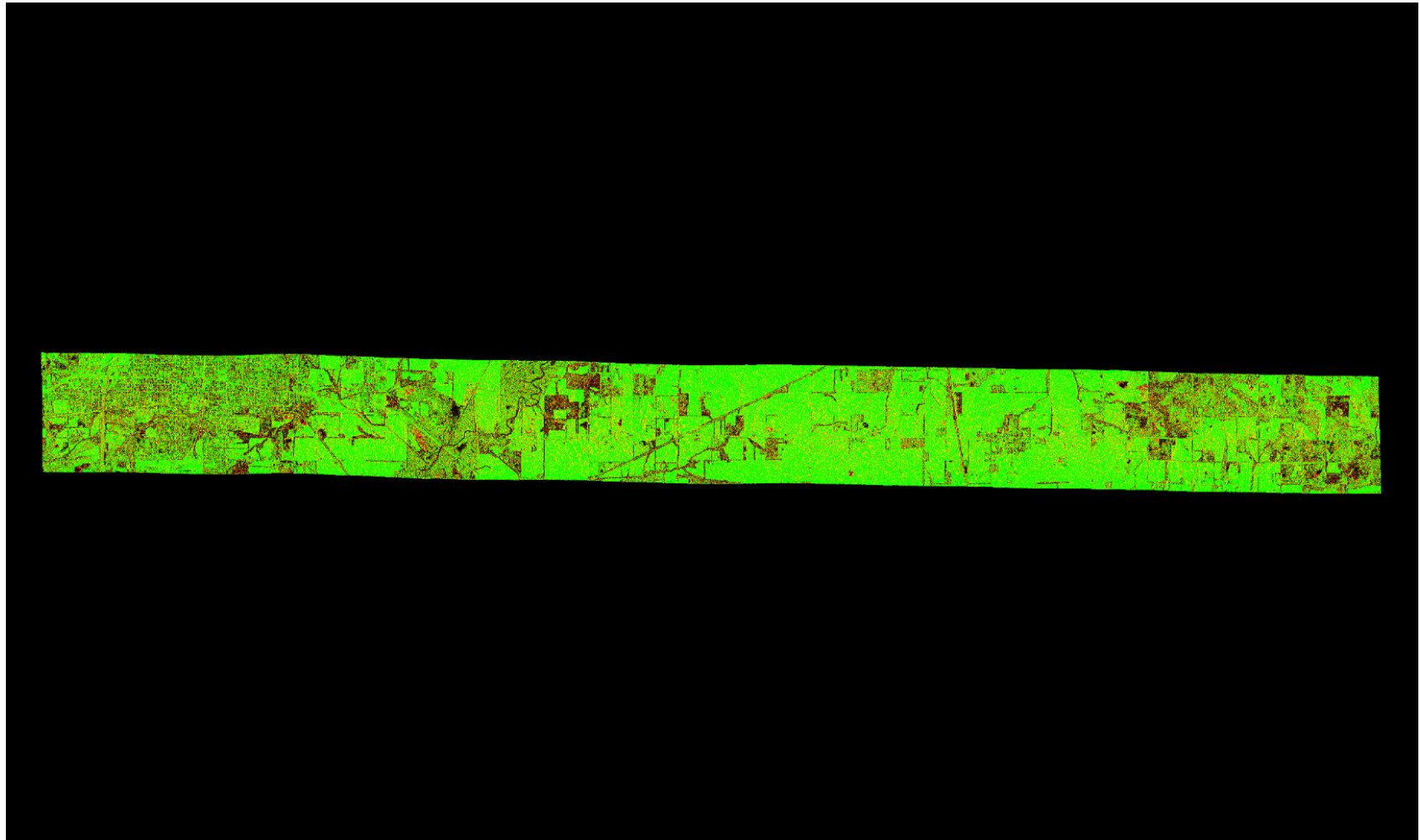


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_012827_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_012827_1-1.jp2](#)

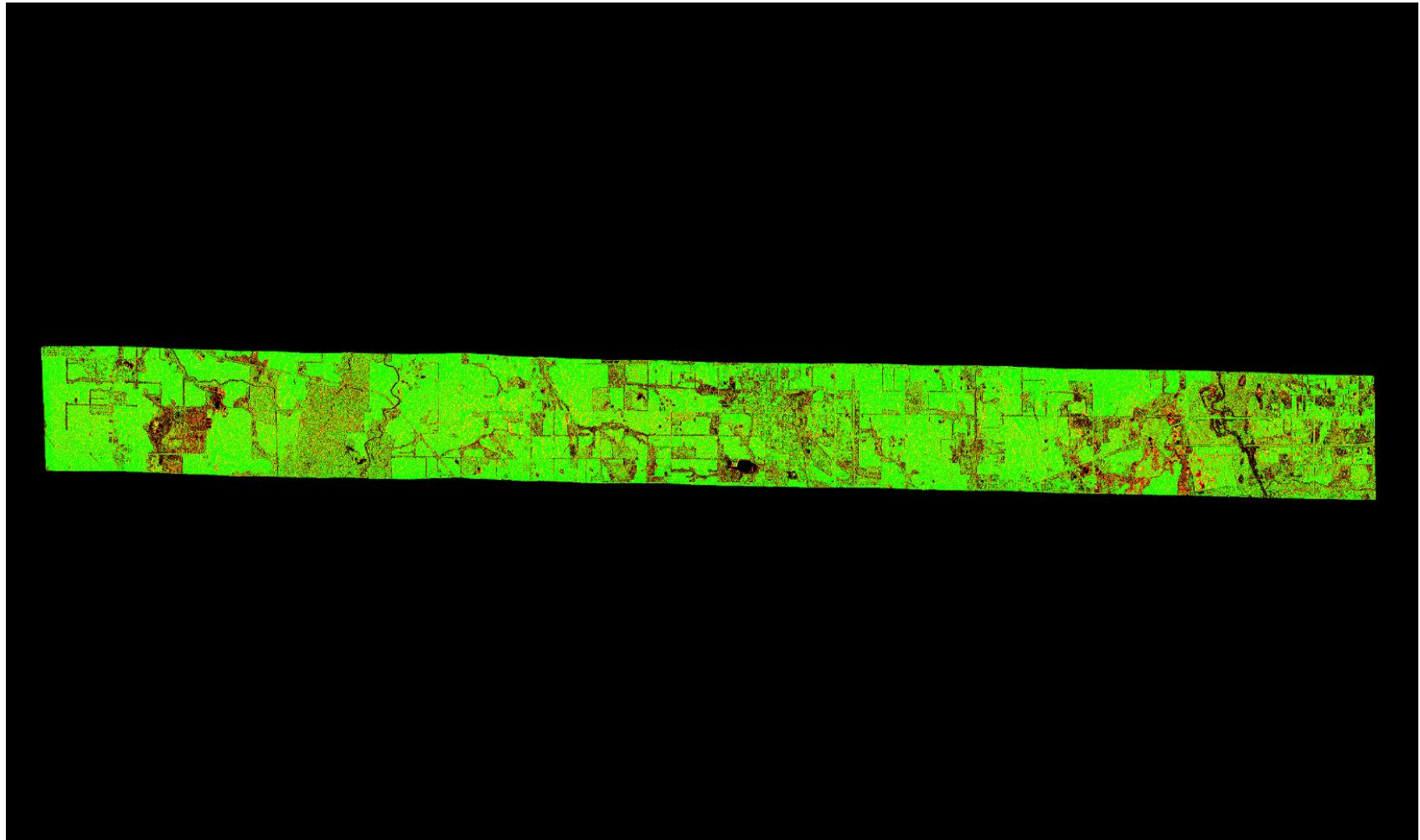


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_012827_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_012827_1-2.jp2](#)

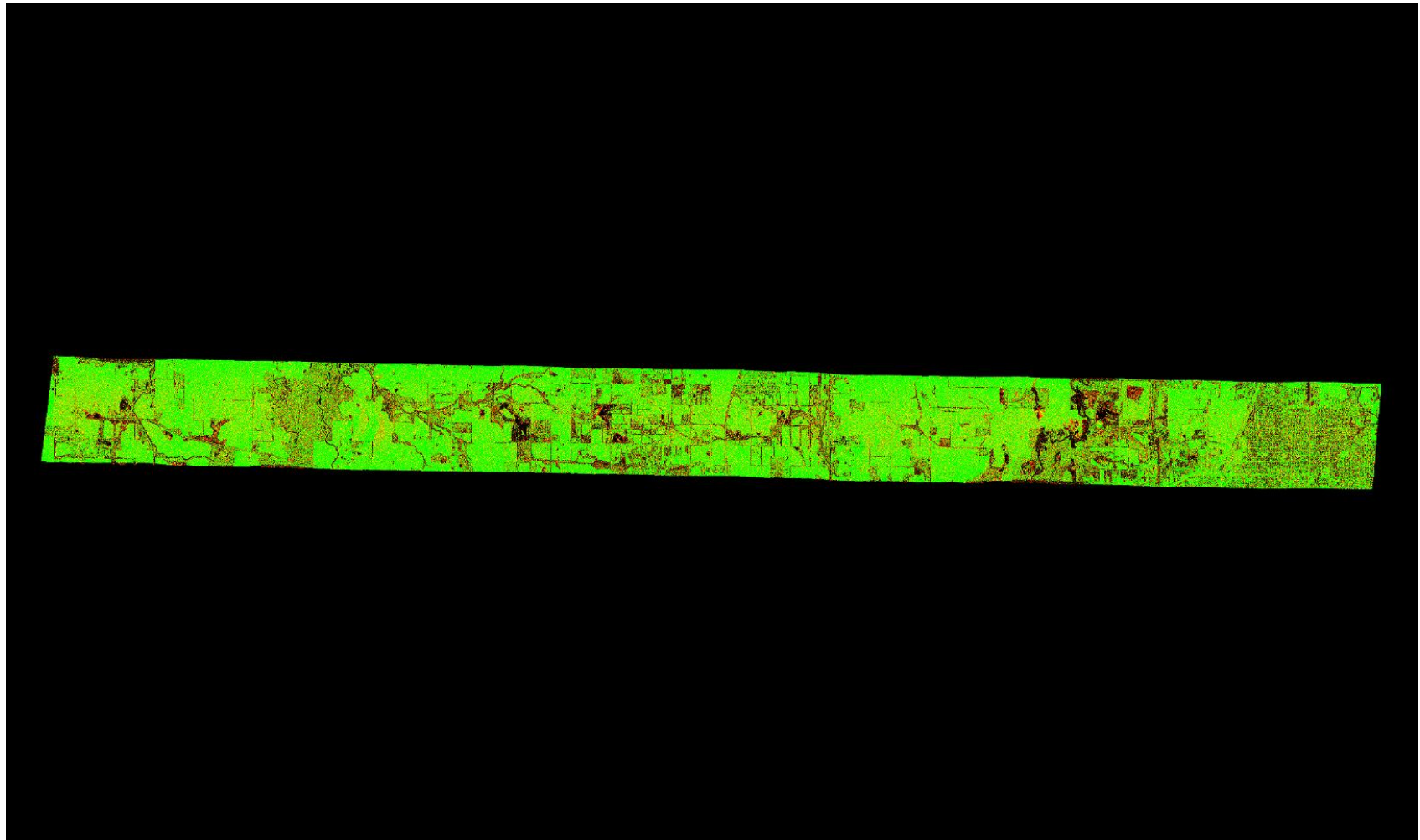


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_014215_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_014215_1-1.jp2](#)

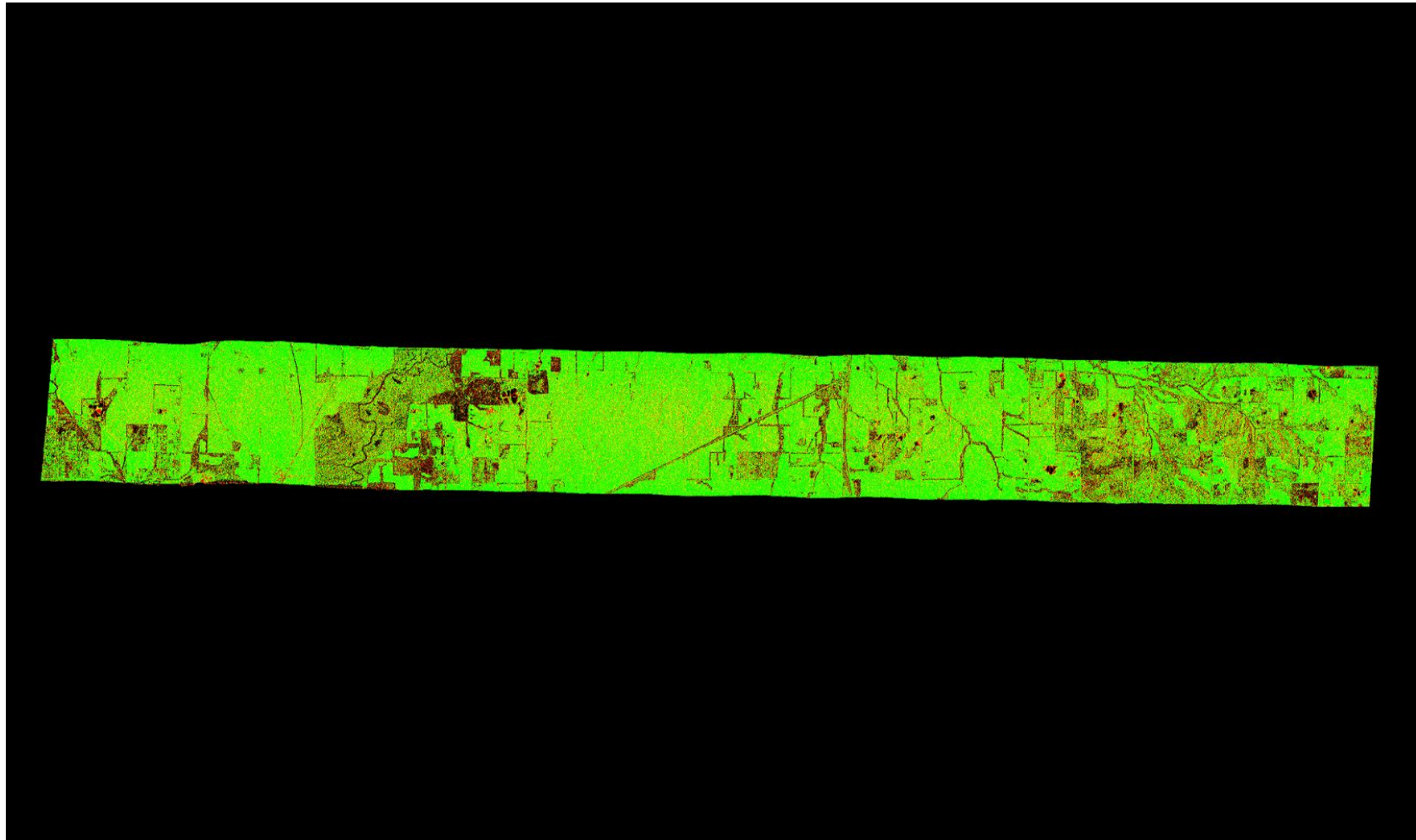


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_014215_1-2.las](#)

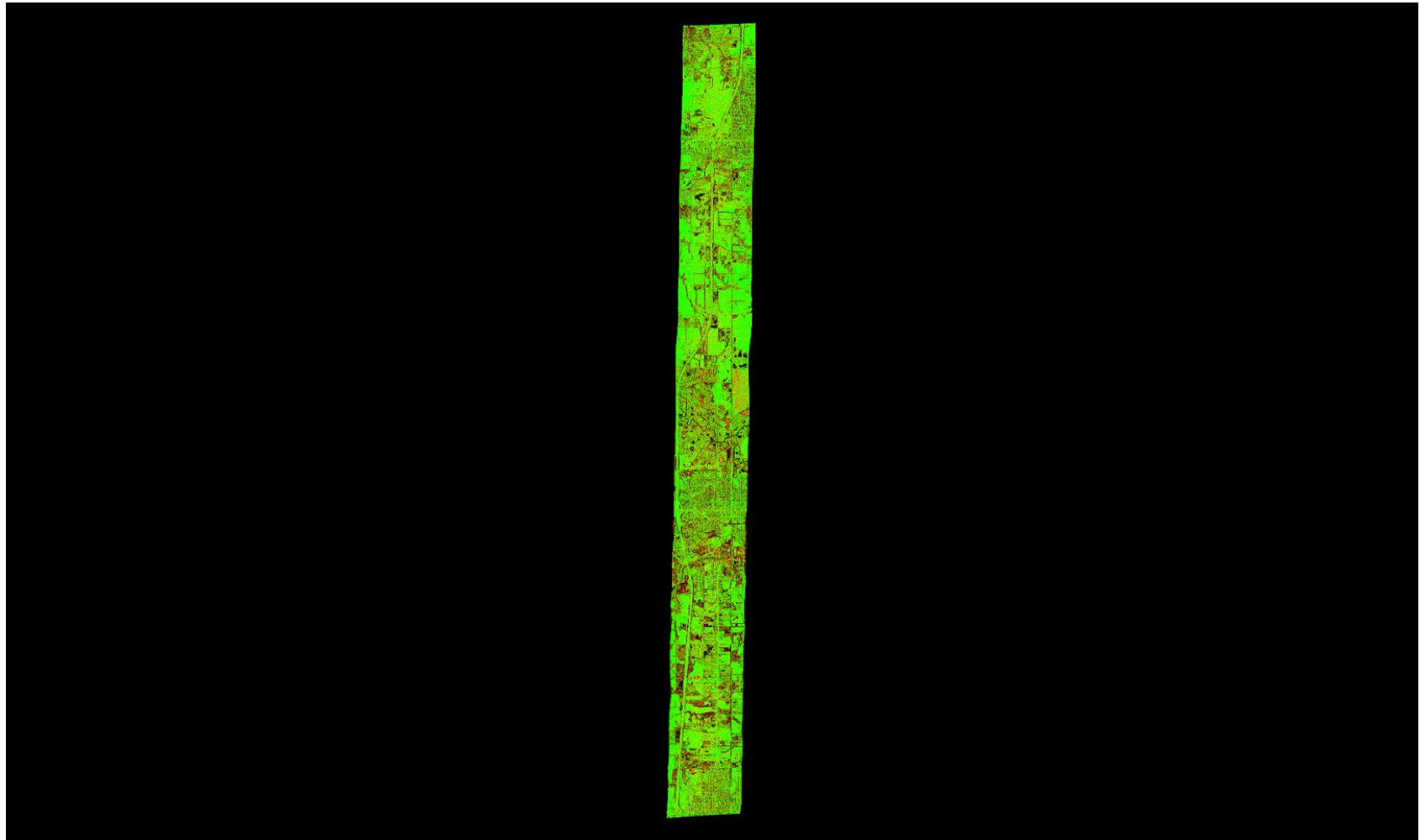
[E:\Franklin County\QAQC\1_9_2\Individual_140418_014215_1-2.jp2](#)



A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

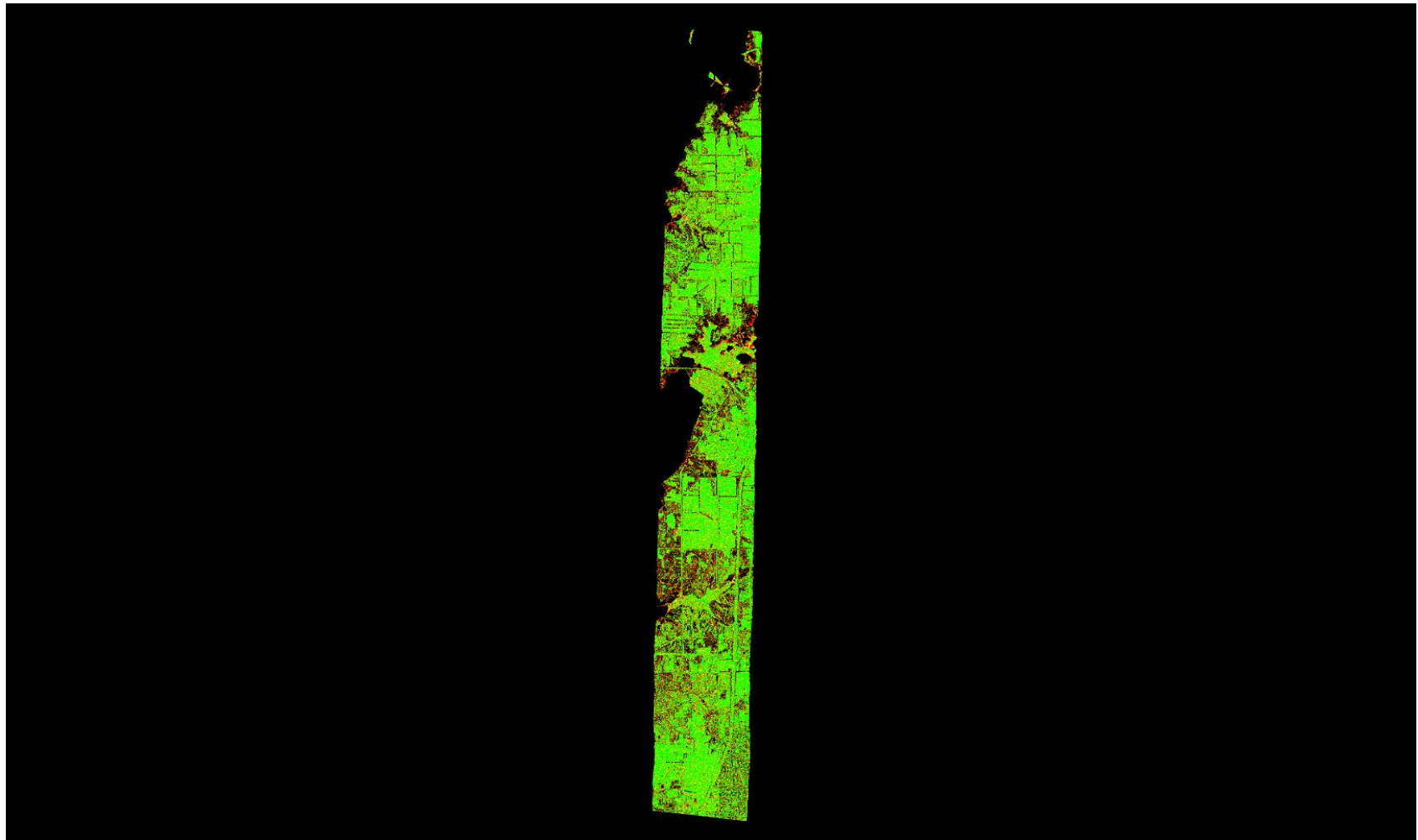
[Data Source - E:\Franklin County\swath\140418_020434_1.las](#)
[E:\Franklin County\QAQC\1_9_2\Individual_140418_020434_1.jp2](#)



A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_145120_1.las](#)
[E:\Franklin County\QAQC\1_9_2\Individual_140418_145120_1.jp2](#)

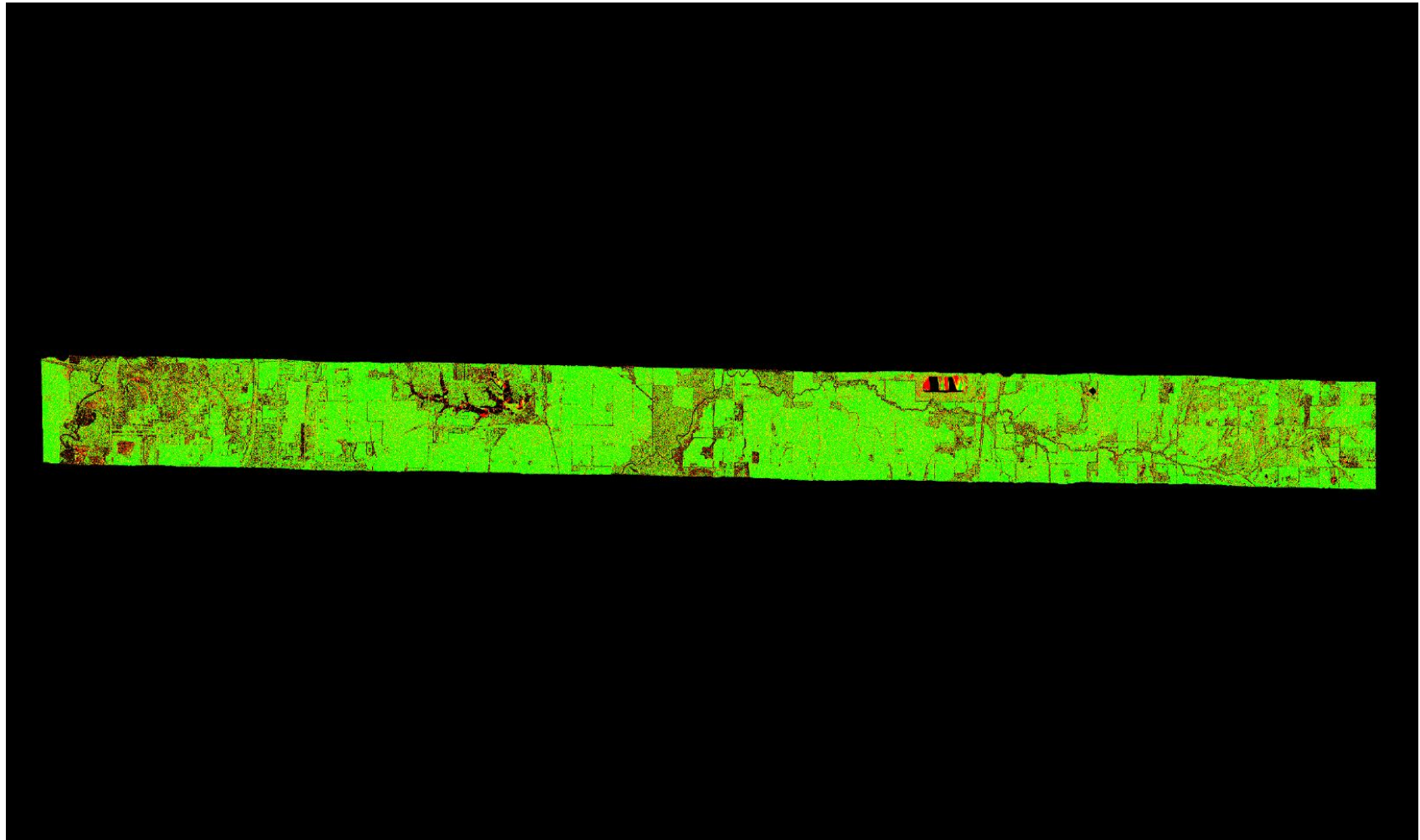


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_150350_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_150350_1-1.jp2](#)

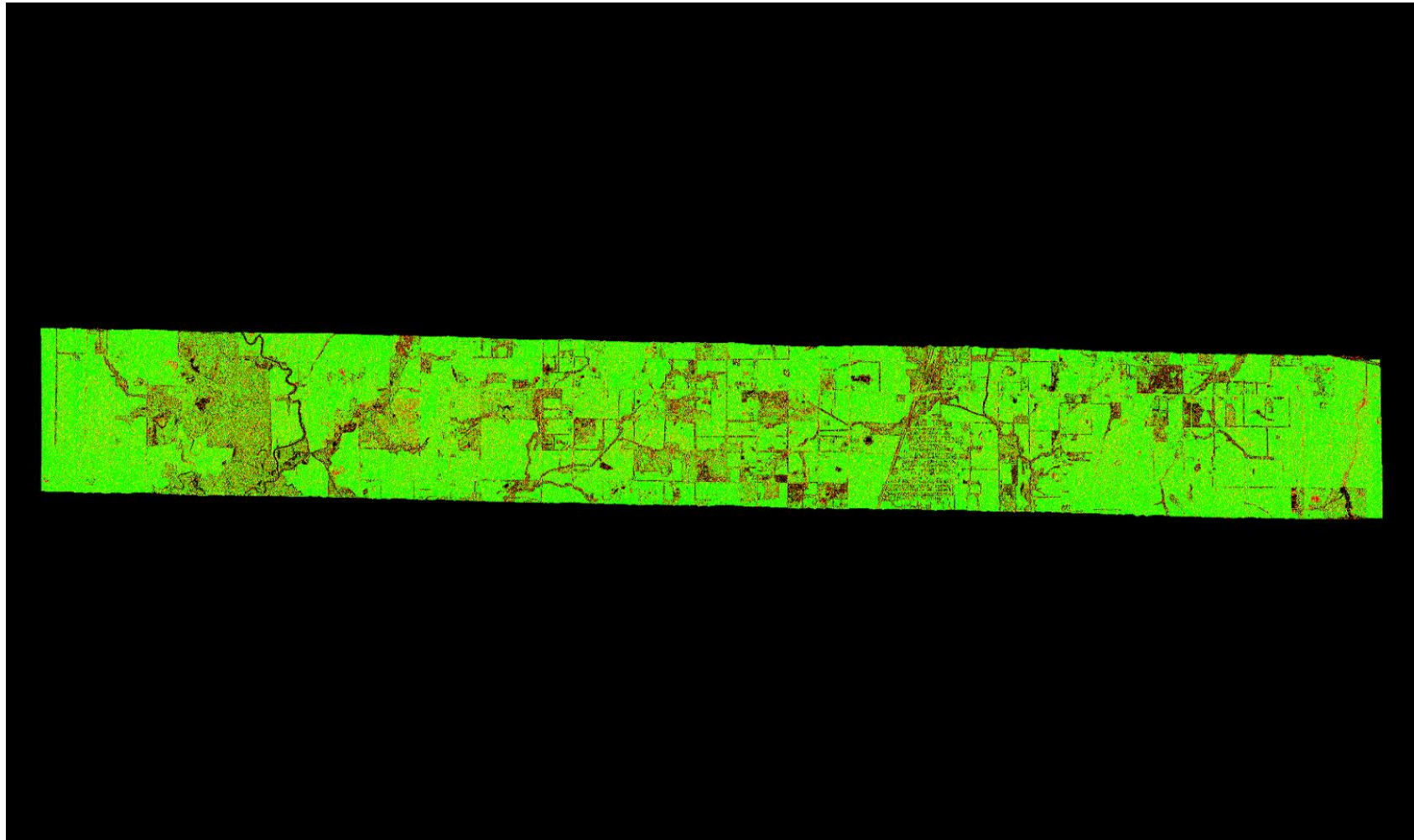


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_150350_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_150350_1-2.jp2](#)

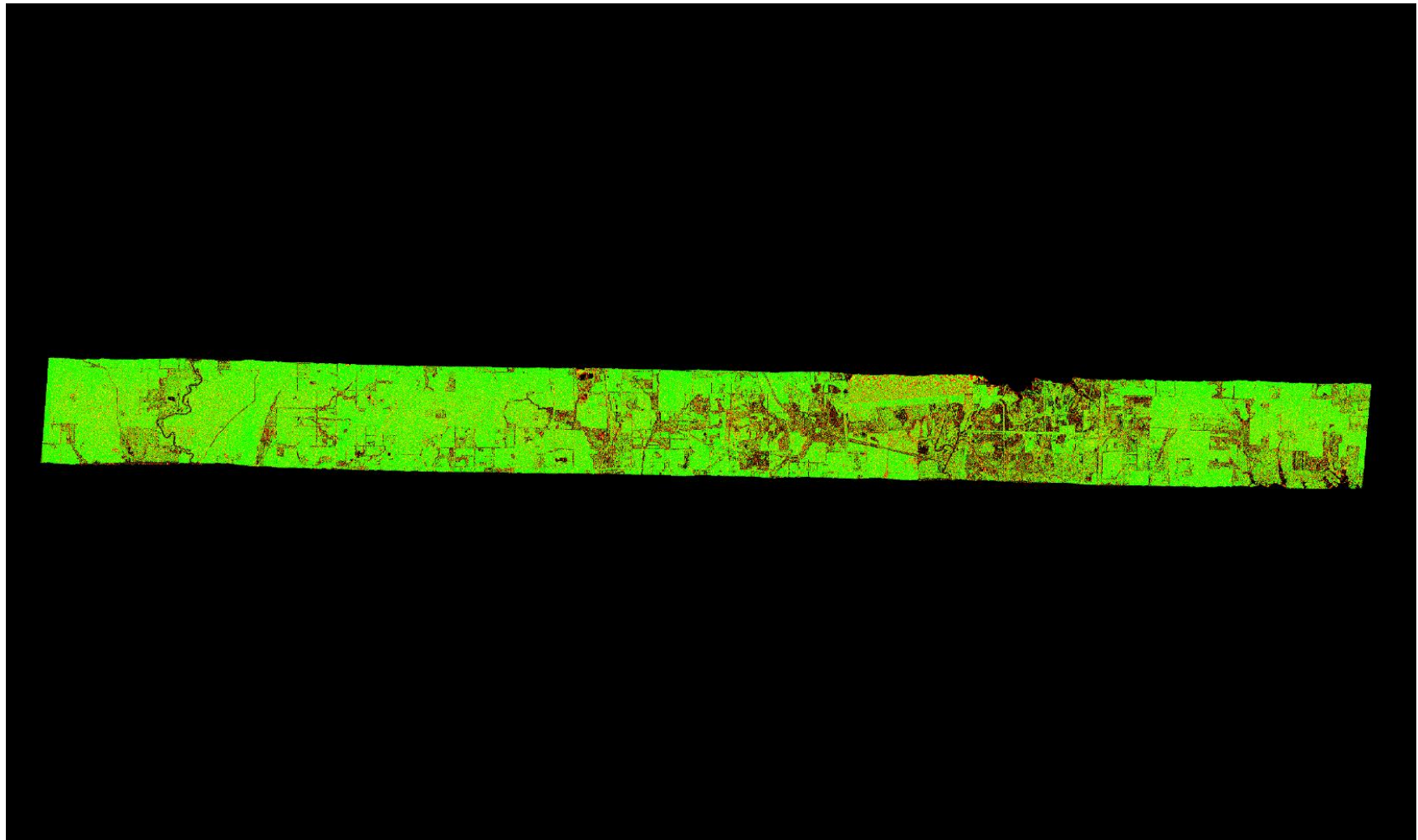


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_151646_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_151646_1-1.jp2](#)

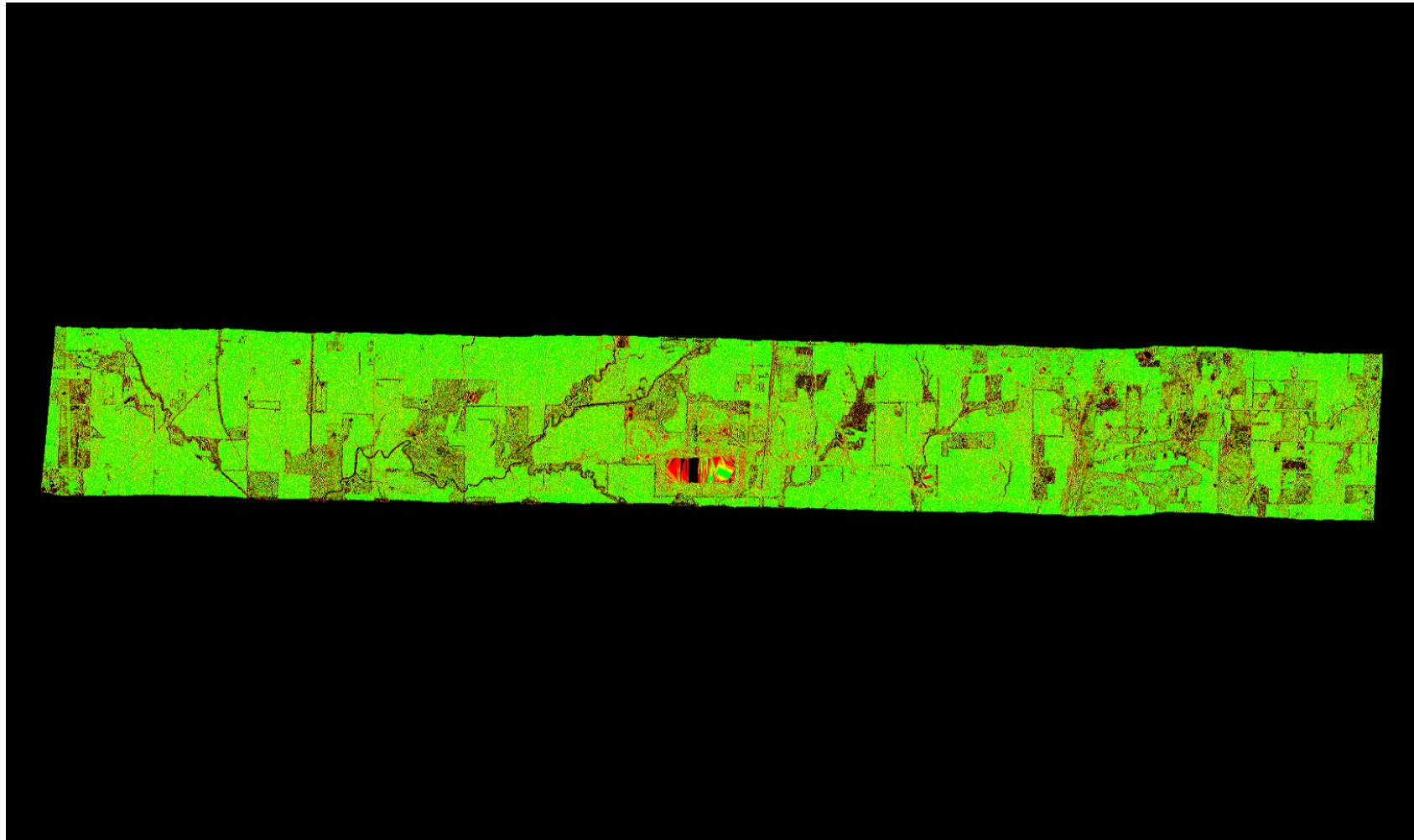


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_151646_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_151646_1-2.jp2](#)

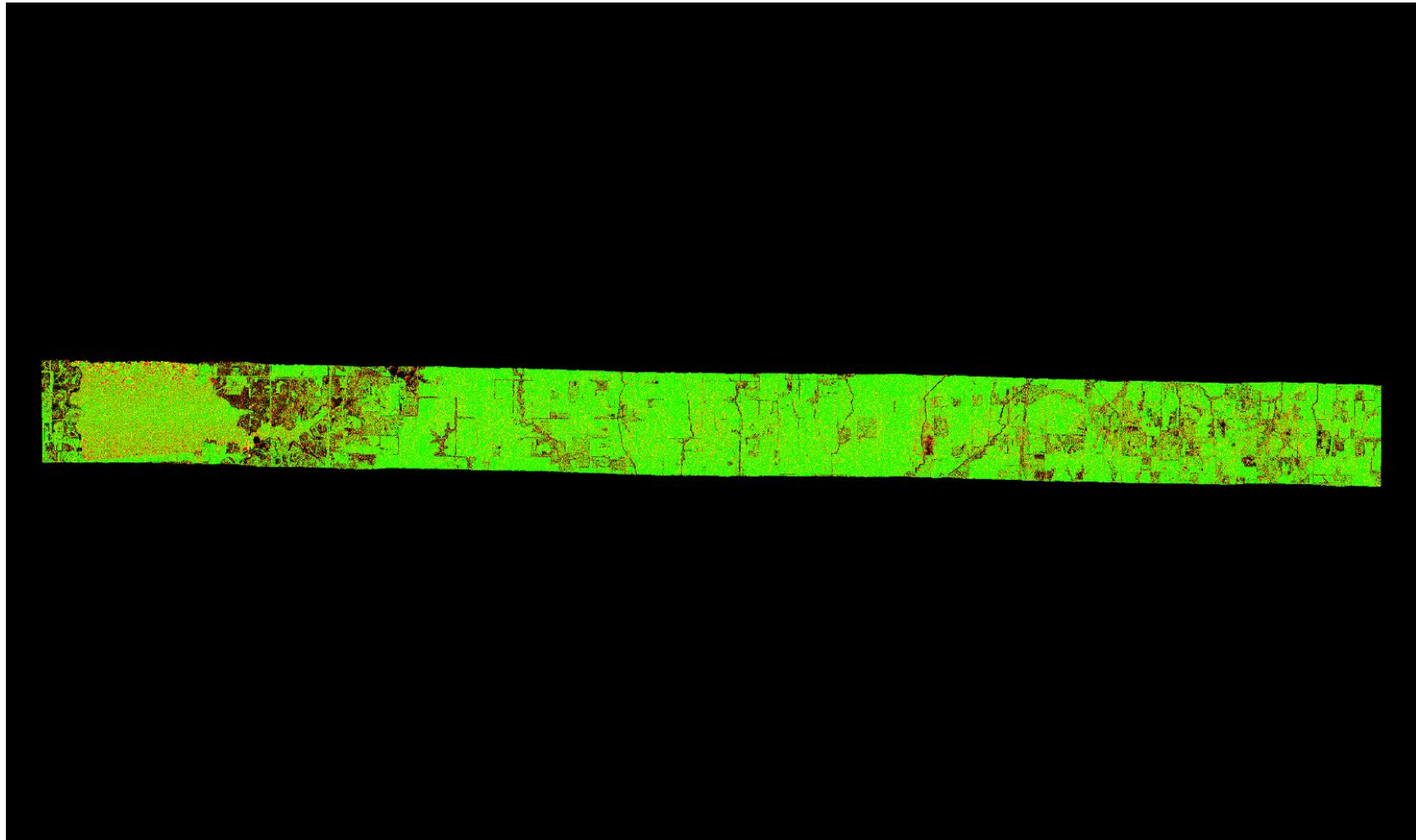


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_152909_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_152909_1-1.jp2](#)

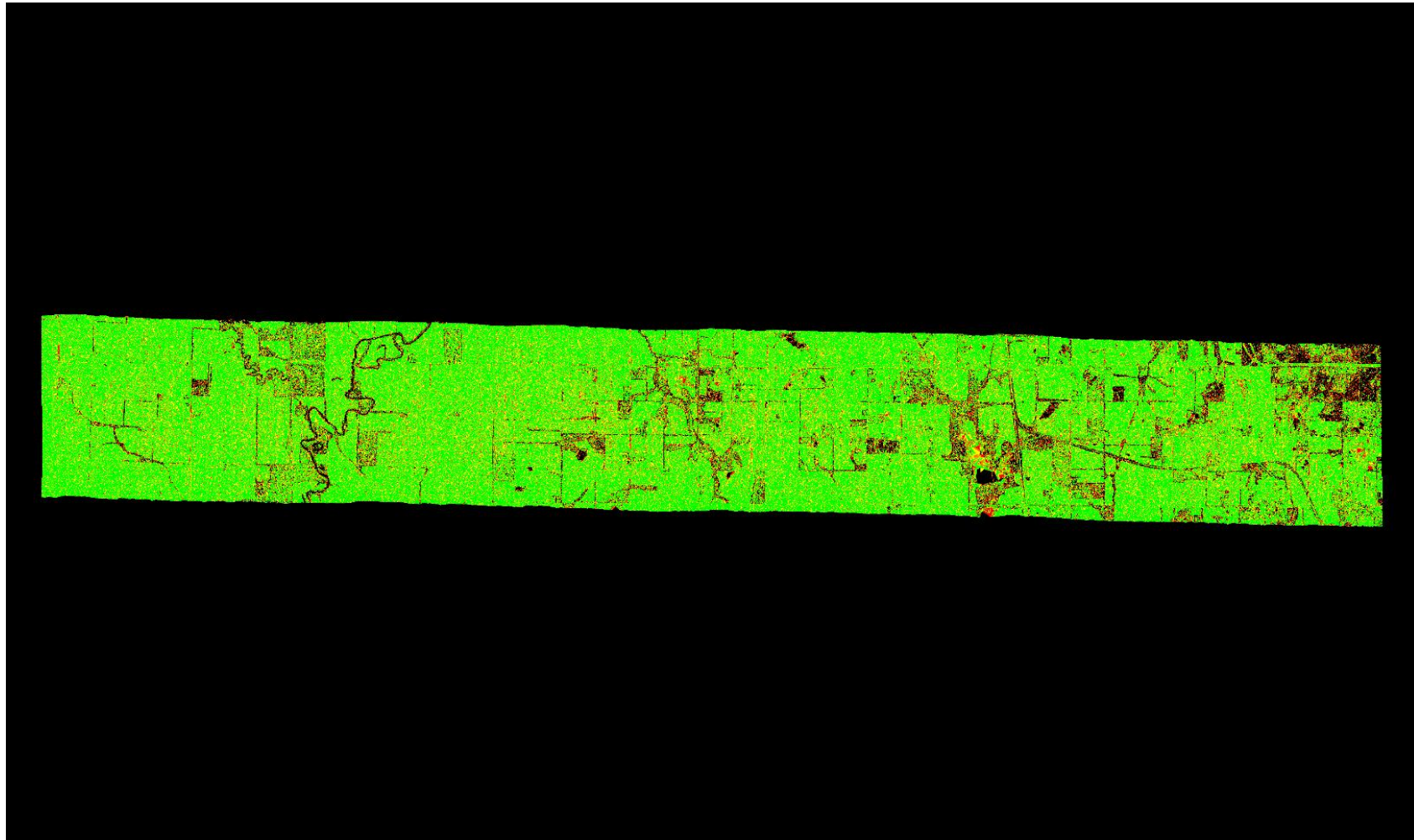


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_152909_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_152909_1-2.jp2](#)

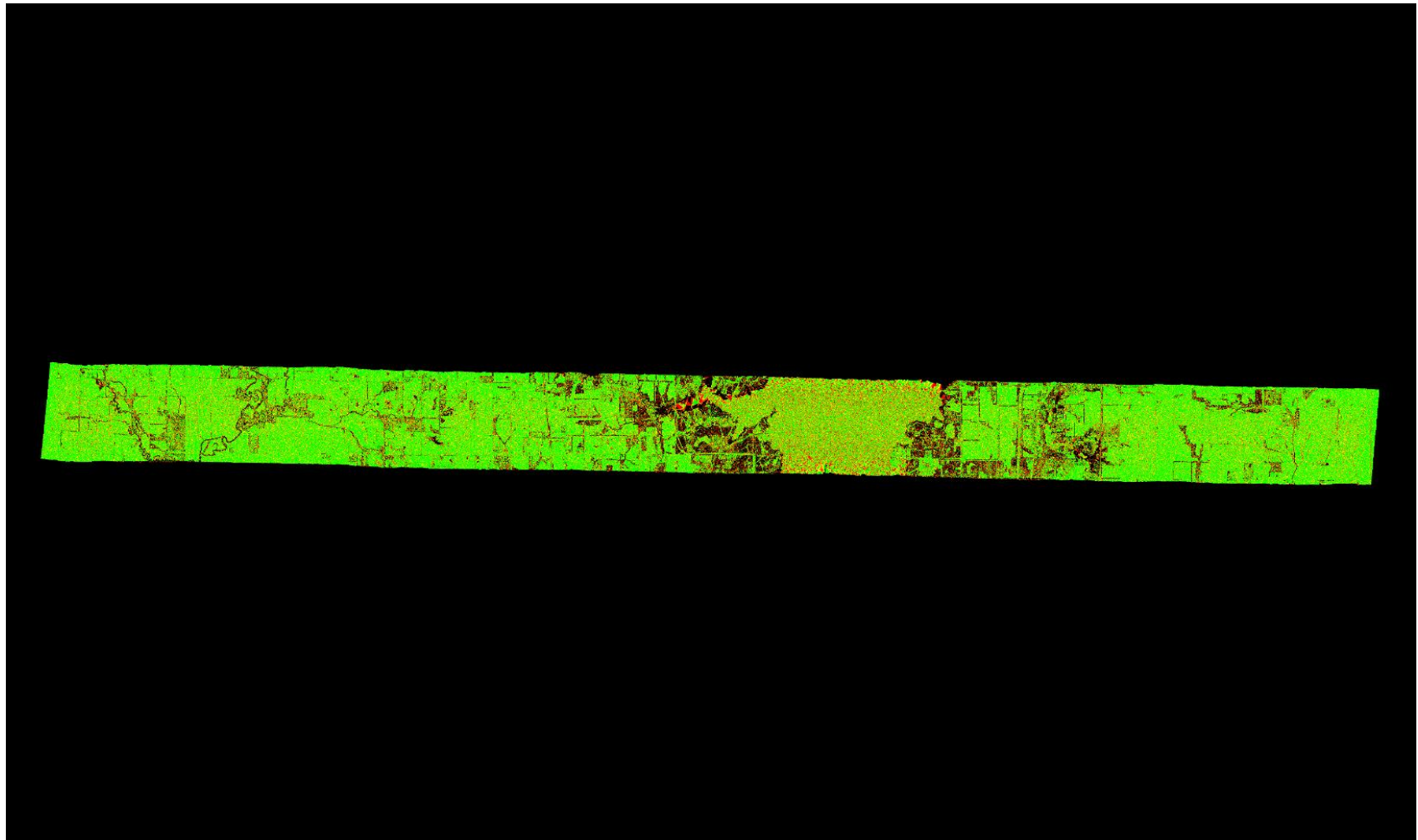


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_154201_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_154201_1-1.jp2](#)

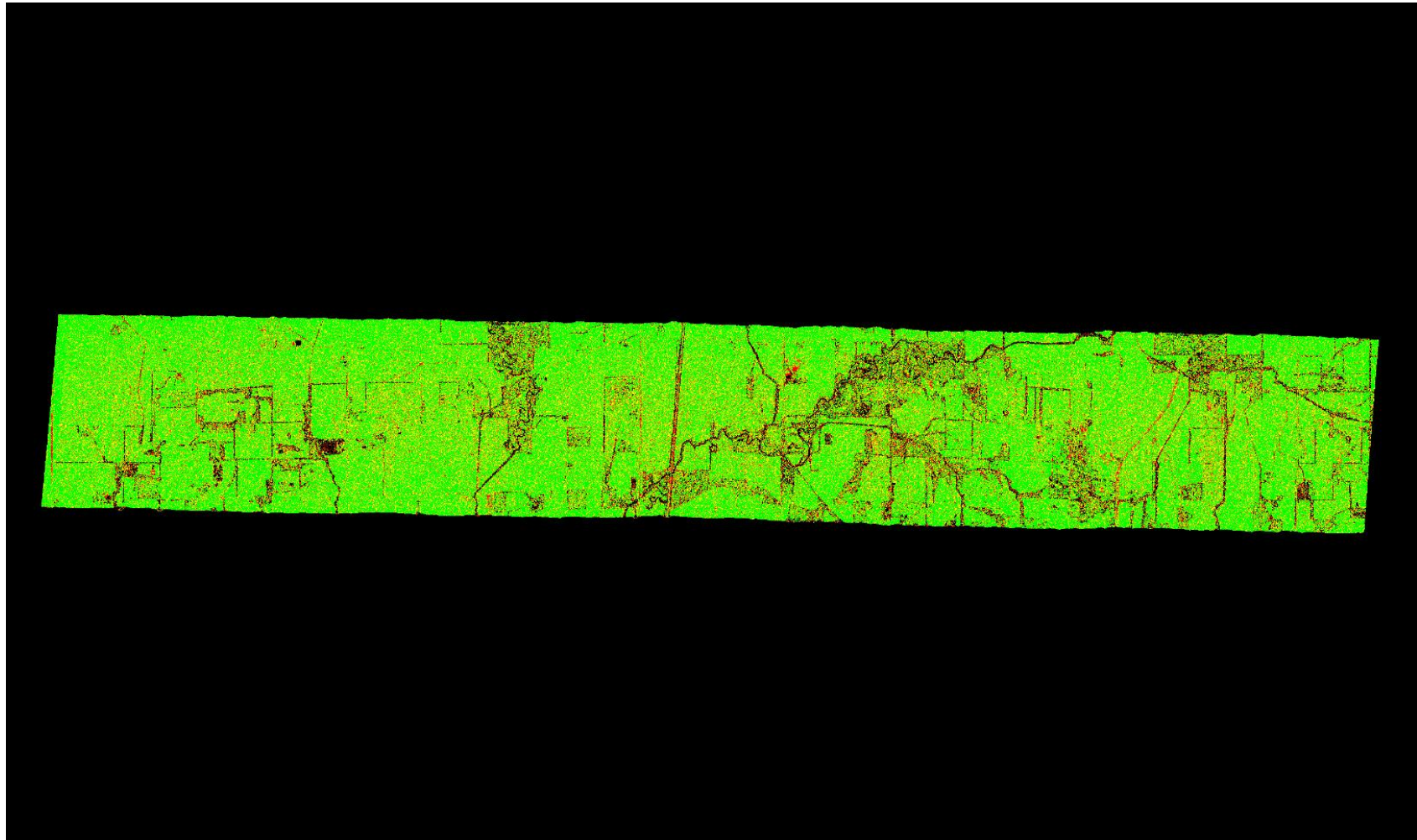


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_154201_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_154201_1-2.jp2](#)

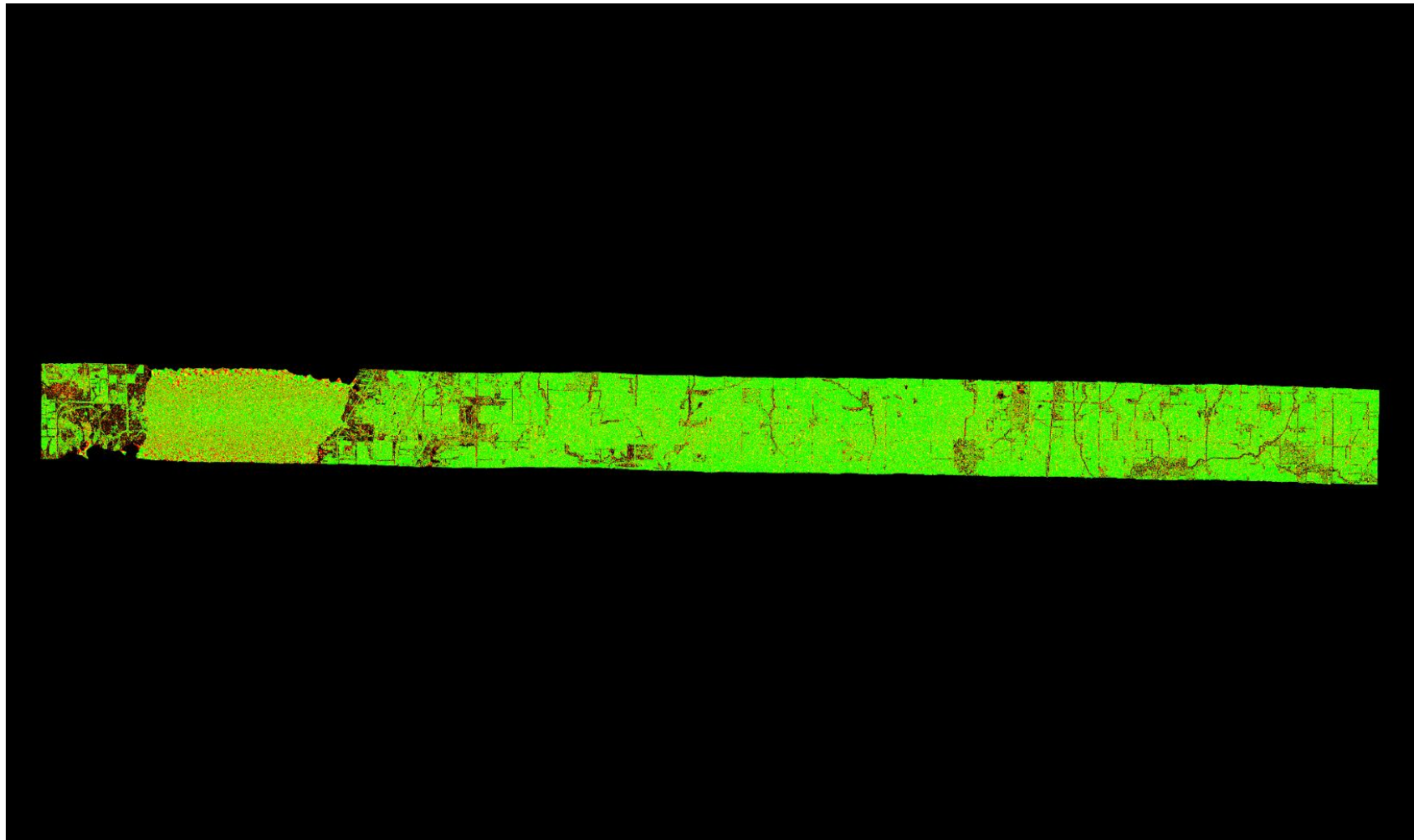


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_155420_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_155420_1-1.jp2](#)

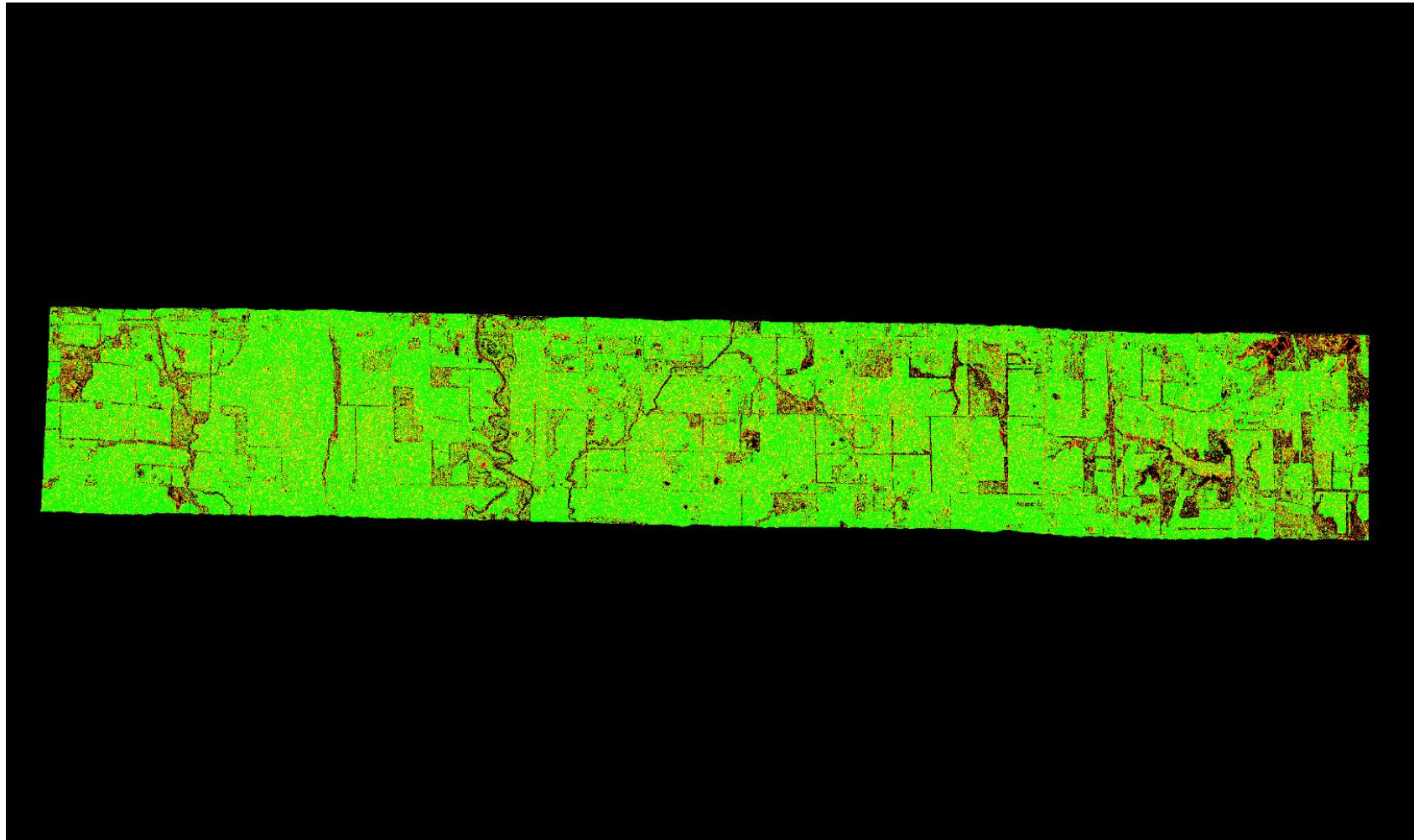


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_155420_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_155420_1-2.jp2](#)

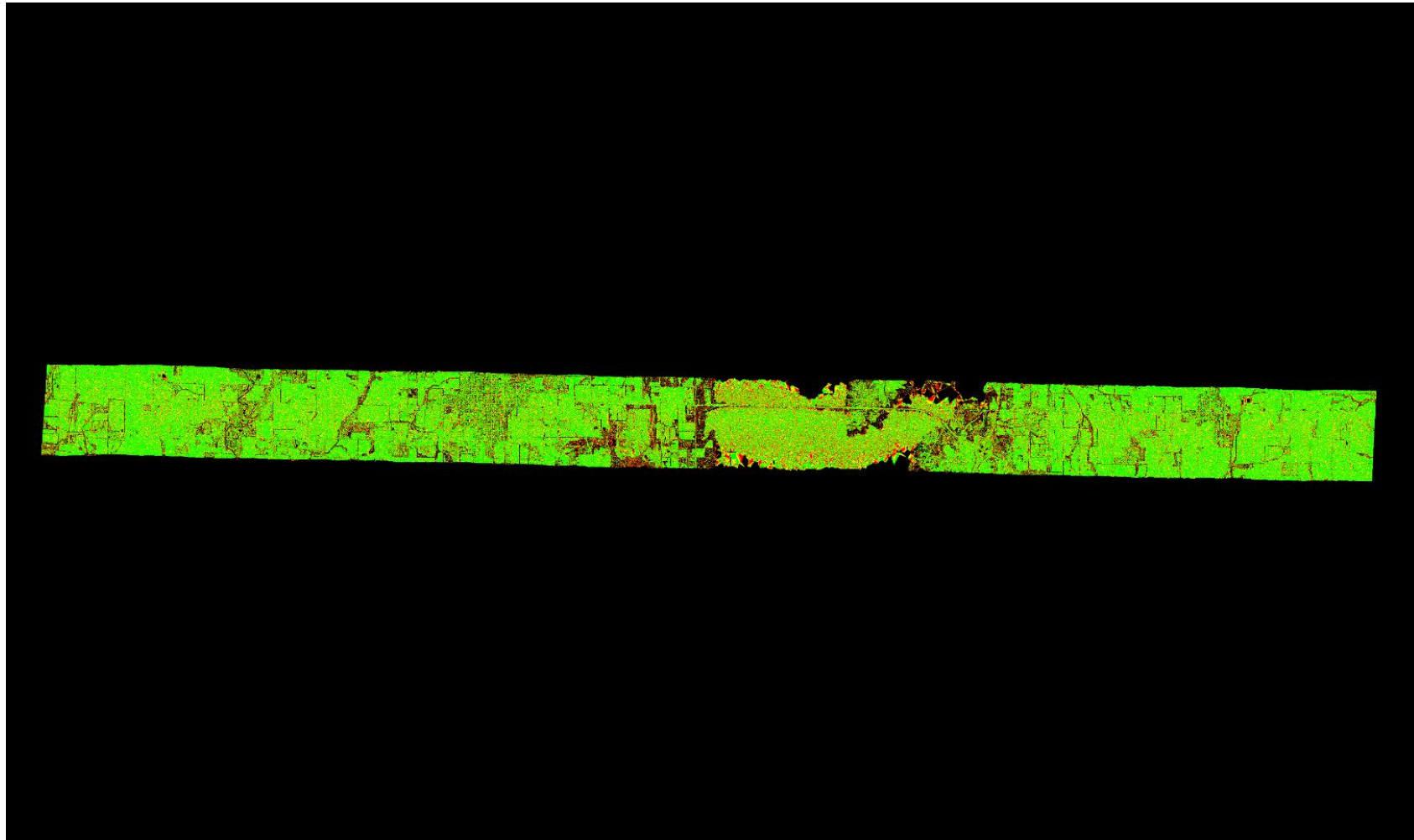


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_160651_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_160651_1-1.jp2](#)

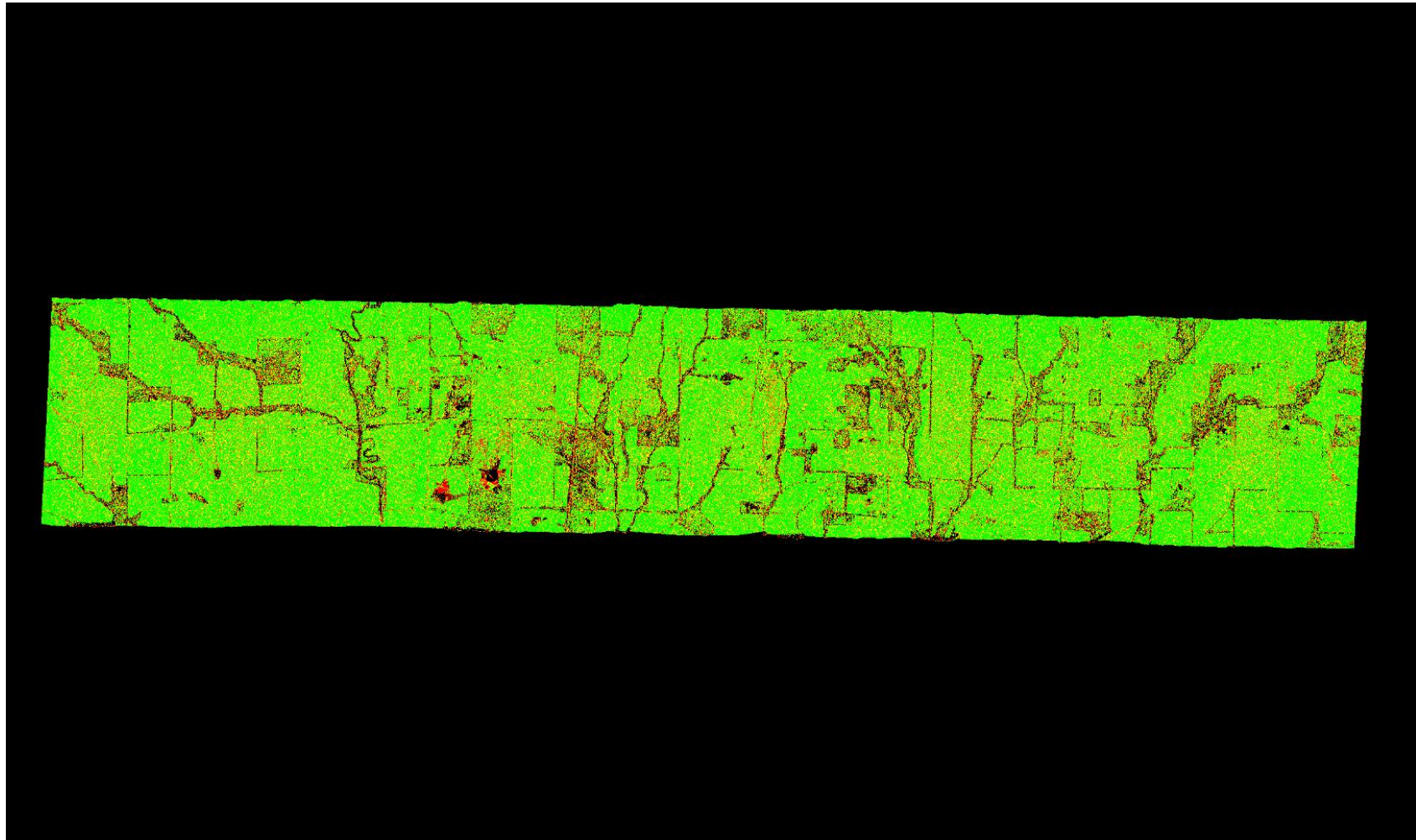


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_160651_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_160651_1-2.jp2](#)

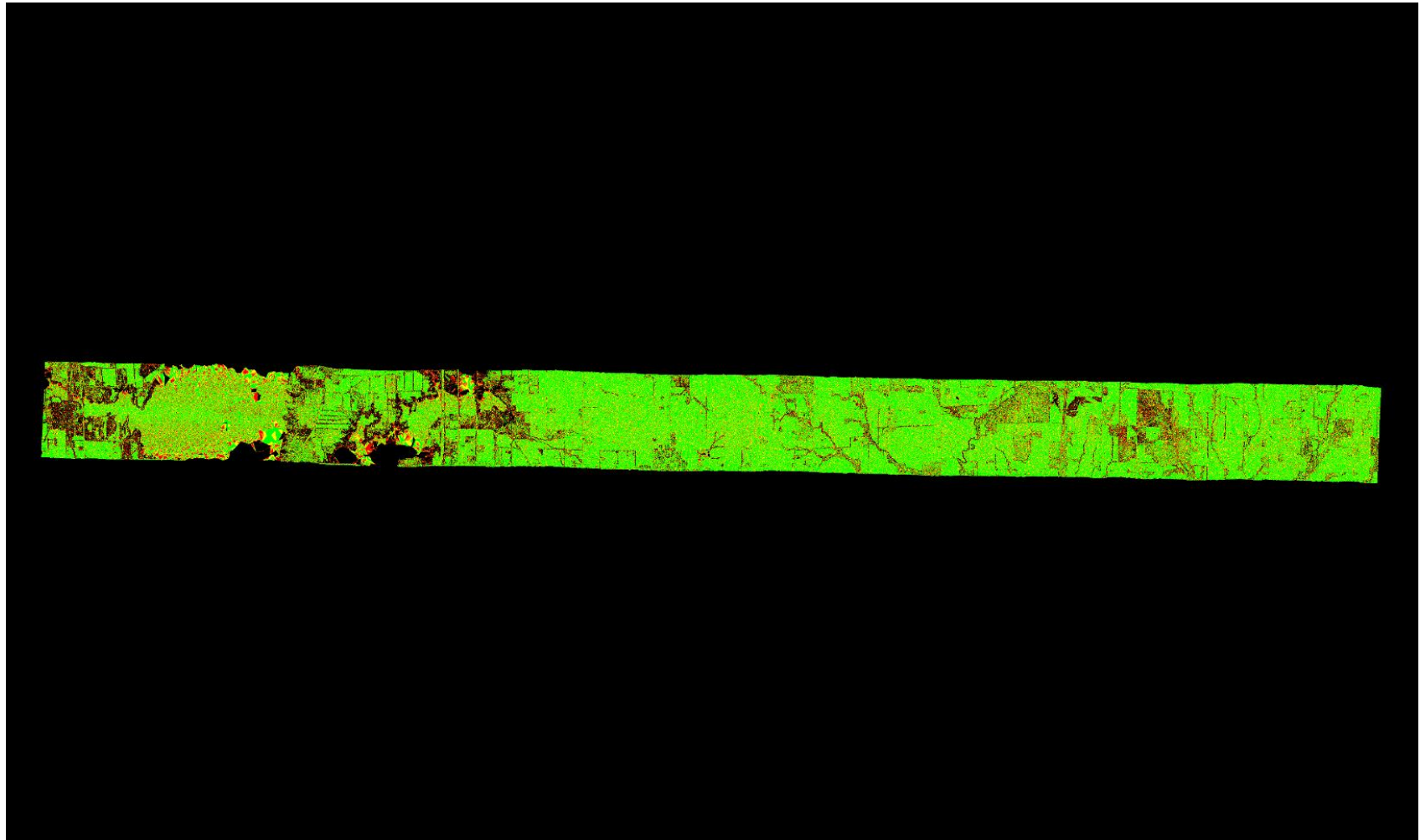


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_161920_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_161920_1-1.jp2](#)

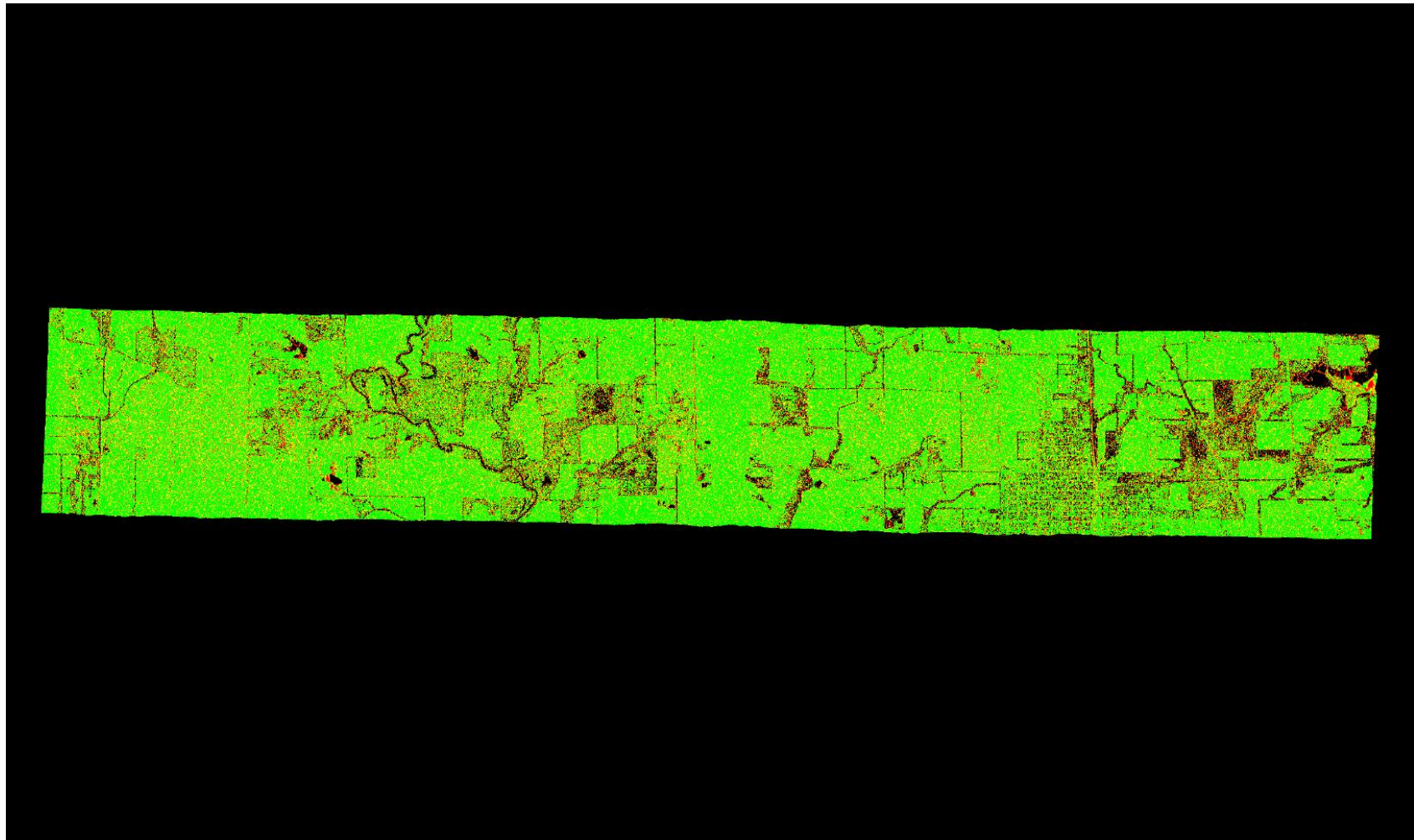


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_161920_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_161920_1-2.jp2](#)

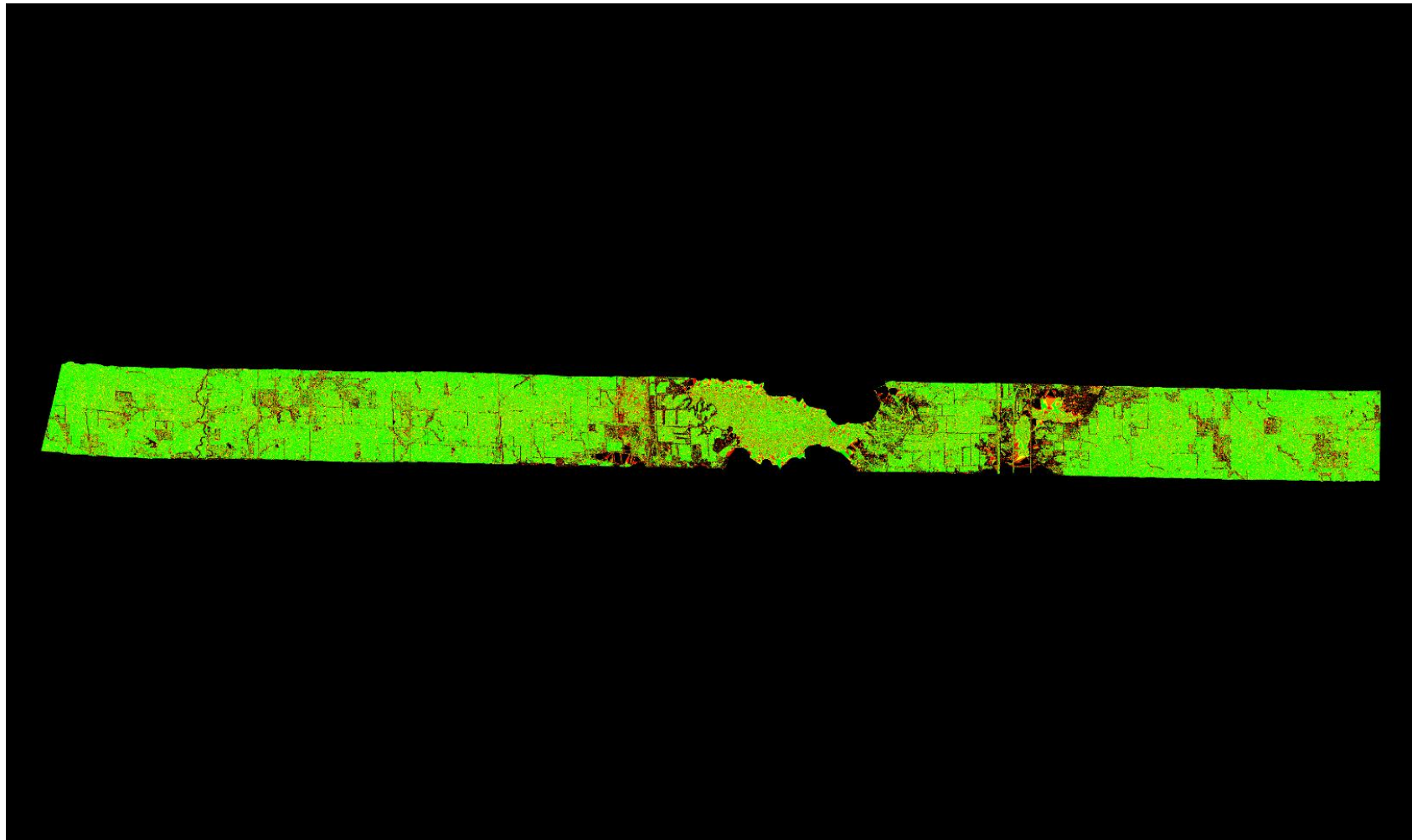


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_163158_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_163158_1-1.jp2](#)

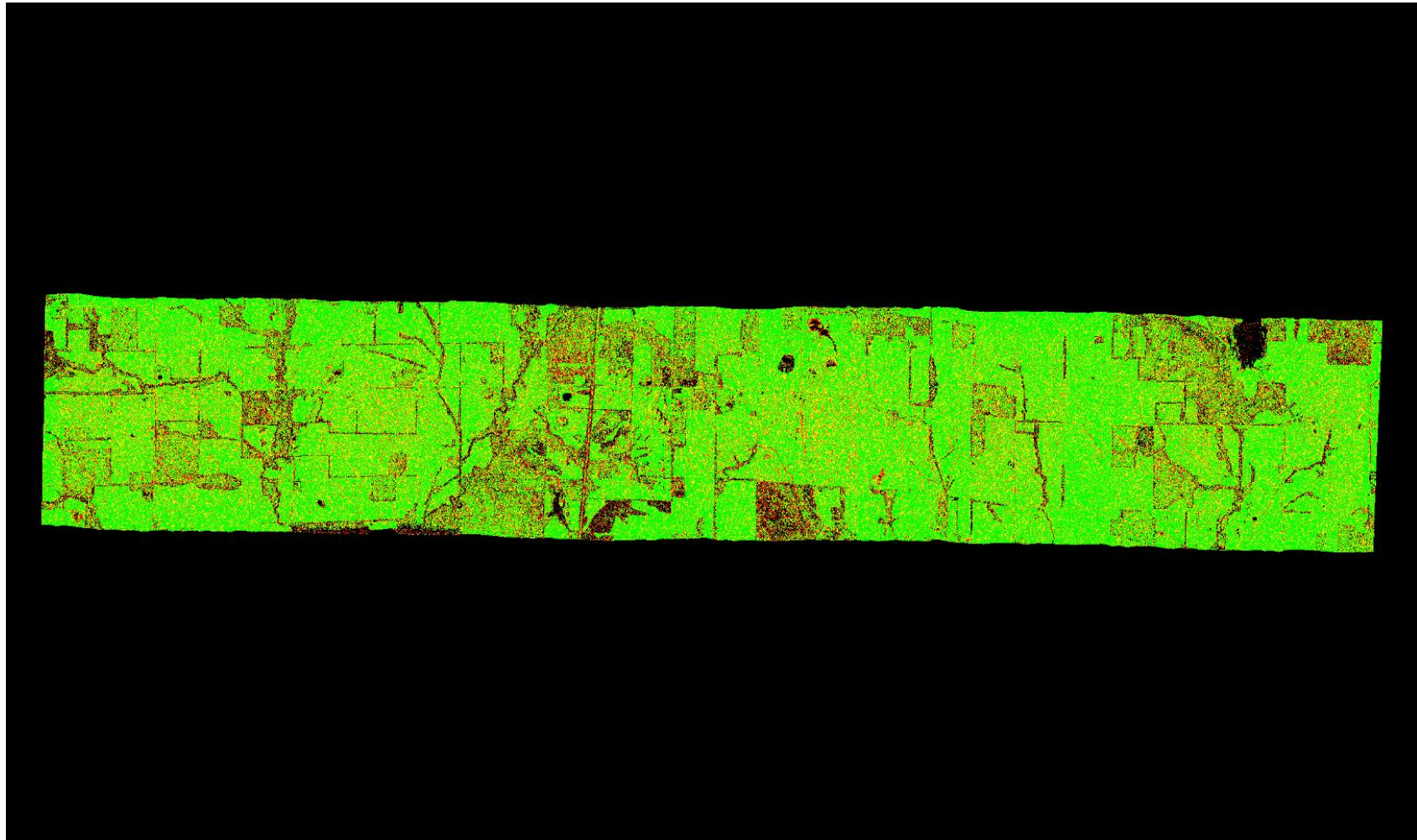


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_163158_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_163158_1-2.jp2](#)

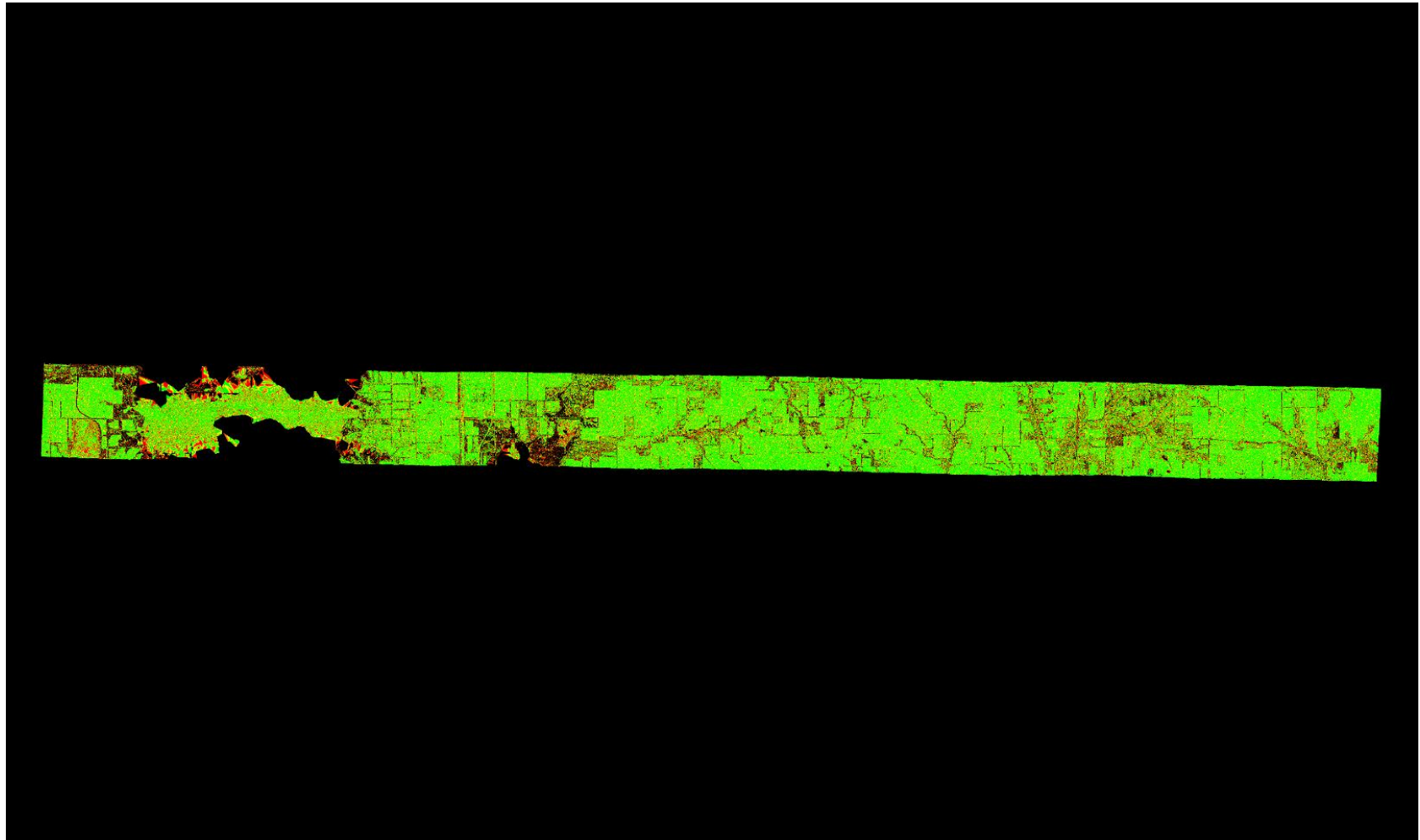


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_164429_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_164429_1-1.jp2](#)

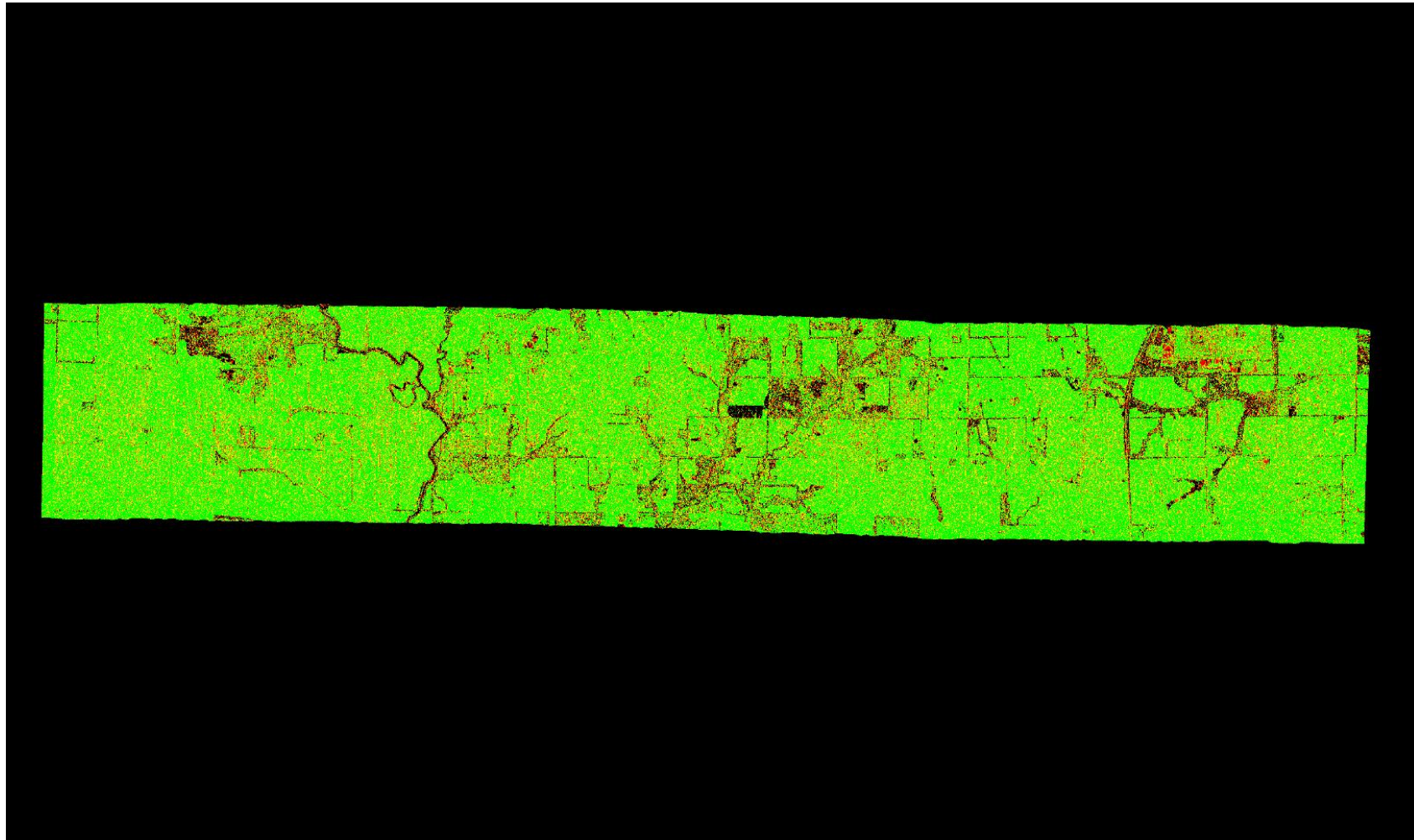


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_164429_1-2.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_164429_1-2.jp2](#)

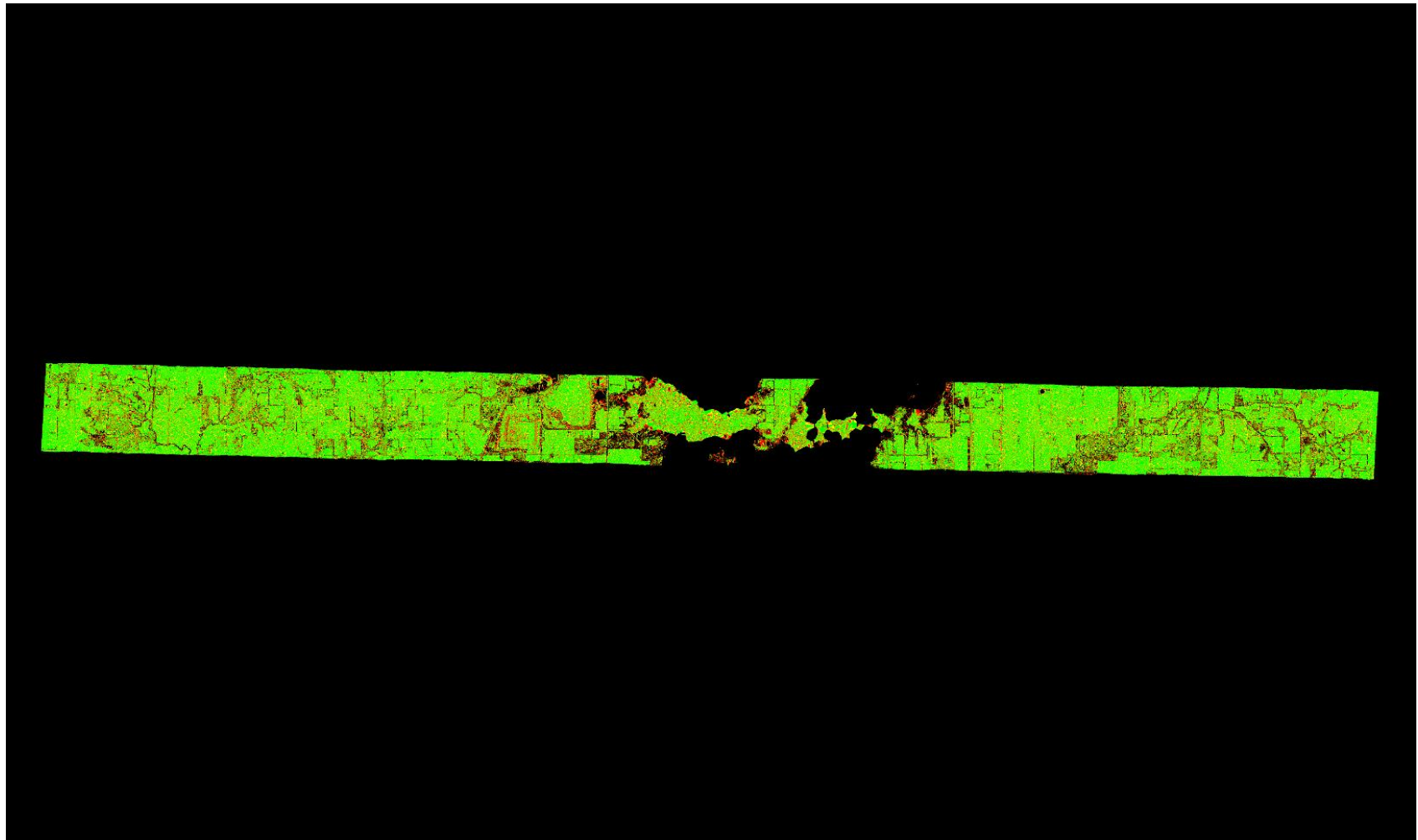


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_165715_1-1.las](#)

[E:\Franklin County\QAQC\1_9_2\Individual_140418_165715_1-1.jp2](#)

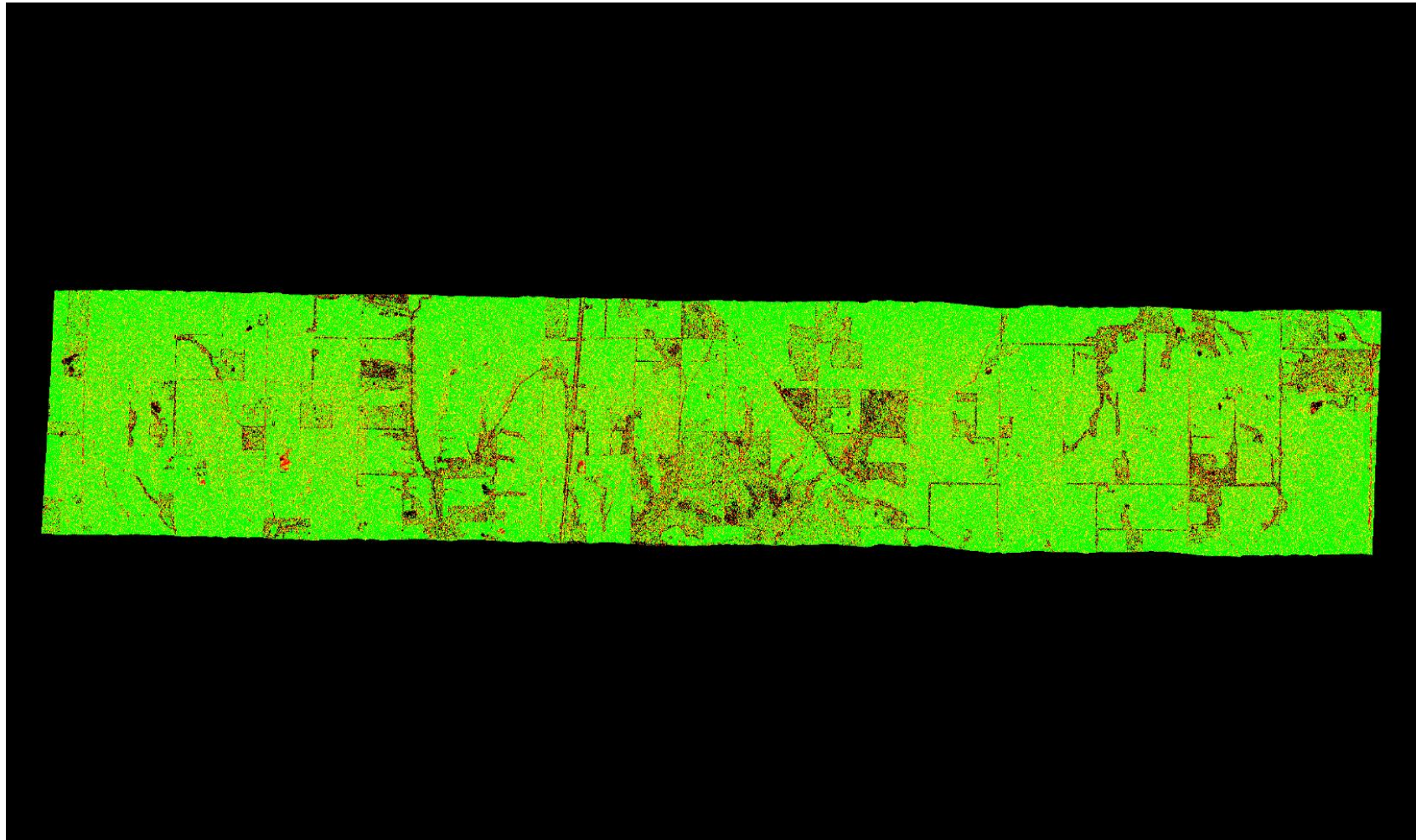


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_165715_1-2.las](#)

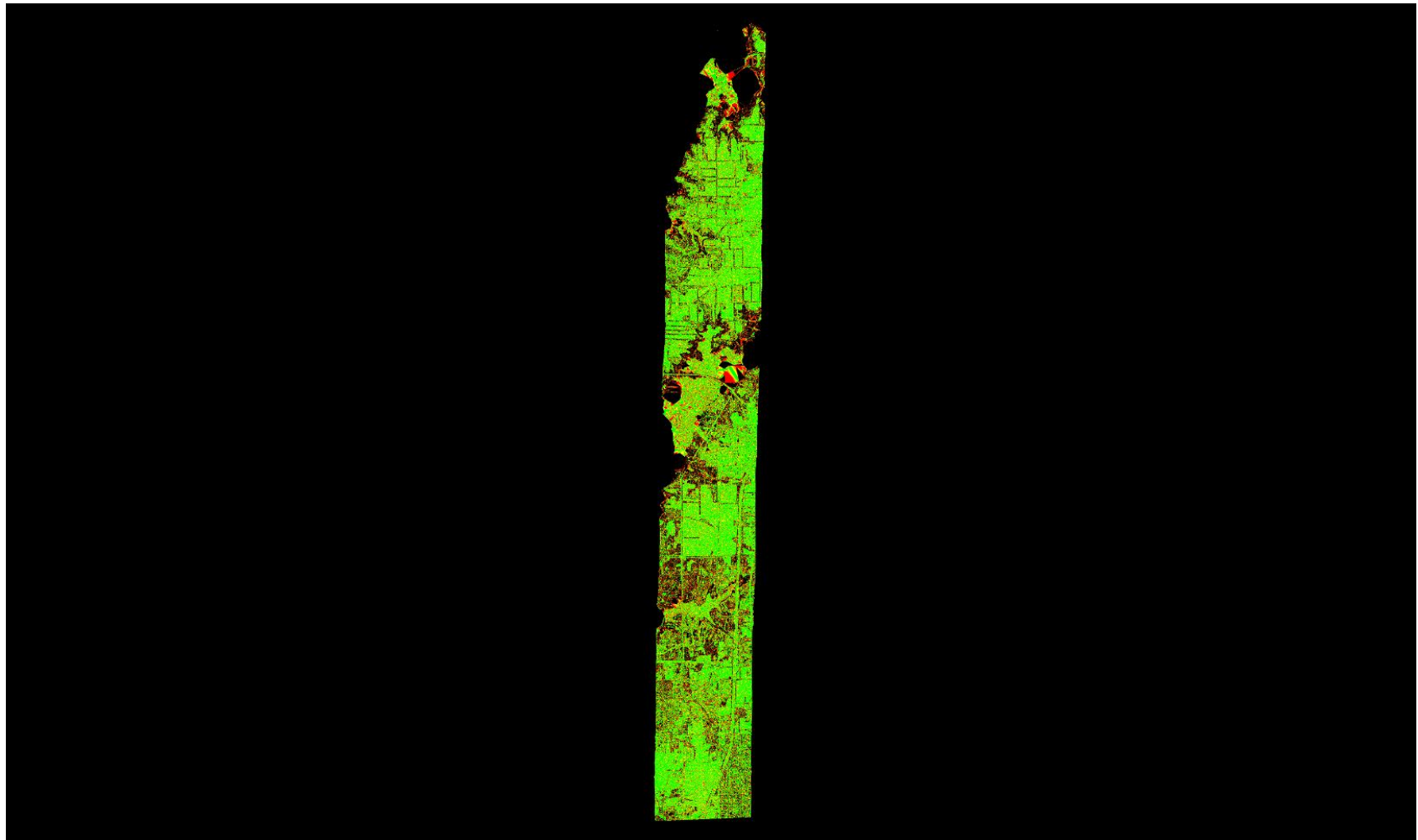
[E:\Franklin County\QAQC\1_9_2\Individual_140418_165715_1-2.jp2](#)



A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

1.9.2 Report on Separation of Scan Direction (Relative Accuracy) per Flight Line

[Data Source - E:\Franklin County\swath\140418_171610_1.las](#)
[E:\Franklin County\QAQC\1_9_2\Individual_140418_171610_1.jp2](#)



A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.). This can be modified in the Color Options settings window.

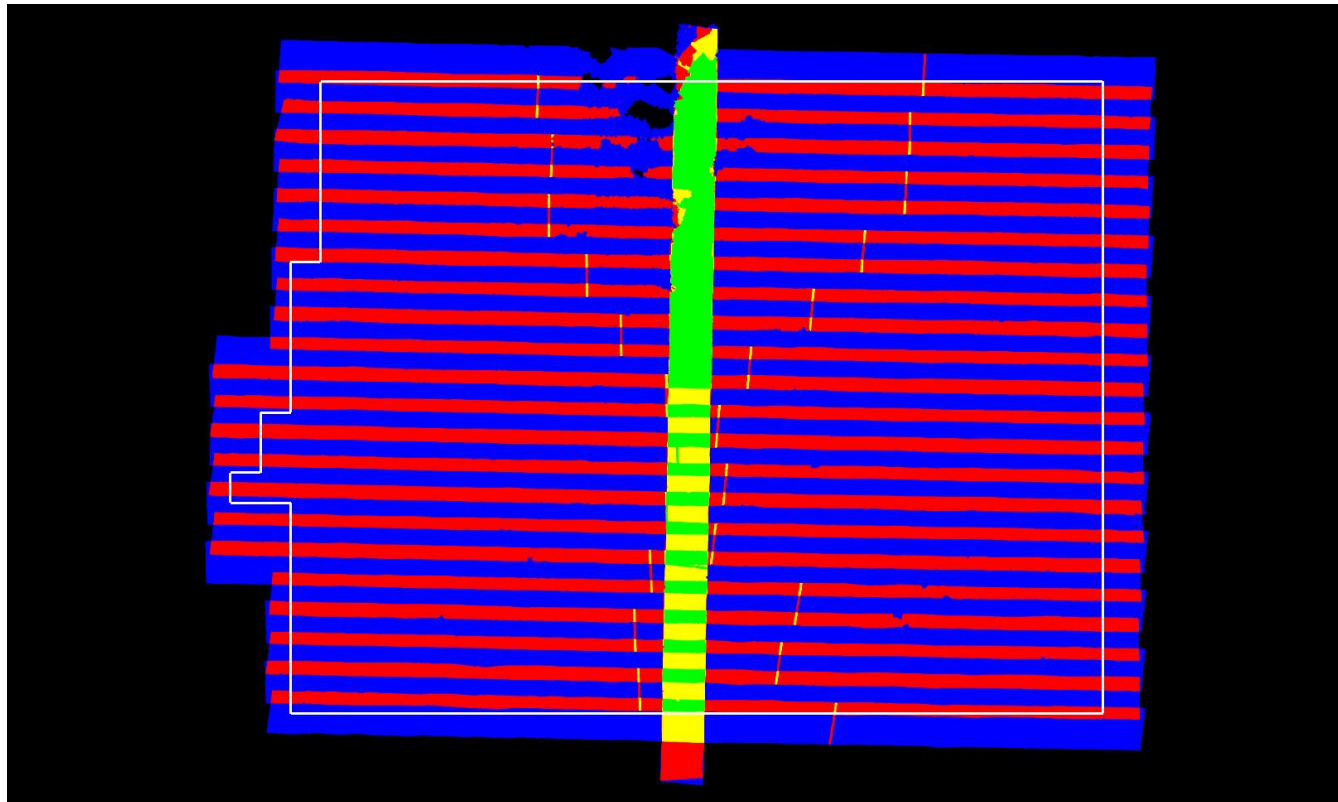
1.10.1 Report on Flight Line Overlap (Swath Data)

The USGS LiDAR Base Specification Version 1.0 requires: "Flightline overlap of 10 percent or greater is required to ensure there are no data gaps between the usable portions of the swaths. Collections in high relief terrain are expected to require greater overlap. Any data with gaps between the geometrically usable portions of the swaths will be rejected."

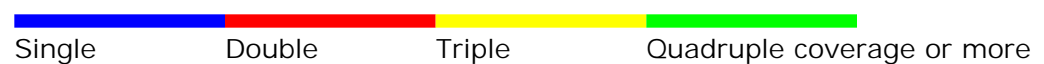
The purpose of this section is to show flight line overlap. Lack of flight line overlap would be displayed as black polygons or slivers between flight lines.

[Data Source - E:\Franklin County\swath](#)

[Result Path - E:\Franklin County\QAQC\1_10\Flightline_Coverage_Overlap.jp2](#)



White polygon is project boundary



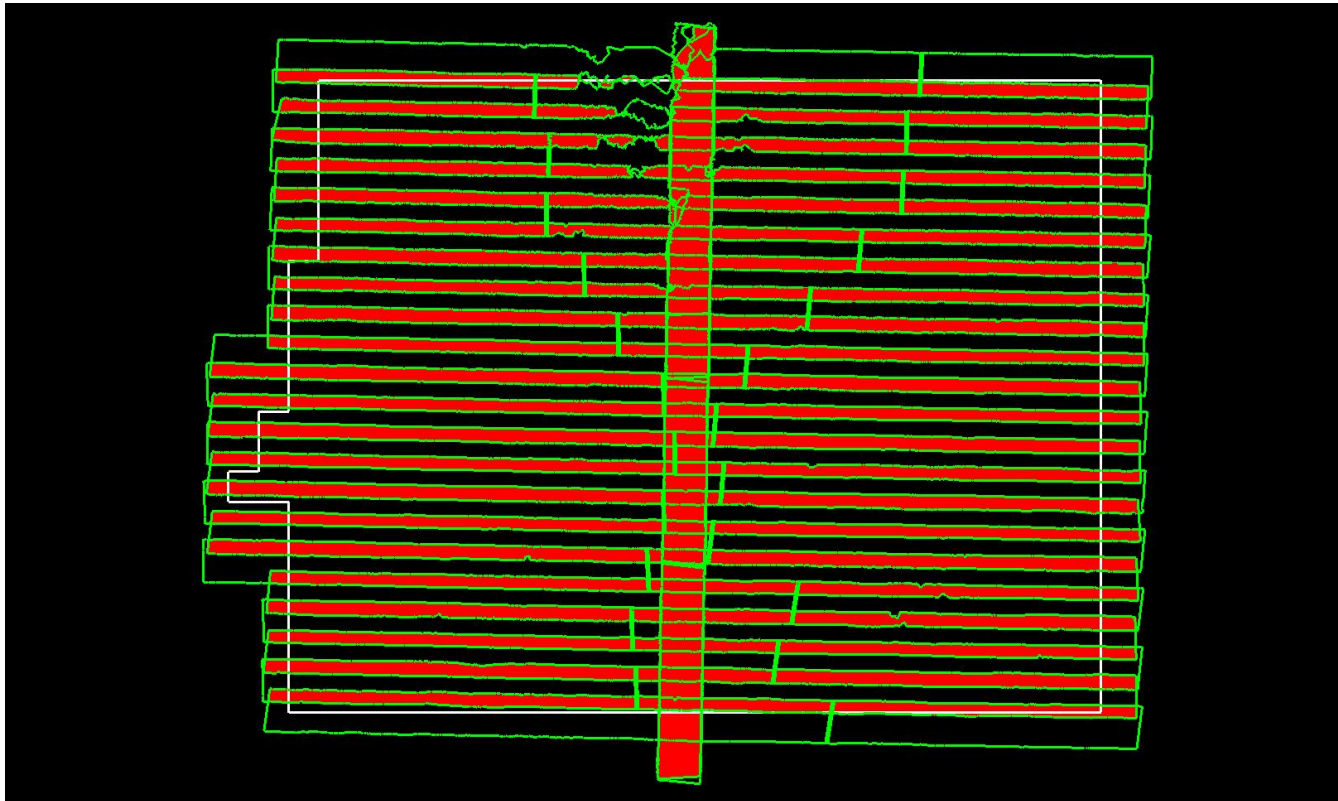
1.10.2 Report on Flight Line Sidelap

The USGS LiDAR Base Specification Version 1.0 requires: "Flightline overlap of 10 percent or greater is required to ensure there are no data gaps between the usable portions of the swaths. Collections in high relief terrain are expected to require greater overlap. Any data with gaps between the geometrically usable portions of the swaths will be rejected."

The purpose of this section is to show flight line overlap. Lack of flight line overlap would be displayed as black polygons or slivers between flight lines.

[Data Source - E:\Franklin County\swath](#)

[Result Path - E:\Franklin County\QAQC\1_10\Flightline Coverage Overlap Side.jp2](#)



White polygon is project boundary

1.10.2 Report on Flight Line Sidelap - Continued

Adjacent Flight Line 1	Adjacent Flight Line 2	Area 1	Area 2	Overlap Area	Sidelap 1 (%)	Sidelap 2 (%)
140417_230025_1-1	140417_231322_1-2	430474696.977	435786794.939	128433967.609	29.8	29.5
140417_230025_1-2	140417_231322_1-1	359279455.077	361294130.3	103379062.599	28.8	28.6
140417_231322_1-1	140417_232632_1-2	427989655.24	427652720.525	140104495.269	32.7	32.8
140417_231322_1-2	140417_232632_1-1	439420131.056	438504117.112	142312263.727	32.4	32.5
140417_232632_1-1	140417_233933_1-2	431425618.847	433213479.363	125280887.211	29	28.9
140417_232632_1-2	140417_233933_1-1	424448200.589	421952677.519	123248529.546	29	29.2
140417_233933_1-1	140417_235212_1-2	402219712.986	402224134.702	128431836.485	31.9	31.9
140417_233933_1-2	140417_235212_1-1	432548577.456	430873279.584	141245954.768	32.7	32.8
140417_235212_1-1	140418_000524_1-2	447818581.115	449318329.073	130231813.355	29.1	29
140417_235212_1-2	140418_000524_1-1	402036209.409	400918498.366	116134382.747	28.9	29
140418_000524_1-1	140418_001909_1-2	503012018.627	504237883.504	163355370.812	32.5	32.4
140418_000524_1-2	140418_001909_1-1	520565643.129	517958931.399	171390505.615	32.9	33.1
140418_001909_1-2	140418_003250_1-1	505110169.825	502702333.266	145310909.459	28.8	28.9
140418_003250_1-1	140418_004640_1-2	490981137.395	491645225.087	158792499.582	32.3	32.3
140418_003250_1-2	140418_004640_1-1	537859971.962	538127422.333	178428376.286	33.2	33.2
140418_004640_1-1	140418_010058_1-2	548537427.554	547733381.375	161055744.907	29.4	29.4
140418_010058_1-1	140418_011447_1-2	501044416.845	503028265.297	164424317.637	32.8	32.7
140418_010058_1-2	140418_011447_1-1	549304439.93	549759859.425	182602054.111	33.2	33.2
140418_011447_1-1	140418_012827_1-2	534372642.587	533980456.417	157151399.464	29.4	29.4
140418_011447_1-2	140418_012827_1-1	501769938.183	499961229.352	144775666.831	28.9	29
140418_012827_1-1	140418_014215_1-2	464744575.998	467608030.482	154102699.88	33.2	33
140418_012827_1-2	140418_014215_1-1	534736715.759	534082197.174	172982967.1	32.3	32.4
140418_014215_1-1	140418_150350_1-2	414702118.574	414825666.284	120070622.184	29	28.9
140418_014215_1-2	140418_150350_1-1	469914611.49	469169917.251	134481749.665	28.6	28.7
140418_150350_1-1	140418_151646_1-2	397695572.5	396850440.46	128558038.715	32.3	32.4
140418_150350_1-2	140418_151646_1-1	410147122.887	409188661.288	133335993.908	32.5	32.6
140418_151646_1-1	140418_152909_1-2	367432263.423	368247849.087	106778409.366	29.1	29
140418_151646_1-2	140418_152909_1-1	393923275.816	395622265.636	114663665.039	29.1	29
140418_152909_1-1	140418_154201_1-2	337197923.313	337097556.385	107708064.811	31.9	32
140418_152909_1-2	140418_154201_1-1	368755017.347	368280970.283	120257037.421	32.6	32.7
140418_154201_1-1	140418_155420_1-1	372762798.555	367734753.305	107608871.492	28.9	29.3
140418_155420_1-1	140418_160651_1-1	415674369.244	412823610.139	123507527.381	29.7	29.9
140418_160651_1-1	140418_161920_1-2	322376955.66	323708543.051	96324022.661	29.9	29.8
140418_160651_1-2	140418_161920_1-1	286367133.02	287272435.972	85009126.405	29.7	29.6

1.10.2 Report on Flight Line Sidelap - Continued

Adjacent Flight Line 1	Adjacent Flight Line 2	Area 1	Area 2	Overlap Area	Sidelap 1 (%)	Sidelap 2 (%)
140418_161920_1-1	140418_163158_1-2	284529801.166	284676648.038	91334343.186	32.1	32.1
140418_161920_1-2	140418_163158_1-1	328860783.097	324008110.267	105107831.558	32	32.4
140418_163158_1-1	140418_164429_1-1	403033941.565	402104393.509	27528578.284	6.8	6.8
140418_164429_1-1	140418_165715_1-1	417002529.157	405341704.039	15723233.259	3.8	3.9
140418_165715_1-1	140418_165715_1-2	568461309.053	258612330.089	2762550.624	0.5	1.1

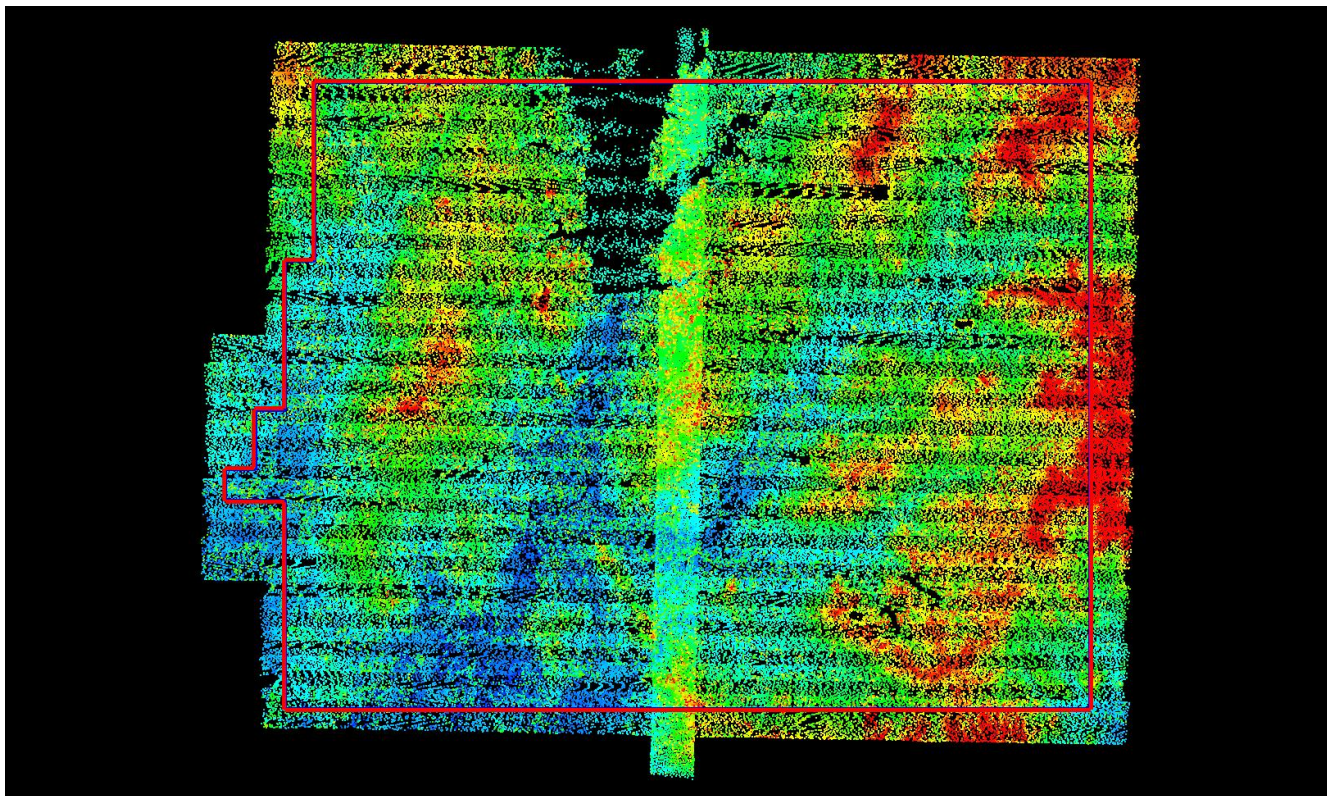
1.11 Report on Collection Area Buffered by 330 US Survey Feet (Swath Data)

The USGS LiDAR Base Specification Version 1.0 requires: "Data collection for the Defined Project Area, buffered by a minimum of 100 meters, is required. The buffered boundary is the Buffered Project Area. In order that all products are consistent to the edge of the Defined Project Area, all products must be generated to the limit of the Buffered Project Area. Since these areas are being generated, they shall also be delivered."

The purpose of this section is to show LiDAR coverage to the extent of a 100 meter buffer of the project boundary.

[Data Source - E:\Franklin_County\swath](#)

[Result Path - E:\Franklin_County\QAQC\1_11\CollectionArea.jpg](#)



Blue polygon is project boundary

Red polygon is project boundary buffered by 330 US Survey Feet

2.1 Report on ASPRS LAS File Format (Swath Data)

The USGS LiDAR Base Specification Version 1.0 requires: "All processing should be carried out with the understanding that all point deliverables are required to be in fully compliant LAS format, either v1.2 or v1.3. The version selected must be used for all LAS deliverables in the project. Data producers are encouraged to review the LAS specification in detail (ASPRS, 2011)."

The purpose of this section is to show the LAS format for the LiDAR swath data.

[Boresighted Files - E:\Franklin_County\swath](#)

File	LAS Format
140417_224329_1-1.las	LAS 1.2
140417_224329_1-2.las	LAS 1.2
140417_230025_1-1.las	LAS 1.2
140417_230025_1-2.las	LAS 1.2
140417_231322_1-1.las	LAS 1.2
140417_231322_1-2.las	LAS 1.2
140417_232632_1-1.las	LAS 1.2
140417_232632_1-2.las	LAS 1.2
140417_233933_1-1.las	LAS 1.2
140417_233933_1-2.las	LAS 1.2
140417_235212_1-1.las	LAS 1.2
140417_235212_1-2.las	LAS 1.2
140418_000524_1-1.las	LAS 1.2
140418_000524_1-2.las	LAS 1.2
140418_001909_1-1.las	LAS 1.2
140418_001909_1-2.las	LAS 1.2
140418_003250_1-1.las	LAS 1.2
140418_003250_1-2.las	LAS 1.2
140418_004640_1-1.las	LAS 1.2
140418_004640_1-2.las	LAS 1.2
140418_010058_1-1.las	LAS 1.2
140418_010058_1-2.las	LAS 1.2
140418_011447_1-1.las	LAS 1.2
140418_011447_1-2.las	LAS 1.2
140418_012827_1-1.las	LAS 1.2
140418_012827_1-2.las	LAS 1.2
140418_014215_1-1.las	LAS 1.2
140418_014215_1-2.las	LAS 1.2
140418_020434_1.las	LAS 1.2
140418_145120_1.las	LAS 1.2
140418_150350_1-1.las	LAS 1.2
140418_150350_1-2.las	LAS 1.2
140418_151646_1-1.las	LAS 1.2
140418_151646_1-2.las	LAS 1.2
140418_152909_1-1.las	LAS 1.2
140418_152909_1-2.las	LAS 1.2
140418_154201_1-1.las	LAS 1.2
140418_154201_1-2.las	LAS 1.2
140418_155420_1-1.las	LAS 1.2
140418_155420_1-2.las	LAS 1.2
140418_160651_1-1.las	LAS 1.2
140418_160651_1-2.las	LAS 1.2
140418_161920_1-1.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Swath Data) - continued

File	LAS Format
140418_161920_1-2.las	LAS 1.2
140418_163158_1-1.las	LAS 1.2
140418_163158_1-2.las	LAS 1.2
140418_164429_1-1.las	LAS 1.2
140418_164429_1-2.las	LAS 1.2
140418_165715_1-1.las	LAS 1.2
140418_165715_1-2.las	LAS 1.2
140418_171610_1.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data)

The purpose of this section is to show the LAS format for the LiDAR tiled data.

[Classified Files - E:\Franklin_County\las](#)

File	LAS Format
07350465.las	LAS 1.2
07400465.las	LAS 1.2
07400470.las	LAS 1.2
07400475.las	LAS 1.2
07450430.las	LAS 1.2
07450435.las	LAS 1.2
07450440.las	LAS 1.2
07450445.las	LAS 1.2
07450450.las	LAS 1.2
07450455.las	LAS 1.2
07450460.las	LAS 1.2
07450465.las	LAS 1.2
07450470.las	LAS 1.2
07450475.las	LAS 1.2
07450480.las	LAS 1.2
07450485.las	LAS 1.2
07450490.las	LAS 1.2
07450495.las	LAS 1.2
07450500.las	LAS 1.2
07500430.las	LAS 1.2
07500435.las	LAS 1.2
07500440.las	LAS 1.2
07500445.las	LAS 1.2
07500450.las	LAS 1.2
07500455.las	LAS 1.2
07500460.las	LAS 1.2
07500465.las	LAS 1.2
07500470.las	LAS 1.2
07500475.las	LAS 1.2
07500480.las	LAS 1.2
07500485.las	LAS 1.2
07500490.las	LAS 1.2
07500495.las	LAS 1.2
07500500.las	LAS 1.2
07500505.las	LAS 1.2
07500510.las	LAS 1.2
07500515.las	LAS 1.2
07500520.las	LAS 1.2
07500525.las	LAS 1.2
07500530.las	LAS 1.2
07550430.las	LAS 1.2
07550435.las	LAS 1.2
07550440.las	LAS 1.2
07550445.las	LAS 1.2
07550450.las	LAS 1.2
07550455.las	LAS 1.2
07550460.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
07550465.las	LAS 1.2
07550470.las	LAS 1.2
07550475.las	LAS 1.2
07550480.las	LAS 1.2
07550485.las	LAS 1.2
07550490.las	LAS 1.2
07550495.las	LAS 1.2
07550500.las	LAS 1.2
07550505.las	LAS 1.2
07550510.las	LAS 1.2
07550515.las	LAS 1.2
07550520.las	LAS 1.2
07550525.las	LAS 1.2
07550530.las	LAS 1.2
07600430.las	LAS 1.2
07600435.las	LAS 1.2
07600440.las	LAS 1.2
07600445.las	LAS 1.2
07600450.las	LAS 1.2
07600455.las	LAS 1.2
07600460.las	LAS 1.2
07600465.las	LAS 1.2
07600470.las	LAS 1.2
07600475.las	LAS 1.2
07600480.las	LAS 1.2
07600485.las	LAS 1.2
07600490.las	LAS 1.2
07600495.las	LAS 1.2
07600500.las	LAS 1.2
07600505.las	LAS 1.2
07600510.las	LAS 1.2
07600515.las	LAS 1.2
07600520.las	LAS 1.2
07600525.las	LAS 1.2
07600530.las	LAS 1.2
07650430.las	LAS 1.2
07650435.las	LAS 1.2
07650440.las	LAS 1.2
07650445.las	LAS 1.2
07650450.las	LAS 1.2
07650455.las	LAS 1.2
07650460.las	LAS 1.2
07650465.las	LAS 1.2
07650470.las	LAS 1.2
07650475.las	LAS 1.2
07650480.las	LAS 1.2
07650485.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
07650490.las	LAS 1.2
07650495.las	LAS 1.2
07650500.las	LAS 1.2
07650505.las	LAS 1.2
07650510.las	LAS 1.2
07650515.las	LAS 1.2
07650520.las	LAS 1.2
07650525.las	LAS 1.2
07650530.las	LAS 1.2
07700430.las	LAS 1.2
07700435.las	LAS 1.2
07700440.las	LAS 1.2
07700445.las	LAS 1.2
07700450.las	LAS 1.2
07700455.las	LAS 1.2
07700460.las	LAS 1.2
07700465.las	LAS 1.2
07700470.las	LAS 1.2
07700475.las	LAS 1.2
07700480.las	LAS 1.2
07700485.las	LAS 1.2
07700490.las	LAS 1.2
07700495.las	LAS 1.2
07700500.las	LAS 1.2
07700505.las	LAS 1.2
07700510.las	LAS 1.2
07700515.las	LAS 1.2
07700520.las	LAS 1.2
07700525.las	LAS 1.2
07700530.las	LAS 1.2
07750430.las	LAS 1.2
07750435.las	LAS 1.2
07750440.las	LAS 1.2
07750445.las	LAS 1.2
07750450.las	LAS 1.2
07750455.las	LAS 1.2
07750460.las	LAS 1.2
07750465.las	LAS 1.2
07750470.las	LAS 1.2
07750475.las	LAS 1.2
07750480.las	LAS 1.2
07750485.las	LAS 1.2
07750490.las	LAS 1.2
07750495.las	LAS 1.2
07750500.las	LAS 1.2
07750505.las	LAS 1.2
07750510.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
07750515.las	LAS 1.2
07750520.las	LAS 1.2
07750525.las	LAS 1.2
07750530.las	LAS 1.2
07800430.las	LAS 1.2
07800435.las	LAS 1.2
07800440.las	LAS 1.2
07800445.las	LAS 1.2
07800450.las	LAS 1.2
07800455.las	LAS 1.2
07800460.las	LAS 1.2
07800465.las	LAS 1.2
07800470.las	LAS 1.2
07800475.las	LAS 1.2
07800480.las	LAS 1.2
07800485.las	LAS 1.2
07800490.las	LAS 1.2
07800495.las	LAS 1.2
07800500.las	LAS 1.2
07800505.las	LAS 1.2
07800510.las	LAS 1.2
07800515.las	LAS 1.2
07800520.las	LAS 1.2
07800525.las	LAS 1.2
07800530.las	LAS 1.2
07850430.las	LAS 1.2
07850435.las	LAS 1.2
07850440.las	LAS 1.2
07850445.las	LAS 1.2
07850450.las	LAS 1.2
07850455.las	LAS 1.2
07850460.las	LAS 1.2
07850465.las	LAS 1.2
07850470.las	LAS 1.2
07850475.las	LAS 1.2
07850480.las	LAS 1.2
07850485.las	LAS 1.2
07850490.las	LAS 1.2
07850495.las	LAS 1.2
07850500.las	LAS 1.2
07850505.las	LAS 1.2
07850510.las	LAS 1.2
07850515.las	LAS 1.2
07850520.las	LAS 1.2
07850525.las	LAS 1.2
07850530.las	LAS 1.2
07900430.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
07900435.las	LAS 1.2
07900440.las	LAS 1.2
07900445.las	LAS 1.2
07900450.las	LAS 1.2
07900455.las	LAS 1.2
07900460.las	LAS 1.2
07900465.las	LAS 1.2
07900470.las	LAS 1.2
07900475.las	LAS 1.2
07900480.las	LAS 1.2
07900485.las	LAS 1.2
07900490.las	LAS 1.2
07900495.las	LAS 1.2
07900500.las	LAS 1.2
07900505.las	LAS 1.2
07900510.las	LAS 1.2
07900515.las	LAS 1.2
07900520.las	LAS 1.2
07900525.las	LAS 1.2
07900530.las	LAS 1.2
07950430.las	LAS 1.2
07950435.las	LAS 1.2
07950440.las	LAS 1.2
07950445.las	LAS 1.2
07950450.las	LAS 1.2
07950455.las	LAS 1.2
07950460.las	LAS 1.2
07950465.las	LAS 1.2
07950470.las	LAS 1.2
07950475.las	LAS 1.2
07950480.las	LAS 1.2
07950485.las	LAS 1.2
07950490.las	LAS 1.2
07950495.las	LAS 1.2
07950500.las	LAS 1.2
07950505.las	LAS 1.2
07950510.las	LAS 1.2
07950515.las	LAS 1.2
07950520.las	LAS 1.2
07950525.las	LAS 1.2
07950530.las	LAS 1.2
08000430.las	LAS 1.2
08000435.las	LAS 1.2
08000440.las	LAS 1.2
08000445.las	LAS 1.2
08000450.las	LAS 1.2
08000455.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
08000460.las	LAS 1.2
08000465.las	LAS 1.2
08000470.las	LAS 1.2
08000475.las	LAS 1.2
08000480.las	LAS 1.2
08000485.las	LAS 1.2
08000490.las	LAS 1.2
08000495.las	LAS 1.2
08000500.las	LAS 1.2
08000505.las	LAS 1.2
08000510.las	LAS 1.2
08000515.las	LAS 1.2
08000520.las	LAS 1.2
08000525.las	LAS 1.2
08000530.las	LAS 1.2
08050430.las	LAS 1.2
08050435.las	LAS 1.2
08050440.las	LAS 1.2
08050445.las	LAS 1.2
08050450.las	LAS 1.2
08050455.las	LAS 1.2
08050460.las	LAS 1.2
08050465.las	LAS 1.2
08050470.las	LAS 1.2
08050475.las	LAS 1.2
08050480.las	LAS 1.2
08050485.las	LAS 1.2
08050490.las	LAS 1.2
08050495.las	LAS 1.2
08050500.las	LAS 1.2
08050505.las	LAS 1.2
08050510.las	LAS 1.2
08050515.las	LAS 1.2
08050520.las	LAS 1.2
08050525.las	LAS 1.2
08050530.las	LAS 1.2
08100430.las	LAS 1.2
08100435.las	LAS 1.2
08100440.las	LAS 1.2
08100445.las	LAS 1.2
08100450.las	LAS 1.2
08100455.las	LAS 1.2
08100460.las	LAS 1.2
08100465.las	LAS 1.2
08100470.las	LAS 1.2
08100475.las	LAS 1.2
08100480.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
08100485.las	LAS 1.2
08100490.las	LAS 1.2
08100495.las	LAS 1.2
08100500.las	LAS 1.2
08100505.las	LAS 1.2
08100510.las	LAS 1.2
08100515.las	LAS 1.2
08100520.las	LAS 1.2
08100525.las	LAS 1.2
08100530.las	LAS 1.2
08150430.las	LAS 1.2
08150435.las	LAS 1.2
08150440.las	LAS 1.2
08150445.las	LAS 1.2
08150450.las	LAS 1.2
08150455.las	LAS 1.2
08150460.las	LAS 1.2
08150465.las	LAS 1.2
08150470.las	LAS 1.2
08150475.las	LAS 1.2
08150480.las	LAS 1.2
08150485.las	LAS 1.2
08150490.las	LAS 1.2
08150495.las	LAS 1.2
08150500.las	LAS 1.2
08150505.las	LAS 1.2
08150510.las	LAS 1.2
08150515.las	LAS 1.2
08150520.las	LAS 1.2
08150525.las	LAS 1.2
08150530.las	LAS 1.2
08200430.las	LAS 1.2
08200435.las	LAS 1.2
08200440.las	LAS 1.2
08200445.las	LAS 1.2
08200450.las	LAS 1.2
08200455.las	LAS 1.2
08200460.las	LAS 1.2
08200465.las	LAS 1.2
08200470.las	LAS 1.2
08200475.las	LAS 1.2
08200480.las	LAS 1.2
08200485.las	LAS 1.2
08200490.las	LAS 1.2
08200495.las	LAS 1.2
08200500.las	LAS 1.2
08200505.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
08200510.las	LAS 1.2
08200515.las	LAS 1.2
08200520.las	LAS 1.2
08200525.las	LAS 1.2
08200530.las	LAS 1.2
08250430.las	LAS 1.2
08250435.las	LAS 1.2
08250440.las	LAS 1.2
08250445.las	LAS 1.2
08250450.las	LAS 1.2
08250455.las	LAS 1.2
08250460.las	LAS 1.2
08250465.las	LAS 1.2
08250470.las	LAS 1.2
08250475.las	LAS 1.2
08250480.las	LAS 1.2
08250485.las	LAS 1.2
08250490.las	LAS 1.2
08250495.las	LAS 1.2
08250500.las	LAS 1.2
08250505.las	LAS 1.2
08250510.las	LAS 1.2
08250515.las	LAS 1.2
08250520.las	LAS 1.2
08250525.las	LAS 1.2
08250530.las	LAS 1.2
08300430.las	LAS 1.2
08300435.las	LAS 1.2
08300440.las	LAS 1.2
08300445.las	LAS 1.2
08300450.las	LAS 1.2
08300455.las	LAS 1.2
08300460.las	LAS 1.2
08300465.las	LAS 1.2
08300470.las	LAS 1.2
08300475.las	LAS 1.2
08300480.las	LAS 1.2
08300485.las	LAS 1.2
08300490.las	LAS 1.2
08300495.las	LAS 1.2
08300500.las	LAS 1.2
08300505.las	LAS 1.2
08300510.las	LAS 1.2
08300515.las	LAS 1.2
08300520.las	LAS 1.2
08300525.las	LAS 1.2
08300530.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
08350430.las	LAS 1.2
08350435.las	LAS 1.2
08350440.las	LAS 1.2
08350445.las	LAS 1.2
08350450.las	LAS 1.2
08350455.las	LAS 1.2
08350460.las	LAS 1.2
08350465.las	LAS 1.2
08350470.las	LAS 1.2
08350475.las	LAS 1.2
08350480.las	LAS 1.2
08350485.las	LAS 1.2
08350490.las	LAS 1.2
08350495.las	LAS 1.2
08350500.las	LAS 1.2
08350505.las	LAS 1.2
08350510.las	LAS 1.2
08350515.las	LAS 1.2
08350520.las	LAS 1.2
08350525.las	LAS 1.2
08350530.las	LAS 1.2
08400430.las	LAS 1.2
08400435.las	LAS 1.2
08400440.las	LAS 1.2
08400445.las	LAS 1.2
08400450.las	LAS 1.2
08400455.las	LAS 1.2
08400460.las	LAS 1.2
08400465.las	LAS 1.2
08400470.las	LAS 1.2
08400475.las	LAS 1.2
08400480.las	LAS 1.2
08400485.las	LAS 1.2
08400490.las	LAS 1.2
08400495.las	LAS 1.2
08400500.las	LAS 1.2
08400505.las	LAS 1.2
08400510.las	LAS 1.2
08400515.las	LAS 1.2
08400520.las	LAS 1.2
08400525.las	LAS 1.2
08400530.las	LAS 1.2
08450430.las	LAS 1.2
08450435.las	LAS 1.2
08450440.las	LAS 1.2
08450445.las	LAS 1.2
08450450.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
08450455.las	LAS 1.2
08450460.las	LAS 1.2
08450465.las	LAS 1.2
08450470.las	LAS 1.2
08450475.las	LAS 1.2
08450480.las	LAS 1.2
08450485.las	LAS 1.2
08450490.las	LAS 1.2
08450495.las	LAS 1.2
08450500.las	LAS 1.2
08450505.las	LAS 1.2
08450510.las	LAS 1.2
08450515.las	LAS 1.2
08450520.las	LAS 1.2
08450525.las	LAS 1.2
08450530.las	LAS 1.2
08500430.las	LAS 1.2
08500435.las	LAS 1.2
08500440.las	LAS 1.2
08500445.las	LAS 1.2
08500450.las	LAS 1.2
08500455.las	LAS 1.2
08500460.las	LAS 1.2
08500465.las	LAS 1.2
08500470.las	LAS 1.2
08500475.las	LAS 1.2
08500480.las	LAS 1.2
08500485.las	LAS 1.2
08500490.las	LAS 1.2
08500495.las	LAS 1.2
08500500.las	LAS 1.2
08500505.las	LAS 1.2
08500510.las	LAS 1.2
08500515.las	LAS 1.2
08500520.las	LAS 1.2
08500525.las	LAS 1.2
08500530.las	LAS 1.2
08550430.las	LAS 1.2
08550435.las	LAS 1.2
08550440.las	LAS 1.2
08550445.las	LAS 1.2
08550450.las	LAS 1.2
08550455.las	LAS 1.2
08550460.las	LAS 1.2
08550465.las	LAS 1.2
08550470.las	LAS 1.2
08550475.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
08550480.las	LAS 1.2
08550485.las	LAS 1.2
08550490.las	LAS 1.2
08550495.las	LAS 1.2
08550500.las	LAS 1.2
08550505.las	LAS 1.2
08550510.las	LAS 1.2
08550515.las	LAS 1.2
08550520.las	LAS 1.2
08550525.las	LAS 1.2
08550530.las	LAS 1.2
08600430.las	LAS 1.2
08600435.las	LAS 1.2
08600440.las	LAS 1.2
08600445.las	LAS 1.2
08600450.las	LAS 1.2
08600455.las	LAS 1.2
08600460.las	LAS 1.2
08600465.las	LAS 1.2
08600470.las	LAS 1.2
08600475.las	LAS 1.2
08600480.las	LAS 1.2
08600485.las	LAS 1.2
08600490.las	LAS 1.2
08600495.las	LAS 1.2
08600500.las	LAS 1.2
08600505.las	LAS 1.2
08600510.las	LAS 1.2
08600515.las	LAS 1.2
08600520.las	LAS 1.2
08600525.las	LAS 1.2
08600530.las	LAS 1.2
08650430.las	LAS 1.2
08650435.las	LAS 1.2
08650440.las	LAS 1.2
08650445.las	LAS 1.2
08650450.las	LAS 1.2
08650455.las	LAS 1.2
08650460.las	LAS 1.2
08650465.las	LAS 1.2
08650470.las	LAS 1.2
08650475.las	LAS 1.2
08650480.las	LAS 1.2
08650485.las	LAS 1.2
08650490.las	LAS 1.2
08650495.las	LAS 1.2
08650500.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

File	LAS Format
08650505.las	LAS 1.2
08650510.las	LAS 1.2
08650515.las	LAS 1.2
08650520.las	LAS 1.2
08650525.las	LAS 1.2
08650530.las	LAS 1.2
08700430.las	LAS 1.2
08700435.las	LAS 1.2
08700440.las	LAS 1.2
08700445.las	LAS 1.2
08700450.las	LAS 1.2
08700455.las	LAS 1.2
08700460.las	LAS 1.2
08700465.las	LAS 1.2
08700470.las	LAS 1.2
08700475.las	LAS 1.2
08700480.las	LAS 1.2
08700485.las	LAS 1.2
08700490.las	LAS 1.2
08700495.las	LAS 1.2
08700500.las	LAS 1.2
08700505.las	LAS 1.2
08700510.las	LAS 1.2
08700515.las	LAS 1.2
08700520.las	LAS 1.2
08700525.las	LAS 1.2
08700530.las	LAS 1.2
08750430.las	LAS 1.2
08750435.las	LAS 1.2
08750440.las	LAS 1.2
08750445.las	LAS 1.2
08750450.las	LAS 1.2
08750455.las	LAS 1.2
08750460.las	LAS 1.2
08750465.las	LAS 1.2
08750470.las	LAS 1.2
08750475.las	LAS 1.2
08750480.las	LAS 1.2
08750485.las	LAS 1.2
08750490.las	LAS 1.2
08750495.las	LAS 1.2
08750500.las	LAS 1.2
08750505.las	LAS 1.2
08750510.las	LAS 1.2
08750515.las	LAS 1.2
08750520.las	LAS 1.2
08750525.las	LAS 1.2

2.1 Report on ASPRS LAS File Format (Tiled Data) - continued

<u>File</u>	<u>LAS Format</u>
08750530.las	LAS 1.2

2.2 Report on Full Waveform Data (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "If full waveform data are collected, delivery of the waveform packets is required. LAS v1.3 deliverables with waveform data are to use external auxiliary files with the extension .wdp for the storage of waveform packet data. See the LAS v1.3 Specification for additional information (ASPRS, 2011)."

The purpose of this section is to show the presence of waveform data for the LiDAR swath data.

[Boresighted Files - E:\Franklin_County\swath](#)

File	Waveform Data (WPD File)
140417_224329_1-1.las	No
140417_224329_1-2.las	No
140417_230025_1-1.las	No
140417_230025_1-2.las	No
140417_231322_1-1.las	No
140417_231322_1-2.las	No
140417_232632_1-1.las	No
140417_232632_1-2.las	No
140417_233933_1-1.las	No
140417_233933_1-2.las	No
140417_235212_1-1.las	No
140417_235212_1-2.las	No
140418_000524_1-1.las	No
140418_000524_1-2.las	No
140418_001909_1-1.las	No
140418_001909_1-2.las	No
140418_003250_1-1.las	No
140418_003250_1-2.las	No
140418_004640_1-1.las	No
140418_004640_1-2.las	No
140418_010058_1-1.las	No
140418_010058_1-2.las	No
140418_011447_1-1.las	No
140418_011447_1-2.las	No
140418_012827_1-1.las	No
140418_012827_1-2.las	No
140418_014215_1-1.las	No
140418_014215_1-2.las	No
140418_020434_1.las	No
140418_145120_1.las	No
140418_150350_1-1.las	No
140418_150350_1-2.las	No
140418_151646_1-1.las	No
140418_151646_1-2.las	No
140418_152909_1-1.las	No
140418_152909_1-2.las	No
140418_154201_1-1.las	No
140418_154201_1-2.las	No
140418_155420_1-1.las	No
140418_155420_1-2.las	No
140418_160651_1-1.las	No
140418_160651_1-2.las	No
140418_161920_1-1.las	No

2.2 Report on Full Waveform Data (Swath Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
140418_161920_1-2.las	No
140418_163158_1-1.las	No
140418_163158_1-2.las	No
140418_164429_1-1.las	No
140418_164429_1-2.las	No
140418_165715_1-1.las	No
140418_165715_1-2.las	No
140418_171610_1.las	No

2.2 Report on Full Waveform Data (Tiled Data)

The purpose of this section is to show the presence of waveform data for the LiDAR tiled data.

[Classified Files - E:\Franklin_County\las](#)

File	Waveform Data (WPD File)
07350465.las	No
07400465.las	No
07400470.las	No
07400475.las	No
07450430.las	No
07450435.las	No
07450440.las	No
07450445.las	No
07450450.las	No
07450455.las	No
07450460.las	No
07450465.las	No
07450470.las	No
07450475.las	No
07450480.las	No
07450485.las	No
07450490.las	No
07450495.las	No
07450500.las	No
07500430.las	No
07500435.las	No
07500440.las	No
07500445.las	No
07500450.las	No
07500455.las	No
07500460.las	No
07500465.las	No
07500470.las	No
07500475.las	No
07500480.las	No
07500485.las	No
07500490.las	No
07500495.las	No
07500500.las	No
07500505.las	No
07500510.las	No
07500515.las	No
07500520.las	No
07500525.las	No
07500530.las	No
07550430.las	No
07550435.las	No
07550440.las	No
07550445.las	No
07550450.las	No
07550455.las	No
07550460.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
07550465.las	No
07550470.las	No
07550475.las	No
07550480.las	No
07550485.las	No
07550490.las	No
07550495.las	No
07550500.las	No
07550505.las	No
07550510.las	No
07550515.las	No
07550520.las	No
07550525.las	No
07550530.las	No
07600430.las	No
07600435.las	No
07600440.las	No
07600445.las	No
07600450.las	No
07600455.las	No
07600460.las	No
07600465.las	No
07600470.las	No
07600475.las	No
07600480.las	No
07600485.las	No
07600490.las	No
07600495.las	No
07600500.las	No
07600505.las	No
07600510.las	No
07600515.las	No
07600520.las	No
07600525.las	No
07600530.las	No
07650430.las	No
07650435.las	No
07650440.las	No
07650445.las	No
07650450.las	No
07650455.las	No
07650460.las	No
07650465.las	No
07650470.las	No
07650475.las	No
07650480.las	No
07650485.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
07650490.las	No
07650495.las	No
07650500.las	No
07650505.las	No
07650510.las	No
07650515.las	No
07650520.las	No
07650525.las	No
07650530.las	No
07700430.las	No
07700435.las	No
07700440.las	No
07700445.las	No
07700450.las	No
07700455.las	No
07700460.las	No
07700465.las	No
07700470.las	No
07700475.las	No
07700480.las	No
07700485.las	No
07700490.las	No
07700495.las	No
07700500.las	No
07700505.las	No
07700510.las	No
07700515.las	No
07700520.las	No
07700525.las	No
07700530.las	No
07750430.las	No
07750435.las	No
07750440.las	No
07750445.las	No
07750450.las	No
07750455.las	No
07750460.las	No
07750465.las	No
07750470.las	No
07750475.las	No
07750480.las	No
07750485.las	No
07750490.las	No
07750495.las	No
07750500.las	No
07750505.las	No
07750510.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
07750515.las	No
07750520.las	No
07750525.las	No
07750530.las	No
07800430.las	No
07800435.las	No
07800440.las	No
07800445.las	No
07800450.las	No
07800455.las	No
07800460.las	No
07800465.las	No
07800470.las	No
07800475.las	No
07800480.las	No
07800485.las	No
07800490.las	No
07800495.las	No
07800500.las	No
07800505.las	No
07800510.las	No
07800515.las	No
07800520.las	No
07800525.las	No
07800530.las	No
07850430.las	No
07850435.las	No
07850440.las	No
07850445.las	No
07850450.las	No
07850455.las	No
07850460.las	No
07850465.las	No
07850470.las	No
07850475.las	No
07850480.las	No
07850485.las	No
07850490.las	No
07850495.las	No
07850500.las	No
07850505.las	No
07850510.las	No
07850515.las	No
07850520.las	No
07850525.las	No
07850530.las	No
07900430.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
07900435.las	No
07900440.las	No
07900445.las	No
07900450.las	No
07900455.las	No
07900460.las	No
07900465.las	No
07900470.las	No
07900475.las	No
07900480.las	No
07900485.las	No
07900490.las	No
07900495.las	No
07900500.las	No
07900505.las	No
07900510.las	No
07900515.las	No
07900520.las	No
07900525.las	No
07900530.las	No
07950430.las	No
07950435.las	No
07950440.las	No
07950445.las	No
07950450.las	No
07950455.las	No
07950460.las	No
07950465.las	No
07950470.las	No
07950475.las	No
07950480.las	No
07950485.las	No
07950490.las	No
07950495.las	No
07950500.las	No
07950505.las	No
07950510.las	No
07950515.las	No
07950520.las	No
07950525.las	No
07950530.las	No
08000430.las	No
08000435.las	No
08000440.las	No
08000445.las	No
08000450.las	No
08000455.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
08000460.las	No
08000465.las	No
08000470.las	No
08000475.las	No
08000480.las	No
08000485.las	No
08000490.las	No
08000495.las	No
08000500.las	No
08000505.las	No
08000510.las	No
08000515.las	No
08000520.las	No
08000525.las	No
08000530.las	No
08050430.las	No
08050435.las	No
08050440.las	No
08050445.las	No
08050450.las	No
08050455.las	No
08050460.las	No
08050465.las	No
08050470.las	No
08050475.las	No
08050480.las	No
08050485.las	No
08050490.las	No
08050495.las	No
08050500.las	No
08050505.las	No
08050510.las	No
08050515.las	No
08050520.las	No
08050525.las	No
08050530.las	No
08100430.las	No
08100435.las	No
08100440.las	No
08100445.las	No
08100450.las	No
08100455.las	No
08100460.las	No
08100465.las	No
08100470.las	No
08100475.las	No
08100480.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
08100485.las	No
08100490.las	No
08100495.las	No
08100500.las	No
08100505.las	No
08100510.las	No
08100515.las	No
08100520.las	No
08100525.las	No
08100530.las	No
08150430.las	No
08150435.las	No
08150440.las	No
08150445.las	No
08150450.las	No
08150455.las	No
08150460.las	No
08150465.las	No
08150470.las	No
08150475.las	No
08150480.las	No
08150485.las	No
08150490.las	No
08150495.las	No
08150500.las	No
08150505.las	No
08150510.las	No
08150515.las	No
08150520.las	No
08150525.las	No
08150530.las	No
08200430.las	No
08200435.las	No
08200440.las	No
08200445.las	No
08200450.las	No
08200455.las	No
08200460.las	No
08200465.las	No
08200470.las	No
08200475.las	No
08200480.las	No
08200485.las	No
08200490.las	No
08200495.las	No
08200500.las	No
08200505.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
08200510.las	No
08200515.las	No
08200520.las	No
08200525.las	No
08200530.las	No
08250430.las	No
08250435.las	No
08250440.las	No
08250445.las	No
08250450.las	No
08250455.las	No
08250460.las	No
08250465.las	No
08250470.las	No
08250475.las	No
08250480.las	No
08250485.las	No
08250490.las	No
08250495.las	No
08250500.las	No
08250505.las	No
08250510.las	No
08250515.las	No
08250520.las	No
08250525.las	No
08250530.las	No
08300430.las	No
08300435.las	No
08300440.las	No
08300445.las	No
08300450.las	No
08300455.las	No
08300460.las	No
08300465.las	No
08300470.las	No
08300475.las	No
08300480.las	No
08300485.las	No
08300490.las	No
08300495.las	No
08300500.las	No
08300505.las	No
08300510.las	No
08300515.las	No
08300520.las	No
08300525.las	No
08300530.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
08350430.las	No
08350435.las	No
08350440.las	No
08350445.las	No
08350450.las	No
08350455.las	No
08350460.las	No
08350465.las	No
08350470.las	No
08350475.las	No
08350480.las	No
08350485.las	No
08350490.las	No
08350495.las	No
08350500.las	No
08350505.las	No
08350510.las	No
08350515.las	No
08350520.las	No
08350525.las	No
08350530.las	No
08400430.las	No
08400435.las	No
08400440.las	No
08400445.las	No
08400450.las	No
08400455.las	No
08400460.las	No
08400465.las	No
08400470.las	No
08400475.las	No
08400480.las	No
08400485.las	No
08400490.las	No
08400495.las	No
08400500.las	No
08400505.las	No
08400510.las	No
08400515.las	No
08400520.las	No
08400525.las	No
08400530.las	No
08450430.las	No
08450435.las	No
08450440.las	No
08450445.las	No
08450450.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
08450455.las	No
08450460.las	No
08450465.las	No
08450470.las	No
08450475.las	No
08450480.las	No
08450485.las	No
08450490.las	No
08450495.las	No
08450500.las	No
08450505.las	No
08450510.las	No
08450515.las	No
08450520.las	No
08450525.las	No
08450530.las	No
08500430.las	No
08500435.las	No
08500440.las	No
08500445.las	No
08500450.las	No
08500455.las	No
08500460.las	No
08500465.las	No
08500470.las	No
08500475.las	No
08500480.las	No
08500485.las	No
08500490.las	No
08500495.las	No
08500500.las	No
08500505.las	No
08500510.las	No
08500515.las	No
08500520.las	No
08500525.las	No
08500530.las	No
08550430.las	No
08550435.las	No
08550440.las	No
08550445.las	No
08550450.las	No
08550455.las	No
08550460.las	No
08550465.las	No
08550470.las	No
08550475.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
08550480.las	No
08550485.las	No
08550490.las	No
08550495.las	No
08550500.las	No
08550505.las	No
08550510.las	No
08550515.las	No
08550520.las	No
08550525.las	No
08550530.las	No
08600430.las	No
08600435.las	No
08600440.las	No
08600445.las	No
08600450.las	No
08600455.las	No
08600460.las	No
08600465.las	No
08600470.las	No
08600475.las	No
08600480.las	No
08600485.las	No
08600490.las	No
08600495.las	No
08600500.las	No
08600505.las	No
08600510.las	No
08600515.las	No
08600520.las	No
08600525.las	No
08600530.las	No
08650430.las	No
08650435.las	No
08650440.las	No
08650445.las	No
08650450.las	No
08650455.las	No
08650460.las	No
08650465.las	No
08650470.las	No
08650475.las	No
08650480.las	No
08650485.las	No
08650490.las	No
08650495.las	No
08650500.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
08650505.las	No
08650510.las	No
08650515.las	No
08650520.las	No
08650525.las	No
08650530.las	No
08700430.las	No
08700435.las	No
08700440.las	No
08700445.las	No
08700450.las	No
08700455.las	No
08700460.las	No
08700465.las	No
08700470.las	No
08700475.las	No
08700480.las	No
08700485.las	No
08700490.las	No
08700495.las	No
08700500.las	No
08700505.las	No
08700510.las	No
08700515.las	No
08700520.las	No
08700525.las	No
08700530.las	No
08750430.las	No
08750435.las	No
08750440.las	No
08750445.las	No
08750450.las	No
08750455.las	No
08750460.las	No
08750465.las	No
08750470.las	No
08750475.las	No
08750480.las	No
08750485.las	No
08750490.las	No
08750495.las	No
08750500.las	No
08750505.las	No
08750510.las	No
08750515.las	No
08750520.las	No
08750525.las	No

2.2 Report on Full Waveform Data (Tiled Data) - continued

<u>File</u>	<u>Waveform Data (WPD File)</u>
08750530.las	No

2.3 Report on Global Positioning System (GPS) Times Type (Swath Data)

The USGS LiDAR Base Specification Version 1.0 requires: "GPS times are to be recorded as Adjusted GPS Time, at a precision sufficient to allow unique timestamps for each pulse. Adjusted GPS Time is defined to be Standard (or satellite) GPS time minus 1×10^9 . See the LAS v1.3 Specification for more detail (ASPRS, 2011)."

The purpose of this section is to show the GPS time type within the LAS files for the LiDAR swath data.

[Boresighted Files - E:\Franklin County\swath](#)

File	GPS Time Type
140417_224329_1-1.las	Adjusted GPS Time
140417_224329_1-2.las	Adjusted GPS Time
140417_230025_1-1.las	Adjusted GPS Time
140417_230025_1-2.las	Adjusted GPS Time
140417_231322_1-1.las	Adjusted GPS Time
140417_231322_1-2.las	Adjusted GPS Time
140417_232632_1-1.las	Adjusted GPS Time
140417_232632_1-2.las	Adjusted GPS Time
140417_233933_1-1.las	Adjusted GPS Time
140417_233933_1-2.las	Adjusted GPS Time
140417_235212_1-1.las	Adjusted GPS Time
140417_235212_1-2.las	Adjusted GPS Time
140418_000524_1-1.las	Adjusted GPS Time
140418_000524_1-2.las	Adjusted GPS Time
140418_001909_1-1.las	Adjusted GPS Time
140418_001909_1-2.las	Adjusted GPS Time
140418_003250_1-1.las	Adjusted GPS Time
140418_003250_1-2.las	Adjusted GPS Time
140418_004640_1-1.las	Adjusted GPS Time
140418_004640_1-2.las	Adjusted GPS Time
140418_010058_1-1.las	Adjusted GPS Time
140418_010058_1-2.las	Adjusted GPS Time
140418_011447_1-1.las	Adjusted GPS Time
140418_011447_1-2.las	Adjusted GPS Time
140418_012827_1-1.las	Adjusted GPS Time
140418_012827_1-2.las	Adjusted GPS Time
140418_014215_1-1.las	Adjusted GPS Time
140418_014215_1-2.las	Adjusted GPS Time
140418_020434_1.las	Adjusted GPS Time
140418_145120_1.las	Adjusted GPS Time
140418_150350_1-1.las	Adjusted GPS Time
140418_150350_1-2.las	Adjusted GPS Time
140418_151646_1-1.las	Adjusted GPS Time
140418_151646_1-2.las	Adjusted GPS Time
140418_152909_1-1.las	Adjusted GPS Time
140418_152909_1-2.las	Adjusted GPS Time
140418_154201_1-1.las	Adjusted GPS Time
140418_154201_1-2.las	Adjusted GPS Time
140418_155420_1-1.las	Adjusted GPS Time
140418_155420_1-2.las	Adjusted GPS Time
140418_160651_1-1.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Swath Data) - continued

<u>File</u>	<u>GPS Time Type</u>
140418_160651_1-2.las	Adjusted GPS Time
140418_161920_1-1.las	Adjusted GPS Time
140418_161920_1-2.las	Adjusted GPS Time
140418_163158_1-1.las	Adjusted GPS Time
140418_163158_1-2.las	Adjusted GPS Time
140418_164429_1-1.las	Adjusted GPS Time
140418_164429_1-2.las	Adjusted GPS Time
140418_165715_1-1.las	Adjusted GPS Time
140418_165715_1-2.las	Adjusted GPS Time
140418_171610_1.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data)

The purpose of this section is to show the GPS time type within the LAS files for the LiDAR tiled data.

[Classified Files - E:\Franklin_County\las](#)

File	GPS Time Type
07350465.las	Adjusted GPS Time
07400465.las	Adjusted GPS Time
07400470.las	Adjusted GPS Time
07400475.las	Adjusted GPS Time
07450430.las	Adjusted GPS Time
07450435.las	Adjusted GPS Time
07450440.las	Adjusted GPS Time
07450445.las	Adjusted GPS Time
07450450.las	Adjusted GPS Time
07450455.las	Adjusted GPS Time
07450460.las	Adjusted GPS Time
07450465.las	Adjusted GPS Time
07450470.las	Adjusted GPS Time
07450475.las	Adjusted GPS Time
07450480.las	Adjusted GPS Time
07450485.las	Adjusted GPS Time
07450490.las	Adjusted GPS Time
07450495.las	Adjusted GPS Time
07450500.las	Adjusted GPS Time
07500430.las	Adjusted GPS Time
07500435.las	Adjusted GPS Time
07500440.las	Adjusted GPS Time
07500445.las	Adjusted GPS Time
07500450.las	Adjusted GPS Time
07500455.las	Adjusted GPS Time
07500460.las	Adjusted GPS Time
07500465.las	Adjusted GPS Time
07500470.las	Adjusted GPS Time
07500475.las	Adjusted GPS Time
07500480.las	Adjusted GPS Time
07500485.las	Adjusted GPS Time
07500490.las	Adjusted GPS Time
07500495.las	Adjusted GPS Time
07500500.las	Adjusted GPS Time
07500505.las	Adjusted GPS Time
07500510.las	Adjusted GPS Time
07500515.las	Adjusted GPS Time
07500520.las	Adjusted GPS Time
07500525.las	Adjusted GPS Time
07500530.las	Adjusted GPS Time
07550430.las	Adjusted GPS Time
07550435.las	Adjusted GPS Time
07550440.las	Adjusted GPS Time
07550445.las	Adjusted GPS Time
07550450.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
07550455.las	Adjusted GPS Time
07550460.las	Adjusted GPS Time
07550465.las	Adjusted GPS Time
07550470.las	Adjusted GPS Time
07550475.las	Adjusted GPS Time
07550480.las	Adjusted GPS Time
07550485.las	Adjusted GPS Time
07550490.las	Adjusted GPS Time
07550495.las	Adjusted GPS Time
07550500.las	Adjusted GPS Time
07550505.las	Adjusted GPS Time
07550510.las	Adjusted GPS Time
07550515.las	Adjusted GPS Time
07550520.las	Adjusted GPS Time
07550525.las	Adjusted GPS Time
07550530.las	Adjusted GPS Time
07600430.las	Adjusted GPS Time
07600435.las	Adjusted GPS Time
07600440.las	Adjusted GPS Time
07600445.las	Adjusted GPS Time
07600450.las	Adjusted GPS Time
07600455.las	Adjusted GPS Time
07600460.las	Adjusted GPS Time
07600465.las	Adjusted GPS Time
07600470.las	Adjusted GPS Time
07600475.las	Adjusted GPS Time
07600480.las	Adjusted GPS Time
07600485.las	Adjusted GPS Time
07600490.las	Adjusted GPS Time
07600495.las	Adjusted GPS Time
07600500.las	Adjusted GPS Time
07600505.las	Adjusted GPS Time
07600510.las	Adjusted GPS Time
07600515.las	Adjusted GPS Time
07600520.las	Adjusted GPS Time
07600525.las	Adjusted GPS Time
07600530.las	Adjusted GPS Time
07650430.las	Adjusted GPS Time
07650435.las	Adjusted GPS Time
07650440.las	Adjusted GPS Time
07650445.las	Adjusted GPS Time
07650450.las	Adjusted GPS Time
07650455.las	Adjusted GPS Time
07650460.las	Adjusted GPS Time
07650465.las	Adjusted GPS Time
07650470.las	Adjusted GPS Time
07650475.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
07650480.las	Adjusted GPS Time
07650485.las	Adjusted GPS Time
07650490.las	Adjusted GPS Time
07650495.las	Adjusted GPS Time
07650500.las	Adjusted GPS Time
07650505.las	Adjusted GPS Time
07650510.las	Adjusted GPS Time
07650515.las	Adjusted GPS Time
07650520.las	Adjusted GPS Time
07650525.las	Adjusted GPS Time
07650530.las	Adjusted GPS Time
07700430.las	Adjusted GPS Time
07700435.las	Adjusted GPS Time
07700440.las	Adjusted GPS Time
07700445.las	Adjusted GPS Time
07700450.las	Adjusted GPS Time
07700455.las	Adjusted GPS Time
07700460.las	Adjusted GPS Time
07700465.las	Adjusted GPS Time
07700470.las	Adjusted GPS Time
07700475.las	Adjusted GPS Time
07700480.las	Adjusted GPS Time
07700485.las	Adjusted GPS Time
07700490.las	Adjusted GPS Time
07700495.las	Adjusted GPS Time
07700500.las	Adjusted GPS Time
07700505.las	Adjusted GPS Time
07700510.las	Adjusted GPS Time
07700515.las	Adjusted GPS Time
07700520.las	Adjusted GPS Time
07700525.las	Adjusted GPS Time
07700530.las	Adjusted GPS Time
07750430.las	Adjusted GPS Time
07750435.las	Adjusted GPS Time
07750440.las	Adjusted GPS Time
07750445.las	Adjusted GPS Time
07750450.las	Adjusted GPS Time
07750455.las	Adjusted GPS Time
07750460.las	Adjusted GPS Time
07750465.las	Adjusted GPS Time
07750470.las	Adjusted GPS Time
07750475.las	Adjusted GPS Time
07750480.las	Adjusted GPS Time
07750485.las	Adjusted GPS Time
07750490.las	Adjusted GPS Time
07750495.las	Adjusted GPS Time
07750500.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
07750505.las	Adjusted GPS Time
07750510.las	Adjusted GPS Time
07750515.las	Adjusted GPS Time
07750520.las	Adjusted GPS Time
07750525.las	Adjusted GPS Time
07750530.las	Adjusted GPS Time
07800430.las	Adjusted GPS Time
07800435.las	Adjusted GPS Time
07800440.las	Adjusted GPS Time
07800445.las	Adjusted GPS Time
07800450.las	Adjusted GPS Time
07800455.las	Adjusted GPS Time
07800460.las	Adjusted GPS Time
07800465.las	Adjusted GPS Time
07800470.las	Adjusted GPS Time
07800475.las	Adjusted GPS Time
07800480.las	Adjusted GPS Time
07800485.las	Adjusted GPS Time
07800490.las	Adjusted GPS Time
07800495.las	Adjusted GPS Time
07800500.las	Adjusted GPS Time
07800505.las	Adjusted GPS Time
07800510.las	Adjusted GPS Time
07800515.las	Adjusted GPS Time
07800520.las	Adjusted GPS Time
07800525.las	Adjusted GPS Time
07800530.las	Adjusted GPS Time
07850430.las	Adjusted GPS Time
07850435.las	Adjusted GPS Time
07850440.las	Adjusted GPS Time
07850445.las	Adjusted GPS Time
07850450.las	Adjusted GPS Time
07850455.las	Adjusted GPS Time
07850460.las	Adjusted GPS Time
07850465.las	Adjusted GPS Time
07850470.las	Adjusted GPS Time
07850475.las	Adjusted GPS Time
07850480.las	Adjusted GPS Time
07850485.las	Adjusted GPS Time
07850490.las	Adjusted GPS Time
07850495.las	Adjusted GPS Time
07850500.las	Adjusted GPS Time
07850505.las	Adjusted GPS Time
07850510.las	Adjusted GPS Time
07850515.las	Adjusted GPS Time
07850520.las	Adjusted GPS Time
07850525.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
07850530.las	Adjusted GPS Time
07900430.las	Adjusted GPS Time
07900435.las	Adjusted GPS Time
07900440.las	Adjusted GPS Time
07900445.las	Adjusted GPS Time
07900450.las	Adjusted GPS Time
07900455.las	Adjusted GPS Time
07900460.las	Adjusted GPS Time
07900465.las	Adjusted GPS Time
07900470.las	Adjusted GPS Time
07900475.las	Adjusted GPS Time
07900480.las	Adjusted GPS Time
07900485.las	Adjusted GPS Time
07900490.las	Adjusted GPS Time
07900495.las	Adjusted GPS Time
07900500.las	Adjusted GPS Time
07900505.las	Adjusted GPS Time
07900510.las	Adjusted GPS Time
07900515.las	Adjusted GPS Time
07900520.las	Adjusted GPS Time
07900525.las	Adjusted GPS Time
07900530.las	Adjusted GPS Time
07950430.las	Adjusted GPS Time
07950435.las	Adjusted GPS Time
07950440.las	Adjusted GPS Time
07950445.las	Adjusted GPS Time
07950450.las	Adjusted GPS Time
07950455.las	Adjusted GPS Time
07950460.las	Adjusted GPS Time
07950465.las	Adjusted GPS Time
07950470.las	Adjusted GPS Time
07950475.las	Adjusted GPS Time
07950480.las	Adjusted GPS Time
07950485.las	Adjusted GPS Time
07950490.las	Adjusted GPS Time
07950495.las	Adjusted GPS Time
07950500.las	Adjusted GPS Time
07950505.las	Adjusted GPS Time
07950510.las	Adjusted GPS Time
07950515.las	Adjusted GPS Time
07950520.las	Adjusted GPS Time
07950525.las	Adjusted GPS Time
07950530.las	Adjusted GPS Time
08000430.las	Adjusted GPS Time
08000435.las	Adjusted GPS Time
08000440.las	Adjusted GPS Time
08000445.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
08000450.las	Adjusted GPS Time
08000455.las	Adjusted GPS Time
08000460.las	Adjusted GPS Time
08000465.las	Adjusted GPS Time
08000470.las	Adjusted GPS Time
08000475.las	Adjusted GPS Time
08000480.las	Adjusted GPS Time
08000485.las	Adjusted GPS Time
08000490.las	Adjusted GPS Time
08000495.las	Adjusted GPS Time
08000500.las	Adjusted GPS Time
08000505.las	Adjusted GPS Time
08000510.las	Adjusted GPS Time
08000515.las	Adjusted GPS Time
08000520.las	Adjusted GPS Time
08000525.las	Adjusted GPS Time
08000530.las	Adjusted GPS Time
08050430.las	Adjusted GPS Time
08050435.las	Adjusted GPS Time
08050440.las	Adjusted GPS Time
08050445.las	Adjusted GPS Time
08050450.las	Adjusted GPS Time
08050455.las	Adjusted GPS Time
08050460.las	Adjusted GPS Time
08050465.las	Adjusted GPS Time
08050470.las	Adjusted GPS Time
08050475.las	Adjusted GPS Time
08050480.las	Adjusted GPS Time
08050485.las	Adjusted GPS Time
08050490.las	Adjusted GPS Time
08050495.las	Adjusted GPS Time
08050500.las	Adjusted GPS Time
08050505.las	Adjusted GPS Time
08050510.las	Adjusted GPS Time
08050515.las	Adjusted GPS Time
08050520.las	Adjusted GPS Time
08050525.las	Adjusted GPS Time
08050530.las	Adjusted GPS Time
08100430.las	Adjusted GPS Time
08100435.las	Adjusted GPS Time
08100440.las	Adjusted GPS Time
08100445.las	Adjusted GPS Time
08100450.las	Adjusted GPS Time
08100455.las	Adjusted GPS Time
08100460.las	Adjusted GPS Time
08100465.las	Adjusted GPS Time
08100470.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
08100475.las	Adjusted GPS Time
08100480.las	Adjusted GPS Time
08100485.las	Adjusted GPS Time
08100490.las	Adjusted GPS Time
08100495.las	Adjusted GPS Time
08100500.las	Adjusted GPS Time
08100505.las	Adjusted GPS Time
08100510.las	Adjusted GPS Time
08100515.las	Adjusted GPS Time
08100520.las	Adjusted GPS Time
08100525.las	Adjusted GPS Time
08100530.las	Adjusted GPS Time
08150430.las	Adjusted GPS Time
08150435.las	Adjusted GPS Time
08150440.las	Adjusted GPS Time
08150445.las	Adjusted GPS Time
08150450.las	Adjusted GPS Time
08150455.las	Adjusted GPS Time
08150460.las	Adjusted GPS Time
08150465.las	Adjusted GPS Time
08150470.las	Adjusted GPS Time
08150475.las	Adjusted GPS Time
08150480.las	Adjusted GPS Time
08150485.las	Adjusted GPS Time
08150490.las	Adjusted GPS Time
08150495.las	Adjusted GPS Time
08150500.las	Adjusted GPS Time
08150505.las	Adjusted GPS Time
08150510.las	Adjusted GPS Time
08150515.las	Adjusted GPS Time
08150520.las	Adjusted GPS Time
08150525.las	Adjusted GPS Time
08150530.las	Adjusted GPS Time
08200430.las	Adjusted GPS Time
08200435.las	Adjusted GPS Time
08200440.las	Adjusted GPS Time
08200445.las	Adjusted GPS Time
08200450.las	Adjusted GPS Time
08200455.las	Adjusted GPS Time
08200460.las	Adjusted GPS Time
08200465.las	Adjusted GPS Time
08200470.las	Adjusted GPS Time
08200475.las	Adjusted GPS Time
08200480.las	Adjusted GPS Time
08200485.las	Adjusted GPS Time
08200490.las	Adjusted GPS Time
08200495.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
08200500.las	Adjusted GPS Time
08200505.las	Adjusted GPS Time
08200510.las	Adjusted GPS Time
08200515.las	Adjusted GPS Time
08200520.las	Adjusted GPS Time
08200525.las	Adjusted GPS Time
08200530.las	Adjusted GPS Time
08250430.las	Adjusted GPS Time
08250435.las	Adjusted GPS Time
08250440.las	Adjusted GPS Time
08250445.las	Adjusted GPS Time
08250450.las	Adjusted GPS Time
08250455.las	Adjusted GPS Time
08250460.las	Adjusted GPS Time
08250465.las	Adjusted GPS Time
08250470.las	Adjusted GPS Time
08250475.las	Adjusted GPS Time
08250480.las	Adjusted GPS Time
08250485.las	Adjusted GPS Time
08250490.las	Adjusted GPS Time
08250495.las	Adjusted GPS Time
08250500.las	Adjusted GPS Time
08250505.las	Adjusted GPS Time
08250510.las	Adjusted GPS Time
08250515.las	Adjusted GPS Time
08250520.las	Adjusted GPS Time
08250525.las	Adjusted GPS Time
08250530.las	Adjusted GPS Time
08300430.las	Adjusted GPS Time
08300435.las	Adjusted GPS Time
08300440.las	Adjusted GPS Time
08300445.las	Adjusted GPS Time
08300450.las	Adjusted GPS Time
08300455.las	Adjusted GPS Time
08300460.las	Adjusted GPS Time
08300465.las	Adjusted GPS Time
08300470.las	Adjusted GPS Time
08300475.las	Adjusted GPS Time
08300480.las	Adjusted GPS Time
08300485.las	Adjusted GPS Time
08300490.las	Adjusted GPS Time
08300495.las	Adjusted GPS Time
08300500.las	Adjusted GPS Time
08300505.las	Adjusted GPS Time
08300510.las	Adjusted GPS Time
08300515.las	Adjusted GPS Time
08300520.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
08300525.las	Adjusted GPS Time
08300530.las	Adjusted GPS Time
08350430.las	Adjusted GPS Time
08350435.las	Adjusted GPS Time
08350440.las	Adjusted GPS Time
08350445.las	Adjusted GPS Time
08350450.las	Adjusted GPS Time
08350455.las	Adjusted GPS Time
08350460.las	Adjusted GPS Time
08350465.las	Adjusted GPS Time
08350470.las	Adjusted GPS Time
08350475.las	Adjusted GPS Time
08350480.las	Adjusted GPS Time
08350485.las	Adjusted GPS Time
08350490.las	Adjusted GPS Time
08350495.las	Adjusted GPS Time
08350500.las	Adjusted GPS Time
08350505.las	Adjusted GPS Time
08350510.las	Adjusted GPS Time
08350515.las	Adjusted GPS Time
08350520.las	Adjusted GPS Time
08350525.las	Adjusted GPS Time
08350530.las	Adjusted GPS Time
08400430.las	Adjusted GPS Time
08400435.las	Adjusted GPS Time
08400440.las	Adjusted GPS Time
08400445.las	Adjusted GPS Time
08400450.las	Adjusted GPS Time
08400455.las	Adjusted GPS Time
08400460.las	Adjusted GPS Time
08400465.las	Adjusted GPS Time
08400470.las	Adjusted GPS Time
08400475.las	Adjusted GPS Time
08400480.las	Adjusted GPS Time
08400485.las	Adjusted GPS Time
08400490.las	Adjusted GPS Time
08400495.las	Adjusted GPS Time
08400500.las	Adjusted GPS Time
08400505.las	Adjusted GPS Time
08400510.las	Adjusted GPS Time
08400515.las	Adjusted GPS Time
08400520.las	Adjusted GPS Time
08400525.las	Adjusted GPS Time
08400530.las	Adjusted GPS Time
08450430.las	Adjusted GPS Time
08450435.las	Adjusted GPS Time
08450440.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
08450445.las	Adjusted GPS Time
08450450.las	Adjusted GPS Time
08450455.las	Adjusted GPS Time
08450460.las	Adjusted GPS Time
08450465.las	Adjusted GPS Time
08450470.las	Adjusted GPS Time
08450475.las	Adjusted GPS Time
08450480.las	Adjusted GPS Time
08450485.las	Adjusted GPS Time
08450490.las	Adjusted GPS Time
08450495.las	Adjusted GPS Time
08450500.las	Adjusted GPS Time
08450505.las	Adjusted GPS Time
08450510.las	Adjusted GPS Time
08450515.las	Adjusted GPS Time
08450520.las	Adjusted GPS Time
08450525.las	Adjusted GPS Time
08450530.las	Adjusted GPS Time
08500430.las	Adjusted GPS Time
08500435.las	Adjusted GPS Time
08500440.las	Adjusted GPS Time
08500445.las	Adjusted GPS Time
08500450.las	Adjusted GPS Time
08500455.las	Adjusted GPS Time
08500460.las	Adjusted GPS Time
08500465.las	Adjusted GPS Time
08500470.las	Adjusted GPS Time
08500475.las	Adjusted GPS Time
08500480.las	Adjusted GPS Time
08500485.las	Adjusted GPS Time
08500490.las	Adjusted GPS Time
08500495.las	Adjusted GPS Time
08500500.las	Adjusted GPS Time
08500505.las	Adjusted GPS Time
08500510.las	Adjusted GPS Time
08500515.las	Adjusted GPS Time
08500520.las	Adjusted GPS Time
08500525.las	Adjusted GPS Time
08500530.las	Adjusted GPS Time
08550430.las	Adjusted GPS Time
08550435.las	Adjusted GPS Time
08550440.las	Adjusted GPS Time
08550445.las	Adjusted GPS Time
08550450.las	Adjusted GPS Time
08550455.las	Adjusted GPS Time
08550460.las	Adjusted GPS Time
08550465.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
08550470.las	Adjusted GPS Time
08550475.las	Adjusted GPS Time
08550480.las	Adjusted GPS Time
08550485.las	Adjusted GPS Time
08550490.las	Adjusted GPS Time
08550495.las	Adjusted GPS Time
08550500.las	Adjusted GPS Time
08550505.las	Adjusted GPS Time
08550510.las	Adjusted GPS Time
08550515.las	Adjusted GPS Time
08550520.las	Adjusted GPS Time
08550525.las	Adjusted GPS Time
08550530.las	Adjusted GPS Time
08600430.las	Adjusted GPS Time
08600435.las	Adjusted GPS Time
08600440.las	Adjusted GPS Time
08600445.las	Adjusted GPS Time
08600450.las	Adjusted GPS Time
08600455.las	Adjusted GPS Time
08600460.las	Adjusted GPS Time
08600465.las	Adjusted GPS Time
08600470.las	Adjusted GPS Time
08600475.las	Adjusted GPS Time
08600480.las	Adjusted GPS Time
08600485.las	Adjusted GPS Time
08600490.las	Adjusted GPS Time
08600495.las	Adjusted GPS Time
08600500.las	Adjusted GPS Time
08600505.las	Adjusted GPS Time
08600510.las	Adjusted GPS Time
08600515.las	Adjusted GPS Time
08600520.las	Adjusted GPS Time
08600525.las	Adjusted GPS Time
08600530.las	Adjusted GPS Time
08650430.las	Adjusted GPS Time
08650435.las	Adjusted GPS Time
08650440.las	Adjusted GPS Time
08650445.las	Adjusted GPS Time
08650450.las	Adjusted GPS Time
08650455.las	Adjusted GPS Time
08650460.las	Adjusted GPS Time
08650465.las	Adjusted GPS Time
08650470.las	Adjusted GPS Time
08650475.las	Adjusted GPS Time
08650480.las	Adjusted GPS Time
08650485.las	Adjusted GPS Time
08650490.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

File	GPS Time Type
08650495.las	Adjusted GPS Time
08650500.las	Adjusted GPS Time
08650505.las	Adjusted GPS Time
08650510.las	Adjusted GPS Time
08650515.las	Adjusted GPS Time
08650520.las	Adjusted GPS Time
08650525.las	Adjusted GPS Time
08650530.las	Adjusted GPS Time
08700430.las	Adjusted GPS Time
08700435.las	Adjusted GPS Time
08700440.las	Adjusted GPS Time
08700445.las	Adjusted GPS Time
08700450.las	Adjusted GPS Time
08700455.las	Adjusted GPS Time
08700460.las	Adjusted GPS Time
08700465.las	Adjusted GPS Time
08700470.las	Adjusted GPS Time
08700475.las	Adjusted GPS Time
08700480.las	Adjusted GPS Time
08700485.las	Adjusted GPS Time
08700490.las	Adjusted GPS Time
08700495.las	Adjusted GPS Time
08700500.las	Adjusted GPS Time
08700505.las	Adjusted GPS Time
08700510.las	Adjusted GPS Time
08700515.las	Adjusted GPS Time
08700520.las	Adjusted GPS Time
08700525.las	Adjusted GPS Time
08700530.las	Adjusted GPS Time
08750430.las	Adjusted GPS Time
08750435.las	Adjusted GPS Time
08750440.las	Adjusted GPS Time
08750445.las	Adjusted GPS Time
08750450.las	Adjusted GPS Time
08750455.las	Adjusted GPS Time
08750460.las	Adjusted GPS Time
08750465.las	Adjusted GPS Time
08750470.las	Adjusted GPS Time
08750475.las	Adjusted GPS Time
08750480.las	Adjusted GPS Time
08750485.las	Adjusted GPS Time
08750490.las	Adjusted GPS Time
08750495.las	Adjusted GPS Time
08750500.las	Adjusted GPS Time
08750505.las	Adjusted GPS Time
08750510.las	Adjusted GPS Time
08750515.las	Adjusted GPS Time

2.3 Report on Global Positioning System (GPS) Times Type (Tiled Data) - continued

<u>File</u>	<u>GPS Time Type</u>
08750520.las	Adjusted GPS Time
08750525.las	Adjusted GPS Time
08750530.las	Adjusted GPS Time

2.4 Report on Datums (Swath Data)

The USGS LiDAR Base Specification Version 1.0 requires: "All data collected must be tied to the datums listed below:

- (1) Horizontal datum reference to the North American Datum of 1983/HARN adjustment (NAD83 HARN) is required.
- (2) Vertical datum reference to the North American Vertical Datum of 1988 (NAVD 88) is required.
- (3) The most recent National Geodetic Survey (NGS)-approved geoid model is required to perform conversions from ellipsoidal heights to orthometric heights."

The purpose of this section is to show the datums of the LAS files for the LiDAR swath data.

[Boresighted Files - E:\Franklin_County\swath](#)

File	EPSG Code	Vertical Datum
140417_224329_1-1.las	None	NAVD88 - Geoid12A (Feet)
140417_224329_1-2.las	None	NAVD88 - Geoid12A (Feet)
140417_230025_1-1.las	None	NAVD88 - Geoid12A (Feet)
140417_230025_1-2.las	None	NAVD88 - Geoid12A (Feet)
140417_231322_1-1.las	None	NAVD88 - Geoid12A (Feet)
140417_231322_1-2.las	None	NAVD88 - Geoid12A (Feet)
140417_232632_1-1.las	None	NAVD88 - Geoid12A (Feet)
140417_232632_1-2.las	None	NAVD88 - Geoid12A (Feet)
140417_233933_1-1.las	None	NAVD88 - Geoid12A (Feet)
140417_233933_1-2.las	None	NAVD88 - Geoid12A (Feet)
140417_235212_1-1.las	None	NAVD88 - Geoid12A (Feet)
140417_235212_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_000524_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_000524_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_001909_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_001909_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_003250_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_003250_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_004640_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_004640_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_010058_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_010058_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_011447_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_011447_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_012827_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_012827_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_014215_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_014215_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_020434_1.las	None	NAVD88 - Geoid12A (Feet)
140418_145120_1.las	None	NAVD88 - Geoid12A (Feet)
140418_150350_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_150350_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_151646_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_151646_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_152909_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_152909_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_154201_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_154201_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_155420_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_155420_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_160651_1-1.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Swath Data) - continued

<u>File</u>	<u>EPSG Code</u>	<u>Vertical Datum</u>
140418_160651_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_161920_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_161920_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_163158_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_163158_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_164429_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_164429_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_165715_1-1.las	None	NAVD88 - Geoid12A (Feet)
140418_165715_1-2.las	None	NAVD88 - Geoid12A (Feet)
140418_171610_1.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data)

The purpose of this section is to show the datums of the LAS files for the LiDAR tiled data.

[Classified Files - E:\Franklin County\las](#)

File	EPSG Code	Vertical Datum
07350465.las	None	NAVD88 - Geoid12A (Feet)
07400465.las	None	NAVD88 - Geoid12A (Feet)
07400470.las	None	NAVD88 - Geoid12A (Feet)
07400475.las	None	NAVD88 - Geoid12A (Feet)
07450430.las	None	NAVD88 - Geoid12A (Feet)
07450435.las	None	NAVD88 - Geoid12A (Feet)
07450440.las	None	NAVD88 - Geoid12A (Feet)
07450445.las	None	NAVD88 - Geoid12A (Feet)
07450450.las	None	NAVD88 - Geoid12A (Feet)
07450455.las	None	NAVD88 - Geoid12A (Feet)
07450460.las	None	NAVD88 - Geoid12A (Feet)
07450465.las	None	NAVD88 - Geoid12A (Feet)
07450470.las	None	NAVD88 - Geoid12A (Feet)
07450475.las	None	NAVD88 - Geoid12A (Feet)
07450480.las	None	NAVD88 - Geoid12A (Feet)
07450485.las	None	NAVD88 - Geoid12A (Feet)
07450490.las	None	NAVD88 - Geoid12A (Feet)
07450495.las	None	NAVD88 - Geoid12A (Feet)
07450500.las	None	NAVD88 - Geoid12A (Feet)
07500430.las	None	NAVD88 - Geoid12A (Feet)
07500435.las	None	NAVD88 - Geoid12A (Feet)
07500440.las	None	NAVD88 - Geoid12A (Feet)
07500445.las	None	NAVD88 - Geoid12A (Feet)
07500450.las	None	NAVD88 - Geoid12A (Feet)
07500455.las	None	NAVD88 - Geoid12A (Feet)
07500460.las	None	NAVD88 - Geoid12A (Feet)
07500465.las	None	NAVD88 - Geoid12A (Feet)
07500470.las	None	NAVD88 - Geoid12A (Feet)
07500475.las	None	NAVD88 - Geoid12A (Feet)
07500480.las	None	NAVD88 - Geoid12A (Feet)
07500485.las	None	NAVD88 - Geoid12A (Feet)
07500490.las	None	NAVD88 - Geoid12A (Feet)
07500495.las	None	NAVD88 - Geoid12A (Feet)
07500500.las	None	NAVD88 - Geoid12A (Feet)
07500505.las	None	NAVD88 - Geoid12A (Feet)
07500510.las	None	NAVD88 - Geoid12A (Feet)
07500515.las	None	NAVD88 - Geoid12A (Feet)
07500520.las	None	NAVD88 - Geoid12A (Feet)
07500525.las	None	NAVD88 - Geoid12A (Feet)
07500530.las	None	NAVD88 - Geoid12A (Feet)
07550430.las	None	NAVD88 - Geoid12A (Feet)
07550435.las	None	NAVD88 - Geoid12A (Feet)
07550440.las	None	NAVD88 - Geoid12A (Feet)
07550445.las	None	NAVD88 - Geoid12A (Feet)
07550450.las	None	NAVD88 - Geoid12A (Feet)
07550455.las	None	NAVD88 - Geoid12A (Feet)
07550460.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
07550465.las	None	NAVD88 - Geoid12A (Feet)
07550470.las	None	NAVD88 - Geoid12A (Feet)
07550475.las	None	NAVD88 - Geoid12A (Feet)
07550480.las	None	NAVD88 - Geoid12A (Feet)
07550485.las	None	NAVD88 - Geoid12A (Feet)
07550490.las	None	NAVD88 - Geoid12A (Feet)
07550495.las	None	NAVD88 - Geoid12A (Feet)
07550500.las	None	NAVD88 - Geoid12A (Feet)
07550505.las	None	NAVD88 - Geoid12A (Feet)
07550510.las	None	NAVD88 - Geoid12A (Feet)
07550515.las	None	NAVD88 - Geoid12A (Feet)
07550520.las	None	NAVD88 - Geoid12A (Feet)
07550525.las	None	NAVD88 - Geoid12A (Feet)
07550530.las	None	NAVD88 - Geoid12A (Feet)
07600430.las	None	NAVD88 - Geoid12A (Feet)
07600435.las	None	NAVD88 - Geoid12A (Feet)
07600440.las	None	NAVD88 - Geoid12A (Feet)
07600445.las	None	NAVD88 - Geoid12A (Feet)
07600450.las	None	NAVD88 - Geoid12A (Feet)
07600455.las	None	NAVD88 - Geoid12A (Feet)
07600460.las	None	NAVD88 - Geoid12A (Feet)
07600465.las	None	NAVD88 - Geoid12A (Feet)
07600470.las	None	NAVD88 - Geoid12A (Feet)
07600475.las	None	NAVD88 - Geoid12A (Feet)
07600480.las	None	NAVD88 - Geoid12A (Feet)
07600485.las	None	NAVD88 - Geoid12A (Feet)
07600490.las	None	NAVD88 - Geoid12A (Feet)
07600495.las	None	NAVD88 - Geoid12A (Feet)
07600500.las	None	NAVD88 - Geoid12A (Feet)
07600505.las	None	NAVD88 - Geoid12A (Feet)
07600510.las	None	NAVD88 - Geoid12A (Feet)
07600515.las	None	NAVD88 - Geoid12A (Feet)
07600520.las	None	NAVD88 - Geoid12A (Feet)
07600525.las	None	NAVD88 - Geoid12A (Feet)
07600530.las	None	NAVD88 - Geoid12A (Feet)
07650430.las	None	NAVD88 - Geoid12A (Feet)
07650435.las	None	NAVD88 - Geoid12A (Feet)
07650440.las	None	NAVD88 - Geoid12A (Feet)
07650445.las	None	NAVD88 - Geoid12A (Feet)
07650450.las	None	NAVD88 - Geoid12A (Feet)
07650455.las	None	NAVD88 - Geoid12A (Feet)
07650460.las	None	NAVD88 - Geoid12A (Feet)
07650465.las	None	NAVD88 - Geoid12A (Feet)
07650470.las	None	NAVD88 - Geoid12A (Feet)
07650475.las	None	NAVD88 - Geoid12A (Feet)
07650480.las	None	NAVD88 - Geoid12A (Feet)
07650485.las	None	NAVD88 - Geoid12A (Feet)
07650490.las	None	NAVD88 - Geoid12A (Feet)
07650495.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
07650500.las	None	NAVD88 - Geoid12A (Feet)
07650505.las	None	NAVD88 - Geoid12A (Feet)
07650510.las	None	NAVD88 - Geoid12A (Feet)
07650515.las	None	NAVD88 - Geoid12A (Feet)
07650520.las	None	NAVD88 - Geoid12A (Feet)
07650525.las	None	NAVD88 - Geoid12A (Feet)
07650530.las	None	NAVD88 - Geoid12A (Feet)
07700430.las	None	NAVD88 - Geoid12A (Feet)
07700435.las	None	NAVD88 - Geoid12A (Feet)
07700440.las	None	NAVD88 - Geoid12A (Feet)
07700445.las	None	NAVD88 - Geoid12A (Feet)
07700450.las	None	NAVD88 - Geoid12A (Feet)
07700455.las	None	NAVD88 - Geoid12A (Feet)
07700460.las	None	NAVD88 - Geoid12A (Feet)
07700465.las	None	NAVD88 - Geoid12A (Feet)
07700470.las	None	NAVD88 - Geoid12A (Feet)
07700475.las	None	NAVD88 - Geoid12A (Feet)
07700480.las	None	NAVD88 - Geoid12A (Feet)
07700485.las	None	NAVD88 - Geoid12A (Feet)
07700490.las	None	NAVD88 - Geoid12A (Feet)
07700495.las	None	NAVD88 - Geoid12A (Feet)
07700500.las	None	NAVD88 - Geoid12A (Feet)
07700505.las	None	NAVD88 - Geoid12A (Feet)
07700510.las	None	NAVD88 - Geoid12A (Feet)
07700515.las	None	NAVD88 - Geoid12A (Feet)
07700520.las	None	NAVD88 - Geoid12A (Feet)
07700525.las	None	NAVD88 - Geoid12A (Feet)
07700530.las	None	NAVD88 - Geoid12A (Feet)
07750430.las	None	NAVD88 - Geoid12A (Feet)
07750435.las	None	NAVD88 - Geoid12A (Feet)
07750440.las	None	NAVD88 - Geoid12A (Feet)
07750445.las	None	NAVD88 - Geoid12A (Feet)
07750450.las	None	NAVD88 - Geoid12A (Feet)
07750455.las	None	NAVD88 - Geoid12A (Feet)
07750460.las	None	NAVD88 - Geoid12A (Feet)
07750465.las	None	NAVD88 - Geoid12A (Feet)
07750470.las	None	NAVD88 - Geoid12A (Feet)
07750475.las	None	NAVD88 - Geoid12A (Feet)
07750480.las	None	NAVD88 - Geoid12A (Feet)
07750485.las	None	NAVD88 - Geoid12A (Feet)
07750490.las	None	NAVD88 - Geoid12A (Feet)
07750495.las	None	NAVD88 - Geoid12A (Feet)
07750500.las	None	NAVD88 - Geoid12A (Feet)
07750505.las	None	NAVD88 - Geoid12A (Feet)
07750510.las	None	NAVD88 - Geoid12A (Feet)
07750515.las	None	NAVD88 - Geoid12A (Feet)
07750520.las	None	NAVD88 - Geoid12A (Feet)
07750525.las	None	NAVD88 - Geoid12A (Feet)
07750530.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
07800430.las	None	NAVD88 - Geoid12A (Feet)
07800435.las	None	NAVD88 - Geoid12A (Feet)
07800440.las	None	NAVD88 - Geoid12A (Feet)
07800445.las	None	NAVD88 - Geoid12A (Feet)
07800450.las	None	NAVD88 - Geoid12A (Feet)
07800455.las	None	NAVD88 - Geoid12A (Feet)
07800460.las	None	NAVD88 - Geoid12A (Feet)
07800465.las	None	NAVD88 - Geoid12A (Feet)
07800470.las	None	NAVD88 - Geoid12A (Feet)
07800475.las	None	NAVD88 - Geoid12A (Feet)
07800480.las	None	NAVD88 - Geoid12A (Feet)
07800485.las	None	NAVD88 - Geoid12A (Feet)
07800490.las	None	NAVD88 - Geoid12A (Feet)
07800495.las	None	NAVD88 - Geoid12A (Feet)
07800500.las	None	NAVD88 - Geoid12A (Feet)
07800505.las	None	NAVD88 - Geoid12A (Feet)
07800510.las	None	NAVD88 - Geoid12A (Feet)
07800515.las	None	NAVD88 - Geoid12A (Feet)
07800520.las	None	NAVD88 - Geoid12A (Feet)
07800525.las	None	NAVD88 - Geoid12A (Feet)
07800530.las	None	NAVD88 - Geoid12A (Feet)
07850430.las	None	NAVD88 - Geoid12A (Feet)
07850435.las	None	NAVD88 - Geoid12A (Feet)
07850440.las	None	NAVD88 - Geoid12A (Feet)
07850445.las	None	NAVD88 - Geoid12A (Feet)
07850450.las	None	NAVD88 - Geoid12A (Feet)
07850455.las	None	NAVD88 - Geoid12A (Feet)
07850460.las	None	NAVD88 - Geoid12A (Feet)
07850465.las	None	NAVD88 - Geoid12A (Feet)
07850470.las	None	NAVD88 - Geoid12A (Feet)
07850475.las	None	NAVD88 - Geoid12A (Feet)
07850480.las	None	NAVD88 - Geoid12A (Feet)
07850485.las	None	NAVD88 - Geoid12A (Feet)
07850490.las	None	NAVD88 - Geoid12A (Feet)
07850495.las	None	NAVD88 - Geoid12A (Feet)
07850500.las	None	NAVD88 - Geoid12A (Feet)
07850505.las	None	NAVD88 - Geoid12A (Feet)
07850510.las	None	NAVD88 - Geoid12A (Feet)
07850515.las	None	NAVD88 - Geoid12A (Feet)
07850520.las	None	NAVD88 - Geoid12A (Feet)
07850525.las	None	NAVD88 - Geoid12A (Feet)
07850530.las	None	NAVD88 - Geoid12A (Feet)
07900430.las	None	NAVD88 - Geoid12A (Feet)
07900435.las	None	NAVD88 - Geoid12A (Feet)
07900440.las	None	NAVD88 - Geoid12A (Feet)
07900445.las	None	NAVD88 - Geoid12A (Feet)
07900450.las	None	NAVD88 - Geoid12A (Feet)
07900455.las	None	NAVD88 - Geoid12A (Feet)
07900460.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
07900465.las	None	NAVD88 - Geoid12A (Feet)
07900470.las	None	NAVD88 - Geoid12A (Feet)
07900475.las	None	NAVD88 - Geoid12A (Feet)
07900480.las	None	NAVD88 - Geoid12A (Feet)
07900485.las	None	NAVD88 - Geoid12A (Feet)
07900490.las	None	NAVD88 - Geoid12A (Feet)
07900495.las	None	NAVD88 - Geoid12A (Feet)
07900500.las	None	NAVD88 - Geoid12A (Feet)
07900505.las	None	NAVD88 - Geoid12A (Feet)
07900510.las	None	NAVD88 - Geoid12A (Feet)
07900515.las	None	NAVD88 - Geoid12A (Feet)
07900520.las	None	NAVD88 - Geoid12A (Feet)
07900525.las	None	NAVD88 - Geoid12A (Feet)
07900530.las	None	NAVD88 - Geoid12A (Feet)
07950430.las	None	NAVD88 - Geoid12A (Feet)
07950435.las	None	NAVD88 - Geoid12A (Feet)
07950440.las	None	NAVD88 - Geoid12A (Feet)
07950445.las	None	NAVD88 - Geoid12A (Feet)
07950450.las	None	NAVD88 - Geoid12A (Feet)
07950455.las	None	NAVD88 - Geoid12A (Feet)
07950460.las	None	NAVD88 - Geoid12A (Feet)
07950465.las	None	NAVD88 - Geoid12A (Feet)
07950470.las	None	NAVD88 - Geoid12A (Feet)
07950475.las	None	NAVD88 - Geoid12A (Feet)
07950480.las	None	NAVD88 - Geoid12A (Feet)
07950485.las	None	NAVD88 - Geoid12A (Feet)
07950490.las	None	NAVD88 - Geoid12A (Feet)
07950495.las	None	NAVD88 - Geoid12A (Feet)
07950500.las	None	NAVD88 - Geoid12A (Feet)
07950505.las	None	NAVD88 - Geoid12A (Feet)
07950510.las	None	NAVD88 - Geoid12A (Feet)
07950515.las	None	NAVD88 - Geoid12A (Feet)
07950520.las	None	NAVD88 - Geoid12A (Feet)
07950525.las	None	NAVD88 - Geoid12A (Feet)
07950530.las	None	NAVD88 - Geoid12A (Feet)
08000430.las	None	NAVD88 - Geoid12A (Feet)
08000435.las	None	NAVD88 - Geoid12A (Feet)
08000440.las	None	NAVD88 - Geoid12A (Feet)
08000445.las	None	NAVD88 - Geoid12A (Feet)
08000450.las	None	NAVD88 - Geoid12A (Feet)
08000455.las	None	NAVD88 - Geoid12A (Feet)
08000460.las	None	NAVD88 - Geoid12A (Feet)
08000465.las	None	NAVD88 - Geoid12A (Feet)
08000470.las	None	NAVD88 - Geoid12A (Feet)
08000475.las	None	NAVD88 - Geoid12A (Feet)
08000480.las	None	NAVD88 - Geoid12A (Feet)
08000485.las	None	NAVD88 - Geoid12A (Feet)
08000490.las	None	NAVD88 - Geoid12A (Feet)
08000495.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
08000500.las	None	NAVD88 - Geoid12A (Feet)
08000505.las	None	NAVD88 - Geoid12A (Feet)
08000510.las	None	NAVD88 - Geoid12A (Feet)
08000515.las	None	NAVD88 - Geoid12A (Feet)
08000520.las	None	NAVD88 - Geoid12A (Feet)
08000525.las	None	NAVD88 - Geoid12A (Feet)
08000530.las	None	NAVD88 - Geoid12A (Feet)
08050430.las	None	NAVD88 - Geoid12A (Feet)
08050435.las	None	NAVD88 - Geoid12A (Feet)
08050440.las	None	NAVD88 - Geoid12A (Feet)
08050445.las	None	NAVD88 - Geoid12A (Feet)
08050450.las	None	NAVD88 - Geoid12A (Feet)
08050455.las	None	NAVD88 - Geoid12A (Feet)
08050460.las	None	NAVD88 - Geoid12A (Feet)
08050465.las	None	NAVD88 - Geoid12A (Feet)
08050470.las	None	NAVD88 - Geoid12A (Feet)
08050475.las	None	NAVD88 - Geoid12A (Feet)
08050480.las	None	NAVD88 - Geoid12A (Feet)
08050485.las	None	NAVD88 - Geoid12A (Feet)
08050490.las	None	NAVD88 - Geoid12A (Feet)
08050495.las	None	NAVD88 - Geoid12A (Feet)
08050500.las	None	NAVD88 - Geoid12A (Feet)
08050505.las	None	NAVD88 - Geoid12A (Feet)
08050510.las	None	NAVD88 - Geoid12A (Feet)
08050515.las	None	NAVD88 - Geoid12A (Feet)
08050520.las	None	NAVD88 - Geoid12A (Feet)
08050525.las	None	NAVD88 - Geoid12A (Feet)
08050530.las	None	NAVD88 - Geoid12A (Feet)
08100430.las	None	NAVD88 - Geoid12A (Feet)
08100435.las	None	NAVD88 - Geoid12A (Feet)
08100440.las	None	NAVD88 - Geoid12A (Feet)
08100445.las	None	NAVD88 - Geoid12A (Feet)
08100450.las	None	NAVD88 - Geoid12A (Feet)
08100455.las	None	NAVD88 - Geoid12A (Feet)
08100460.las	None	NAVD88 - Geoid12A (Feet)
08100465.las	None	NAVD88 - Geoid12A (Feet)
08100470.las	None	NAVD88 - Geoid12A (Feet)
08100475.las	None	NAVD88 - Geoid12A (Feet)
08100480.las	None	NAVD88 - Geoid12A (Feet)
08100485.las	None	NAVD88 - Geoid12A (Feet)
08100490.las	None	NAVD88 - Geoid12A (Feet)
08100495.las	None	NAVD88 - Geoid12A (Feet)
08100500.las	None	NAVD88 - Geoid12A (Feet)
08100505.las	None	NAVD88 - Geoid12A (Feet)
08100510.las	None	NAVD88 - Geoid12A (Feet)
08100515.las	None	NAVD88 - Geoid12A (Feet)
08100520.las	None	NAVD88 - Geoid12A (Feet)
08100525.las	None	NAVD88 - Geoid12A (Feet)
08100530.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
08150430.las	None	NAVD88 - Geoid12A (Feet)
08150435.las	None	NAVD88 - Geoid12A (Feet)
08150440.las	None	NAVD88 - Geoid12A (Feet)
08150445.las	None	NAVD88 - Geoid12A (Feet)
08150450.las	None	NAVD88 - Geoid12A (Feet)
08150455.las	None	NAVD88 - Geoid12A (Feet)
08150460.las	None	NAVD88 - Geoid12A (Feet)
08150465.las	None	NAVD88 - Geoid12A (Feet)
08150470.las	None	NAVD88 - Geoid12A (Feet)
08150475.las	None	NAVD88 - Geoid12A (Feet)
08150480.las	None	NAVD88 - Geoid12A (Feet)
08150485.las	None	NAVD88 - Geoid12A (Feet)
08150490.las	None	NAVD88 - Geoid12A (Feet)
08150495.las	None	NAVD88 - Geoid12A (Feet)
08150500.las	None	NAVD88 - Geoid12A (Feet)
08150505.las	None	NAVD88 - Geoid12A (Feet)
08150510.las	None	NAVD88 - Geoid12A (Feet)
08150515.las	None	NAVD88 - Geoid12A (Feet)
08150520.las	None	NAVD88 - Geoid12A (Feet)
08150525.las	None	NAVD88 - Geoid12A (Feet)
08150530.las	None	NAVD88 - Geoid12A (Feet)
08200430.las	None	NAVD88 - Geoid12A (Feet)
08200435.las	None	NAVD88 - Geoid12A (Feet)
08200440.las	None	NAVD88 - Geoid12A (Feet)
08200445.las	None	NAVD88 - Geoid12A (Feet)
08200450.las	None	NAVD88 - Geoid12A (Feet)
08200455.las	None	NAVD88 - Geoid12A (Feet)
08200460.las	None	NAVD88 - Geoid12A (Feet)
08200465.las	None	NAVD88 - Geoid12A (Feet)
08200470.las	None	NAVD88 - Geoid12A (Feet)
08200475.las	None	NAVD88 - Geoid12A (Feet)
08200480.las	None	NAVD88 - Geoid12A (Feet)
08200485.las	None	NAVD88 - Geoid12A (Feet)
08200490.las	None	NAVD88 - Geoid12A (Feet)
08200495.las	None	NAVD88 - Geoid12A (Feet)
08200500.las	None	NAVD88 - Geoid12A (Feet)
08200505.las	None	NAVD88 - Geoid12A (Feet)
08200510.las	None	NAVD88 - Geoid12A (Feet)
08200515.las	None	NAVD88 - Geoid12A (Feet)
08200520.las	None	NAVD88 - Geoid12A (Feet)
08200525.las	None	NAVD88 - Geoid12A (Feet)
08200530.las	None	NAVD88 - Geoid12A (Feet)
08250430.las	None	NAVD88 - Geoid12A (Feet)
08250435.las	None	NAVD88 - Geoid12A (Feet)
08250440.las	None	NAVD88 - Geoid12A (Feet)
08250445.las	None	NAVD88 - Geoid12A (Feet)
08250450.las	None	NAVD88 - Geoid12A (Feet)
08250455.las	None	NAVD88 - Geoid12A (Feet)
08250460.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
08250465.las	None	NAVD88 - Geoid12A (Feet)
08250470.las	None	NAVD88 - Geoid12A (Feet)
08250475.las	None	NAVD88 - Geoid12A (Feet)
08250480.las	None	NAVD88 - Geoid12A (Feet)
08250485.las	None	NAVD88 - Geoid12A (Feet)
08250490.las	None	NAVD88 - Geoid12A (Feet)
08250495.las	None	NAVD88 - Geoid12A (Feet)
08250500.las	None	NAVD88 - Geoid12A (Feet)
08250505.las	None	NAVD88 - Geoid12A (Feet)
08250510.las	None	NAVD88 - Geoid12A (Feet)
08250515.las	None	NAVD88 - Geoid12A (Feet)
08250520.las	None	NAVD88 - Geoid12A (Feet)
08250525.las	None	NAVD88 - Geoid12A (Feet)
08250530.las	None	NAVD88 - Geoid12A (Feet)
08300430.las	None	NAVD88 - Geoid12A (Feet)
08300435.las	None	NAVD88 - Geoid12A (Feet)
08300440.las	None	NAVD88 - Geoid12A (Feet)
08300445.las	None	NAVD88 - Geoid12A (Feet)
08300450.las	None	NAVD88 - Geoid12A (Feet)
08300455.las	None	NAVD88 - Geoid12A (Feet)
08300460.las	None	NAVD88 - Geoid12A (Feet)
08300465.las	None	NAVD88 - Geoid12A (Feet)
08300470.las	None	NAVD88 - Geoid12A (Feet)
08300475.las	None	NAVD88 - Geoid12A (Feet)
08300480.las	None	NAVD88 - Geoid12A (Feet)
08300485.las	None	NAVD88 - Geoid12A (Feet)
08300490.las	None	NAVD88 - Geoid12A (Feet)
08300495.las	None	NAVD88 - Geoid12A (Feet)
08300500.las	None	NAVD88 - Geoid12A (Feet)
08300505.las	None	NAVD88 - Geoid12A (Feet)
08300510.las	None	NAVD88 - Geoid12A (Feet)
08300515.las	None	NAVD88 - Geoid12A (Feet)
08300520.las	None	NAVD88 - Geoid12A (Feet)
08300525.las	None	NAVD88 - Geoid12A (Feet)
08300530.las	None	NAVD88 - Geoid12A (Feet)
08350430.las	None	NAVD88 - Geoid12A (Feet)
08350435.las	None	NAVD88 - Geoid12A (Feet)
08350440.las	None	NAVD88 - Geoid12A (Feet)
08350445.las	None	NAVD88 - Geoid12A (Feet)
08350450.las	None	NAVD88 - Geoid12A (Feet)
08350455.las	None	NAVD88 - Geoid12A (Feet)
08350460.las	None	NAVD88 - Geoid12A (Feet)
08350465.las	None	NAVD88 - Geoid12A (Feet)
08350470.las	None	NAVD88 - Geoid12A (Feet)
08350475.las	None	NAVD88 - Geoid12A (Feet)
08350480.las	None	NAVD88 - Geoid12A (Feet)
08350485.las	None	NAVD88 - Geoid12A (Feet)
08350490.las	None	NAVD88 - Geoid12A (Feet)
08350495.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
08350500.las	None	NAVD88 - Geoid12A (Feet)
08350505.las	None	NAVD88 - Geoid12A (Feet)
08350510.las	None	NAVD88 - Geoid12A (Feet)
08350515.las	None	NAVD88 - Geoid12A (Feet)
08350520.las	None	NAVD88 - Geoid12A (Feet)
08350525.las	None	NAVD88 - Geoid12A (Feet)
08350530.las	None	NAVD88 - Geoid12A (Feet)
08400430.las	None	NAVD88 - Geoid12A (Feet)
08400435.las	None	NAVD88 - Geoid12A (Feet)
08400440.las	None	NAVD88 - Geoid12A (Feet)
08400445.las	None	NAVD88 - Geoid12A (Feet)
08400450.las	None	NAVD88 - Geoid12A (Feet)
08400455.las	None	NAVD88 - Geoid12A (Feet)
08400460.las	None	NAVD88 - Geoid12A (Feet)
08400465.las	None	NAVD88 - Geoid12A (Feet)
08400470.las	None	NAVD88 - Geoid12A (Feet)
08400475.las	None	NAVD88 - Geoid12A (Feet)
08400480.las	None	NAVD88 - Geoid12A (Feet)
08400485.las	None	NAVD88 - Geoid12A (Feet)
08400490.las	None	NAVD88 - Geoid12A (Feet)
08400495.las	None	NAVD88 - Geoid12A (Feet)
08400500.las	None	NAVD88 - Geoid12A (Feet)
08400505.las	None	NAVD88 - Geoid12A (Feet)
08400510.las	None	NAVD88 - Geoid12A (Feet)
08400515.las	None	NAVD88 - Geoid12A (Feet)
08400520.las	None	NAVD88 - Geoid12A (Feet)
08400525.las	None	NAVD88 - Geoid12A (Feet)
08400530.las	None	NAVD88 - Geoid12A (Feet)
08450430.las	None	NAVD88 - Geoid12A (Feet)
08450435.las	None	NAVD88 - Geoid12A (Feet)
08450440.las	None	NAVD88 - Geoid12A (Feet)
08450445.las	None	NAVD88 - Geoid12A (Feet)
08450450.las	None	NAVD88 - Geoid12A (Feet)
08450455.las	None	NAVD88 - Geoid12A (Feet)
08450460.las	None	NAVD88 - Geoid12A (Feet)
08450465.las	None	NAVD88 - Geoid12A (Feet)
08450470.las	None	NAVD88 - Geoid12A (Feet)
08450475.las	None	NAVD88 - Geoid12A (Feet)
08450480.las	None	NAVD88 - Geoid12A (Feet)
08450485.las	None	NAVD88 - Geoid12A (Feet)
08450490.las	None	NAVD88 - Geoid12A (Feet)
08450495.las	None	NAVD88 - Geoid12A (Feet)
08450500.las	None	NAVD88 - Geoid12A (Feet)
08450505.las	None	NAVD88 - Geoid12A (Feet)
08450510.las	None	NAVD88 - Geoid12A (Feet)
08450515.las	None	NAVD88 - Geoid12A (Feet)
08450520.las	None	NAVD88 - Geoid12A (Feet)
08450525.las	None	NAVD88 - Geoid12A (Feet)
08450530.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
08500430.las	None	NAVD88 - Geoid12A (Feet)
08500435.las	None	NAVD88 - Geoid12A (Feet)
08500440.las	None	NAVD88 - Geoid12A (Feet)
08500445.las	None	NAVD88 - Geoid12A (Feet)
08500450.las	None	NAVD88 - Geoid12A (Feet)
08500455.las	None	NAVD88 - Geoid12A (Feet)
08500460.las	None	NAVD88 - Geoid12A (Feet)
08500465.las	None	NAVD88 - Geoid12A (Feet)
08500470.las	None	NAVD88 - Geoid12A (Feet)
08500475.las	None	NAVD88 - Geoid12A (Feet)
08500480.las	None	NAVD88 - Geoid12A (Feet)
08500485.las	None	NAVD88 - Geoid12A (Feet)
08500490.las	None	NAVD88 - Geoid12A (Feet)
08500495.las	None	NAVD88 - Geoid12A (Feet)
08500500.las	None	NAVD88 - Geoid12A (Feet)
08500505.las	None	NAVD88 - Geoid12A (Feet)
08500510.las	None	NAVD88 - Geoid12A (Feet)
08500515.las	None	NAVD88 - Geoid12A (Feet)
08500520.las	None	NAVD88 - Geoid12A (Feet)
08500525.las	None	NAVD88 - Geoid12A (Feet)
08500530.las	None	NAVD88 - Geoid12A (Feet)
08550430.las	None	NAVD88 - Geoid12A (Feet)
08550435.las	None	NAVD88 - Geoid12A (Feet)
08550440.las	None	NAVD88 - Geoid12A (Feet)
08550445.las	None	NAVD88 - Geoid12A (Feet)
08550450.las	None	NAVD88 - Geoid12A (Feet)
08550455.las	None	NAVD88 - Geoid12A (Feet)
08550460.las	None	NAVD88 - Geoid12A (Feet)
08550465.las	None	NAVD88 - Geoid12A (Feet)
08550470.las	None	NAVD88 - Geoid12A (Feet)
08550475.las	None	NAVD88 - Geoid12A (Feet)
08550480.las	None	NAVD88 - Geoid12A (Feet)
08550485.las	None	NAVD88 - Geoid12A (Feet)
08550490.las	None	NAVD88 - Geoid12A (Feet)
08550495.las	None	NAVD88 - Geoid12A (Feet)
08550500.las	None	NAVD88 - Geoid12A (Feet)
08550505.las	None	NAVD88 - Geoid12A (Feet)
08550510.las	None	NAVD88 - Geoid12A (Feet)
08550515.las	None	NAVD88 - Geoid12A (Feet)
08550520.las	None	NAVD88 - Geoid12A (Feet)
08550525.las	None	NAVD88 - Geoid12A (Feet)
08550530.las	None	NAVD88 - Geoid12A (Feet)
08600430.las	None	NAVD88 - Geoid12A (Feet)
08600435.las	None	NAVD88 - Geoid12A (Feet)
08600440.las	None	NAVD88 - Geoid12A (Feet)
08600445.las	None	NAVD88 - Geoid12A (Feet)
08600450.las	None	NAVD88 - Geoid12A (Feet)
08600455.las	None	NAVD88 - Geoid12A (Feet)
08600460.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
08600465.las	None	NAVD88 - Geoid12A (Feet)
08600470.las	None	NAVD88 - Geoid12A (Feet)
08600475.las	None	NAVD88 - Geoid12A (Feet)
08600480.las	None	NAVD88 - Geoid12A (Feet)
08600485.las	None	NAVD88 - Geoid12A (Feet)
08600490.las	None	NAVD88 - Geoid12A (Feet)
08600495.las	None	NAVD88 - Geoid12A (Feet)
08600500.las	None	NAVD88 - Geoid12A (Feet)
08600505.las	None	NAVD88 - Geoid12A (Feet)
08600510.las	None	NAVD88 - Geoid12A (Feet)
08600515.las	None	NAVD88 - Geoid12A (Feet)
08600520.las	None	NAVD88 - Geoid12A (Feet)
08600525.las	None	NAVD88 - Geoid12A (Feet)
08600530.las	None	NAVD88 - Geoid12A (Feet)
08650430.las	None	NAVD88 - Geoid12A (Feet)
08650435.las	None	NAVD88 - Geoid12A (Feet)
08650440.las	None	NAVD88 - Geoid12A (Feet)
08650445.las	None	NAVD88 - Geoid12A (Feet)
08650450.las	None	NAVD88 - Geoid12A (Feet)
08650455.las	None	NAVD88 - Geoid12A (Feet)
08650460.las	None	NAVD88 - Geoid12A (Feet)
08650465.las	None	NAVD88 - Geoid12A (Feet)
08650470.las	None	NAVD88 - Geoid12A (Feet)
08650475.las	None	NAVD88 - Geoid12A (Feet)
08650480.las	None	NAVD88 - Geoid12A (Feet)
08650485.las	None	NAVD88 - Geoid12A (Feet)
08650490.las	None	NAVD88 - Geoid12A (Feet)
08650495.las	None	NAVD88 - Geoid12A (Feet)
08650500.las	None	NAVD88 - Geoid12A (Feet)
08650505.las	None	NAVD88 - Geoid12A (Feet)
08650510.las	None	NAVD88 - Geoid12A (Feet)
08650515.las	None	NAVD88 - Geoid12A (Feet)
08650520.las	None	NAVD88 - Geoid12A (Feet)
08650525.las	None	NAVD88 - Geoid12A (Feet)
08650530.las	None	NAVD88 - Geoid12A (Feet)
08700430.las	None	NAVD88 - Geoid12A (Feet)
08700435.las	None	NAVD88 - Geoid12A (Feet)
08700440.las	None	NAVD88 - Geoid12A (Feet)
08700445.las	None	NAVD88 - Geoid12A (Feet)
08700450.las	None	NAVD88 - Geoid12A (Feet)
08700455.las	None	NAVD88 - Geoid12A (Feet)
08700460.las	None	NAVD88 - Geoid12A (Feet)
08700465.las	None	NAVD88 - Geoid12A (Feet)
08700470.las	None	NAVD88 - Geoid12A (Feet)
08700475.las	None	NAVD88 - Geoid12A (Feet)
08700480.las	None	NAVD88 - Geoid12A (Feet)
08700485.las	None	NAVD88 - Geoid12A (Feet)
08700490.las	None	NAVD88 - Geoid12A (Feet)
08700495.las	None	NAVD88 - Geoid12A (Feet)

2.4 Report on Datums (Tiled Data) - continued

File	EPSG Code	Vertical Datum
08700500.las	None	NAVD88 - Geoid12A (Feet)
08700505.las	None	NAVD88 - Geoid12A (Feet)
08700510.las	None	NAVD88 - Geoid12A (Feet)
08700515.las	None	NAVD88 - Geoid12A (Feet)
08700520.las	None	NAVD88 - Geoid12A (Feet)
08700525.las	None	NAVD88 - Geoid12A (Feet)
08700530.las	None	NAVD88 - Geoid12A (Feet)
08750430.las	None	NAVD88 - Geoid12A (Feet)
08750435.las	None	NAVD88 - Geoid12A (Feet)
08750440.las	None	NAVD88 - Geoid12A (Feet)
08750445.las	None	NAVD88 - Geoid12A (Feet)
08750450.las	None	NAVD88 - Geoid12A (Feet)
08750455.las	None	NAVD88 - Geoid12A (Feet)
08750460.las	None	NAVD88 - Geoid12A (Feet)
08750465.las	None	NAVD88 - Geoid12A (Feet)
08750470.las	None	NAVD88 - Geoid12A (Feet)
08750475.las	None	NAVD88 - Geoid12A (Feet)
08750480.las	None	NAVD88 - Geoid12A (Feet)
08750485.las	None	NAVD88 - Geoid12A (Feet)
08750490.las	None	NAVD88 - Geoid12A (Feet)
08750495.las	None	NAVD88 - Geoid12A (Feet)
08750500.las	None	NAVD88 - Geoid12A (Feet)
08750505.las	None	NAVD88 - Geoid12A (Feet)
08750510.las	None	NAVD88 - Geoid12A (Feet)
08750515.las	None	NAVD88 - Geoid12A (Feet)
08750520.las	None	NAVD88 - Geoid12A (Feet)
08750525.las	None	NAVD88 - Geoid12A (Feet)
08750530.las	None	NAVD88 - Geoid12A (Feet)

2.5 Report on Coordinate Reference System (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "The USGS preferred Coordinate Reference System for the Conterminous United States (CONUS) is Universal Transverse Mercator UTM, NAD83 HARN, Meters; NAVD88, Meters. Each discrete project is to be processed using the single predominant UTM zone for the overall collection area. The USGS will also accept data in other Coordinate Reference Systems that meet the conditions below:

- (1) State Plane and State Coordinate Reference Systems that have been accepted by the European Petroleum Survey Group (EPSG) may be used.
- (2) Coordinate Reference Systems for collections in Alaska, Hawaii, and other areas Outside the Conterminous United States (OCONUS) must be approved by the USGS before collection."

The purpose of this section is to show the projections of the LAS files for the LiDAR swath data.

[Boresighted Files - E:\Franklin County\swath](#)

File	EPSG Code	Projection
140417_224329_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_224329_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_230025_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_230025_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_231322_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_231322_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_232632_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_232632_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_233933_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_233933_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_235212_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140417_235212_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_000524_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_000524_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_001909_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_001909_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_003250_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_003250_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_004640_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_004640_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_010058_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_010058_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_011447_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_011447_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_012827_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator

2.5 Report on Coordinate Reference System (Swath Data) - continued

File	EPSG Code	Projection
140418_012827_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_014215_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_014215_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_020434_1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_145120_1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_150350_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_150350_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_151646_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_151646_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_152909_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_152909_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_154201_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_154201_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_155420_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_155420_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_160651_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_160651_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_161920_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_161920_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_163158_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_163158_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_164429_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_164429_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_165715_1-1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_165715_1-2.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
140418_171610_1.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator

2.5 Report on Coordinate Reference System (Tiled Data)

The purpose of this section is to show the projections of the LAS files for the LiDAR tiled data.

[Classified Files - E:\Franklin County\las](#)

File	EPSG Code	Projection
07350465.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07400465.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07400470.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07400475.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450430.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450435.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450440.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450445.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450450.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450455.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450460.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450465.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450470.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450475.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450480.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450485.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450490.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450495.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07450500.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500430.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500435.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500440.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500445.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500450.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500455.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500460.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500465.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500470.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500475.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500480.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500485.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
07500490.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator

2.5 Report on Coordinate Reference System (Tiled Data) - continued

File	EPSG Code	Projection
08750455.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750460.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750465.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750470.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750475.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750480.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750485.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750490.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750495.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750500.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750505.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750510.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750515.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750520.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750525.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator
08750530.las	32767	NAD_1983_2011_StatePlane_Illinois_East_FIPS_1201_Ft_US projection: Transverse Mercator

2.6 Report on Units of Reference (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "All references to the unit of measure "Feet" and "Foot" must specify "International", "Intl", "U.S. Survey", or "US"."

The purpose of this section is to show the horizontal and vertical units of the LAS files for the LiDAR swath data.

[Boresighted Files - E:\Franklin County\swath](#)

File	Horizontal Unit	Vertical Unit
140417_224329_1-1.las	US Survey Feet	US Survey Feet
140417_224329_1-2.las	US Survey Feet	US Survey Feet
140417_230025_1-1.las	US Survey Feet	US Survey Feet
140417_230025_1-2.las	US Survey Feet	US Survey Feet
140417_231322_1-1.las	US Survey Feet	US Survey Feet
140417_231322_1-2.las	US Survey Feet	US Survey Feet
140417_232632_1-1.las	US Survey Feet	US Survey Feet
140417_232632_1-2.las	US Survey Feet	US Survey Feet
140417_233933_1-1.las	US Survey Feet	US Survey Feet
140417_233933_1-2.las	US Survey Feet	US Survey Feet
140417_235212_1-1.las	US Survey Feet	US Survey Feet
140417_235212_1-2.las	US Survey Feet	US Survey Feet
140418_000524_1-1.las	US Survey Feet	US Survey Feet
140418_000524_1-2.las	US Survey Feet	US Survey Feet
140418_001909_1-1.las	US Survey Feet	US Survey Feet
140418_001909_1-2.las	US Survey Feet	US Survey Feet
140418_003250_1-1.las	US Survey Feet	US Survey Feet
140418_003250_1-2.las	US Survey Feet	US Survey Feet
140418_004640_1-1.las	US Survey Feet	US Survey Feet
140418_004640_1-2.las	US Survey Feet	US Survey Feet
140418_010058_1-1.las	US Survey Feet	US Survey Feet
140418_010058_1-2.las	US Survey Feet	US Survey Feet
140418_011447_1-1.las	US Survey Feet	US Survey Feet
140418_011447_1-2.las	US Survey Feet	US Survey Feet
140418_012827_1-1.las	US Survey Feet	US Survey Feet
140418_012827_1-2.las	US Survey Feet	US Survey Feet
140418_014215_1-1.las	US Survey Feet	US Survey Feet
140418_014215_1-2.las	US Survey Feet	US Survey Feet
140418_020434_1.las	US Survey Feet	US Survey Feet
140418_145120_1.las	US Survey Feet	US Survey Feet
140418_150350_1-1.las	US Survey Feet	US Survey Feet
140418_150350_1-2.las	US Survey Feet	US Survey Feet
140418_151646_1-1.las	US Survey Feet	US Survey Feet
140418_151646_1-2.las	US Survey Feet	US Survey Feet
140418_152909_1-1.las	US Survey Feet	US Survey Feet
140418_152909_1-2.las	US Survey Feet	US Survey Feet
140418_154201_1-1.las	US Survey Feet	US Survey Feet
140418_154201_1-2.las	US Survey Feet	US Survey Feet
140418_155420_1-1.las	US Survey Feet	US Survey Feet
140418_155420_1-2.las	US Survey Feet	US Survey Feet
140418_160651_1-1.las	US Survey Feet	US Survey Feet
140418_160651_1-2.las	US Survey Feet	US Survey Feet
140418_161920_1-1.las	US Survey Feet	US Survey Feet
140418_161920_1-2.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Swath Data) - continued

<u>File</u>	<u>Horizontal Unit</u>	<u>Vertical Unit</u>
140418_163158_1-1.las	US Survey Feet	US Survey Feet
140418_163158_1-2.las	US Survey Feet	US Survey Feet
140418_164429_1-1.las	US Survey Feet	US Survey Feet
140418_164429_1-2.las	US Survey Feet	US Survey Feet
140418_165715_1-1.las	US Survey Feet	US Survey Feet
140418_165715_1-2.las	US Survey Feet	US Survey Feet
140418_171610_1.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

The purpose of this section is to show the horizontal and vertical units of the LAS files for the LiDAR tiled data.

[Classified Files - E:\Franklin County\las](#)

File	Horizontal Unit	Vertical Unit
07350465.las	US Survey Feet	US Survey Feet
07400465.las	US Survey Feet	US Survey Feet
07400470.las	US Survey Feet	US Survey Feet
07400475.las	US Survey Feet	US Survey Feet
07450430.las	US Survey Feet	US Survey Feet
07450435.las	US Survey Feet	US Survey Feet
07450440.las	US Survey Feet	US Survey Feet
07450445.las	US Survey Feet	US Survey Feet
07450450.las	US Survey Feet	US Survey Feet
07450455.las	US Survey Feet	US Survey Feet
07450460.las	US Survey Feet	US Survey Feet
07450465.las	US Survey Feet	US Survey Feet
07450470.las	US Survey Feet	US Survey Feet
07450475.las	US Survey Feet	US Survey Feet
07450480.las	US Survey Feet	US Survey Feet
07450485.las	US Survey Feet	US Survey Feet
07450490.las	US Survey Feet	US Survey Feet
07450495.las	US Survey Feet	US Survey Feet
07450500.las	US Survey Feet	US Survey Feet
07500430.las	US Survey Feet	US Survey Feet
07500435.las	US Survey Feet	US Survey Feet
07500440.las	US Survey Feet	US Survey Feet
07500445.las	US Survey Feet	US Survey Feet
07500450.las	US Survey Feet	US Survey Feet
07500455.las	US Survey Feet	US Survey Feet
07500460.las	US Survey Feet	US Survey Feet
07500465.las	US Survey Feet	US Survey Feet
07500470.las	US Survey Feet	US Survey Feet
07500475.las	US Survey Feet	US Survey Feet
07500480.las	US Survey Feet	US Survey Feet
07500485.las	US Survey Feet	US Survey Feet
07500490.las	US Survey Feet	US Survey Feet
07500495.las	US Survey Feet	US Survey Feet
07500500.las	US Survey Feet	US Survey Feet
07500505.las	US Survey Feet	US Survey Feet
07500510.las	US Survey Feet	US Survey Feet
07500515.las	US Survey Feet	US Survey Feet
07500520.las	US Survey Feet	US Survey Feet
07500525.las	US Survey Feet	US Survey Feet
07500530.las	US Survey Feet	US Survey Feet
07550430.las	US Survey Feet	US Survey Feet
07550435.las	US Survey Feet	US Survey Feet
07550440.las	US Survey Feet	US Survey Feet
07550445.las	US Survey Feet	US Survey Feet
07550450.las	US Survey Feet	US Survey Feet
07550455.las	US Survey Feet	US Survey Feet
07550460.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
07550465.las	US Survey Feet	US Survey Feet
07550470.las	US Survey Feet	US Survey Feet
07550475.las	US Survey Feet	US Survey Feet
07550480.las	US Survey Feet	US Survey Feet
07550485.las	US Survey Feet	US Survey Feet
07550490.las	US Survey Feet	US Survey Feet
07550495.las	US Survey Feet	US Survey Feet
07550500.las	US Survey Feet	US Survey Feet
07550505.las	US Survey Feet	US Survey Feet
07550510.las	US Survey Feet	US Survey Feet
07550515.las	US Survey Feet	US Survey Feet
07550520.las	US Survey Feet	US Survey Feet
07550525.las	US Survey Feet	US Survey Feet
07550530.las	US Survey Feet	US Survey Feet
07600430.las	US Survey Feet	US Survey Feet
07600435.las	US Survey Feet	US Survey Feet
07600440.las	US Survey Feet	US Survey Feet
07600445.las	US Survey Feet	US Survey Feet
07600450.las	US Survey Feet	US Survey Feet
07600455.las	US Survey Feet	US Survey Feet
07600460.las	US Survey Feet	US Survey Feet
07600465.las	US Survey Feet	US Survey Feet
07600470.las	US Survey Feet	US Survey Feet
07600475.las	US Survey Feet	US Survey Feet
07600480.las	US Survey Feet	US Survey Feet
07600485.las	US Survey Feet	US Survey Feet
07600490.las	US Survey Feet	US Survey Feet
07600495.las	US Survey Feet	US Survey Feet
07600500.las	US Survey Feet	US Survey Feet
07600505.las	US Survey Feet	US Survey Feet
07600510.las	US Survey Feet	US Survey Feet
07600515.las	US Survey Feet	US Survey Feet
07600520.las	US Survey Feet	US Survey Feet
07600525.las	US Survey Feet	US Survey Feet
07600530.las	US Survey Feet	US Survey Feet
07650430.las	US Survey Feet	US Survey Feet
07650435.las	US Survey Feet	US Survey Feet
07650440.las	US Survey Feet	US Survey Feet
07650445.las	US Survey Feet	US Survey Feet
07650450.las	US Survey Feet	US Survey Feet
07650455.las	US Survey Feet	US Survey Feet
07650460.las	US Survey Feet	US Survey Feet
07650465.las	US Survey Feet	US Survey Feet
07650470.las	US Survey Feet	US Survey Feet
07650475.las	US Survey Feet	US Survey Feet
07650480.las	US Survey Feet	US Survey Feet
07650485.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
07650490.las	US Survey Feet	US Survey Feet
07650495.las	US Survey Feet	US Survey Feet
07650500.las	US Survey Feet	US Survey Feet
07650505.las	US Survey Feet	US Survey Feet
07650510.las	US Survey Feet	US Survey Feet
07650515.las	US Survey Feet	US Survey Feet
07650520.las	US Survey Feet	US Survey Feet
07650525.las	US Survey Feet	US Survey Feet
07650530.las	US Survey Feet	US Survey Feet
07700430.las	US Survey Feet	US Survey Feet
07700435.las	US Survey Feet	US Survey Feet
07700440.las	US Survey Feet	US Survey Feet
07700445.las	US Survey Feet	US Survey Feet
07700450.las	US Survey Feet	US Survey Feet
07700455.las	US Survey Feet	US Survey Feet
07700460.las	US Survey Feet	US Survey Feet
07700465.las	US Survey Feet	US Survey Feet
07700470.las	US Survey Feet	US Survey Feet
07700475.las	US Survey Feet	US Survey Feet
07700480.las	US Survey Feet	US Survey Feet
07700485.las	US Survey Feet	US Survey Feet
07700490.las	US Survey Feet	US Survey Feet
07700495.las	US Survey Feet	US Survey Feet
07700500.las	US Survey Feet	US Survey Feet
07700505.las	US Survey Feet	US Survey Feet
07700510.las	US Survey Feet	US Survey Feet
07700515.las	US Survey Feet	US Survey Feet
07700520.las	US Survey Feet	US Survey Feet
07700525.las	US Survey Feet	US Survey Feet
07700530.las	US Survey Feet	US Survey Feet
07750430.las	US Survey Feet	US Survey Feet
07750435.las	US Survey Feet	US Survey Feet
07750440.las	US Survey Feet	US Survey Feet
07750445.las	US Survey Feet	US Survey Feet
07750450.las	US Survey Feet	US Survey Feet
07750455.las	US Survey Feet	US Survey Feet
07750460.las	US Survey Feet	US Survey Feet
07750465.las	US Survey Feet	US Survey Feet
07750470.las	US Survey Feet	US Survey Feet
07750475.las	US Survey Feet	US Survey Feet
07750480.las	US Survey Feet	US Survey Feet
07750485.las	US Survey Feet	US Survey Feet
07750490.las	US Survey Feet	US Survey Feet
07750495.las	US Survey Feet	US Survey Feet
07750500.las	US Survey Feet	US Survey Feet
07750505.las	US Survey Feet	US Survey Feet
07750510.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data) - continued

File	Horizontal Unit	Vertical Unit
07750515.las	US Survey Feet	US Survey Feet
07750520.las	US Survey Feet	US Survey Feet
07750525.las	US Survey Feet	US Survey Feet
07750530.las	US Survey Feet	US Survey Feet
07800430.las	US Survey Feet	US Survey Feet
07800435.las	US Survey Feet	US Survey Feet
07800440.las	US Survey Feet	US Survey Feet
07800445.las	US Survey Feet	US Survey Feet
07800450.las	US Survey Feet	US Survey Feet
07800455.las	US Survey Feet	US Survey Feet
07800460.las	US Survey Feet	US Survey Feet
07800465.las	US Survey Feet	US Survey Feet
07800470.las	US Survey Feet	US Survey Feet
07800475.las	US Survey Feet	US Survey Feet
07800480.las	US Survey Feet	US Survey Feet
07800485.las	US Survey Feet	US Survey Feet
07800490.las	US Survey Feet	US Survey Feet
07800495.las	US Survey Feet	US Survey Feet
07800500.las	US Survey Feet	US Survey Feet
07800505.las	US Survey Feet	US Survey Feet
07800510.las	US Survey Feet	US Survey Feet
07800515.las	US Survey Feet	US Survey Feet
07800520.las	US Survey Feet	US Survey Feet
07800525.las	US Survey Feet	US Survey Feet
07800530.las	US Survey Feet	US Survey Feet
07850430.las	US Survey Feet	US Survey Feet
07850435.las	US Survey Feet	US Survey Feet
07850440.las	US Survey Feet	US Survey Feet
07850445.las	US Survey Feet	US Survey Feet
07850450.las	US Survey Feet	US Survey Feet
07850455.las	US Survey Feet	US Survey Feet
07850460.las	US Survey Feet	US Survey Feet
07850465.las	US Survey Feet	US Survey Feet
07850470.las	US Survey Feet	US Survey Feet
07850475.las	US Survey Feet	US Survey Feet
07850480.las	US Survey Feet	US Survey Feet
07850485.las	US Survey Feet	US Survey Feet
07850490.las	US Survey Feet	US Survey Feet
07850495.las	US Survey Feet	US Survey Feet
07850500.las	US Survey Feet	US Survey Feet
07850505.las	US Survey Feet	US Survey Feet
07850510.las	US Survey Feet	US Survey Feet
07850515.las	US Survey Feet	US Survey Feet
07850520.las	US Survey Feet	US Survey Feet
07850525.las	US Survey Feet	US Survey Feet
07850530.las	US Survey Feet	US Survey Feet
07900430.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
07900435.las	US Survey Feet	US Survey Feet
07900440.las	US Survey Feet	US Survey Feet
07900445.las	US Survey Feet	US Survey Feet
07900450.las	US Survey Feet	US Survey Feet
07900455.las	US Survey Feet	US Survey Feet
07900460.las	US Survey Feet	US Survey Feet
07900465.las	US Survey Feet	US Survey Feet
07900470.las	US Survey Feet	US Survey Feet
07900475.las	US Survey Feet	US Survey Feet
07900480.las	US Survey Feet	US Survey Feet
07900485.las	US Survey Feet	US Survey Feet
07900490.las	US Survey Feet	US Survey Feet
07900495.las	US Survey Feet	US Survey Feet
07900500.las	US Survey Feet	US Survey Feet
07900505.las	US Survey Feet	US Survey Feet
07900510.las	US Survey Feet	US Survey Feet
07900515.las	US Survey Feet	US Survey Feet
07900520.las	US Survey Feet	US Survey Feet
07900525.las	US Survey Feet	US Survey Feet
07900530.las	US Survey Feet	US Survey Feet
07950430.las	US Survey Feet	US Survey Feet
07950435.las	US Survey Feet	US Survey Feet
07950440.las	US Survey Feet	US Survey Feet
07950445.las	US Survey Feet	US Survey Feet
07950450.las	US Survey Feet	US Survey Feet
07950455.las	US Survey Feet	US Survey Feet
07950460.las	US Survey Feet	US Survey Feet
07950465.las	US Survey Feet	US Survey Feet
07950470.las	US Survey Feet	US Survey Feet
07950475.las	US Survey Feet	US Survey Feet
07950480.las	US Survey Feet	US Survey Feet
07950485.las	US Survey Feet	US Survey Feet
07950490.las	US Survey Feet	US Survey Feet
07950495.las	US Survey Feet	US Survey Feet
07950500.las	US Survey Feet	US Survey Feet
07950505.las	US Survey Feet	US Survey Feet
07950510.las	US Survey Feet	US Survey Feet
07950515.las	US Survey Feet	US Survey Feet
07950520.las	US Survey Feet	US Survey Feet
07950525.las	US Survey Feet	US Survey Feet
07950530.las	US Survey Feet	US Survey Feet
08000430.las	US Survey Feet	US Survey Feet
08000435.las	US Survey Feet	US Survey Feet
08000440.las	US Survey Feet	US Survey Feet
08000445.las	US Survey Feet	US Survey Feet
08000450.las	US Survey Feet	US Survey Feet
08000455.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
08000460.las	US Survey Feet	US Survey Feet
08000465.las	US Survey Feet	US Survey Feet
08000470.las	US Survey Feet	US Survey Feet
08000475.las	US Survey Feet	US Survey Feet
08000480.las	US Survey Feet	US Survey Feet
08000485.las	US Survey Feet	US Survey Feet
08000490.las	US Survey Feet	US Survey Feet
08000495.las	US Survey Feet	US Survey Feet
08000500.las	US Survey Feet	US Survey Feet
08000505.las	US Survey Feet	US Survey Feet
08000510.las	US Survey Feet	US Survey Feet
08000515.las	US Survey Feet	US Survey Feet
08000520.las	US Survey Feet	US Survey Feet
08000525.las	US Survey Feet	US Survey Feet
08000530.las	US Survey Feet	US Survey Feet
08050430.las	US Survey Feet	US Survey Feet
08050435.las	US Survey Feet	US Survey Feet
08050440.las	US Survey Feet	US Survey Feet
08050445.las	US Survey Feet	US Survey Feet
08050450.las	US Survey Feet	US Survey Feet
08050455.las	US Survey Feet	US Survey Feet
08050460.las	US Survey Feet	US Survey Feet
08050465.las	US Survey Feet	US Survey Feet
08050470.las	US Survey Feet	US Survey Feet
08050475.las	US Survey Feet	US Survey Feet
08050480.las	US Survey Feet	US Survey Feet
08050485.las	US Survey Feet	US Survey Feet
08050490.las	US Survey Feet	US Survey Feet
08050495.las	US Survey Feet	US Survey Feet
08050500.las	US Survey Feet	US Survey Feet
08050505.las	US Survey Feet	US Survey Feet
08050510.las	US Survey Feet	US Survey Feet
08050515.las	US Survey Feet	US Survey Feet
08050520.las	US Survey Feet	US Survey Feet
08050525.las	US Survey Feet	US Survey Feet
08050530.las	US Survey Feet	US Survey Feet
08100430.las	US Survey Feet	US Survey Feet
08100435.las	US Survey Feet	US Survey Feet
08100440.las	US Survey Feet	US Survey Feet
08100445.las	US Survey Feet	US Survey Feet
08100450.las	US Survey Feet	US Survey Feet
08100455.las	US Survey Feet	US Survey Feet
08100460.las	US Survey Feet	US Survey Feet
08100465.las	US Survey Feet	US Survey Feet
08100470.las	US Survey Feet	US Survey Feet
08100475.las	US Survey Feet	US Survey Feet
08100480.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data) - continued

File	Horizontal Unit	Vertical Unit
08100485.las	US Survey Feet	US Survey Feet
08100490.las	US Survey Feet	US Survey Feet
08100495.las	US Survey Feet	US Survey Feet
08100500.las	US Survey Feet	US Survey Feet
08100505.las	US Survey Feet	US Survey Feet
08100510.las	US Survey Feet	US Survey Feet
08100515.las	US Survey Feet	US Survey Feet
08100520.las	US Survey Feet	US Survey Feet
08100525.las	US Survey Feet	US Survey Feet
08100530.las	US Survey Feet	US Survey Feet
08150430.las	US Survey Feet	US Survey Feet
08150435.las	US Survey Feet	US Survey Feet
08150440.las	US Survey Feet	US Survey Feet
08150445.las	US Survey Feet	US Survey Feet
08150450.las	US Survey Feet	US Survey Feet
08150455.las	US Survey Feet	US Survey Feet
08150460.las	US Survey Feet	US Survey Feet
08150465.las	US Survey Feet	US Survey Feet
08150470.las	US Survey Feet	US Survey Feet
08150475.las	US Survey Feet	US Survey Feet
08150480.las	US Survey Feet	US Survey Feet
08150485.las	US Survey Feet	US Survey Feet
08150490.las	US Survey Feet	US Survey Feet
08150495.las	US Survey Feet	US Survey Feet
08150500.las	US Survey Feet	US Survey Feet
08150505.las	US Survey Feet	US Survey Feet
08150510.las	US Survey Feet	US Survey Feet
08150515.las	US Survey Feet	US Survey Feet
08150520.las	US Survey Feet	US Survey Feet
08150525.las	US Survey Feet	US Survey Feet
08150530.las	US Survey Feet	US Survey Feet
08200430.las	US Survey Feet	US Survey Feet
08200435.las	US Survey Feet	US Survey Feet
08200440.las	US Survey Feet	US Survey Feet
08200445.las	US Survey Feet	US Survey Feet
08200450.las	US Survey Feet	US Survey Feet
08200455.las	US Survey Feet	US Survey Feet
08200460.las	US Survey Feet	US Survey Feet
08200465.las	US Survey Feet	US Survey Feet
08200470.las	US Survey Feet	US Survey Feet
08200475.las	US Survey Feet	US Survey Feet
08200480.las	US Survey Feet	US Survey Feet
08200485.las	US Survey Feet	US Survey Feet
08200490.las	US Survey Feet	US Survey Feet
08200495.las	US Survey Feet	US Survey Feet
08200500.las	US Survey Feet	US Survey Feet
08200505.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
08200510.las	US Survey Feet	US Survey Feet
08200515.las	US Survey Feet	US Survey Feet
08200520.las	US Survey Feet	US Survey Feet
08200525.las	US Survey Feet	US Survey Feet
08200530.las	US Survey Feet	US Survey Feet
08250430.las	US Survey Feet	US Survey Feet
08250435.las	US Survey Feet	US Survey Feet
08250440.las	US Survey Feet	US Survey Feet
08250445.las	US Survey Feet	US Survey Feet
08250450.las	US Survey Feet	US Survey Feet
08250455.las	US Survey Feet	US Survey Feet
08250460.las	US Survey Feet	US Survey Feet
08250465.las	US Survey Feet	US Survey Feet
08250470.las	US Survey Feet	US Survey Feet
08250475.las	US Survey Feet	US Survey Feet
08250480.las	US Survey Feet	US Survey Feet
08250485.las	US Survey Feet	US Survey Feet
08250490.las	US Survey Feet	US Survey Feet
08250495.las	US Survey Feet	US Survey Feet
08250500.las	US Survey Feet	US Survey Feet
08250505.las	US Survey Feet	US Survey Feet
08250510.las	US Survey Feet	US Survey Feet
08250515.las	US Survey Feet	US Survey Feet
08250520.las	US Survey Feet	US Survey Feet
08250525.las	US Survey Feet	US Survey Feet
08250530.las	US Survey Feet	US Survey Feet
08300430.las	US Survey Feet	US Survey Feet
08300435.las	US Survey Feet	US Survey Feet
08300440.las	US Survey Feet	US Survey Feet
08300445.las	US Survey Feet	US Survey Feet
08300450.las	US Survey Feet	US Survey Feet
08300455.las	US Survey Feet	US Survey Feet
08300460.las	US Survey Feet	US Survey Feet
08300465.las	US Survey Feet	US Survey Feet
08300470.las	US Survey Feet	US Survey Feet
08300475.las	US Survey Feet	US Survey Feet
08300480.las	US Survey Feet	US Survey Feet
08300485.las	US Survey Feet	US Survey Feet
08300490.las	US Survey Feet	US Survey Feet
08300495.las	US Survey Feet	US Survey Feet
08300500.las	US Survey Feet	US Survey Feet
08300505.las	US Survey Feet	US Survey Feet
08300510.las	US Survey Feet	US Survey Feet
08300515.las	US Survey Feet	US Survey Feet
08300520.las	US Survey Feet	US Survey Feet
08300525.las	US Survey Feet	US Survey Feet
08300530.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
08350430.las	US Survey Feet	US Survey Feet
08350435.las	US Survey Feet	US Survey Feet
08350440.las	US Survey Feet	US Survey Feet
08350445.las	US Survey Feet	US Survey Feet
08350450.las	US Survey Feet	US Survey Feet
08350455.las	US Survey Feet	US Survey Feet
08350460.las	US Survey Feet	US Survey Feet
08350465.las	US Survey Feet	US Survey Feet
08350470.las	US Survey Feet	US Survey Feet
08350475.las	US Survey Feet	US Survey Feet
08350480.las	US Survey Feet	US Survey Feet
08350485.las	US Survey Feet	US Survey Feet
08350490.las	US Survey Feet	US Survey Feet
08350495.las	US Survey Feet	US Survey Feet
08350500.las	US Survey Feet	US Survey Feet
08350505.las	US Survey Feet	US Survey Feet
08350510.las	US Survey Feet	US Survey Feet
08350515.las	US Survey Feet	US Survey Feet
08350520.las	US Survey Feet	US Survey Feet
08350525.las	US Survey Feet	US Survey Feet
08350530.las	US Survey Feet	US Survey Feet
08400430.las	US Survey Feet	US Survey Feet
08400435.las	US Survey Feet	US Survey Feet
08400440.las	US Survey Feet	US Survey Feet
08400445.las	US Survey Feet	US Survey Feet
08400450.las	US Survey Feet	US Survey Feet
08400455.las	US Survey Feet	US Survey Feet
08400460.las	US Survey Feet	US Survey Feet
08400465.las	US Survey Feet	US Survey Feet
08400470.las	US Survey Feet	US Survey Feet
08400475.las	US Survey Feet	US Survey Feet
08400480.las	US Survey Feet	US Survey Feet
08400485.las	US Survey Feet	US Survey Feet
08400490.las	US Survey Feet	US Survey Feet
08400495.las	US Survey Feet	US Survey Feet
08400500.las	US Survey Feet	US Survey Feet
08400505.las	US Survey Feet	US Survey Feet
08400510.las	US Survey Feet	US Survey Feet
08400515.las	US Survey Feet	US Survey Feet
08400520.las	US Survey Feet	US Survey Feet
08400525.las	US Survey Feet	US Survey Feet
08400530.las	US Survey Feet	US Survey Feet
08450430.las	US Survey Feet	US Survey Feet
08450435.las	US Survey Feet	US Survey Feet
08450440.las	US Survey Feet	US Survey Feet
08450445.las	US Survey Feet	US Survey Feet
08450450.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data) - continued

File	Horizontal Unit	Vertical Unit
08450455.las	US Survey Feet	US Survey Feet
08450460.las	US Survey Feet	US Survey Feet
08450465.las	US Survey Feet	US Survey Feet
08450470.las	US Survey Feet	US Survey Feet
08450475.las	US Survey Feet	US Survey Feet
08450480.las	US Survey Feet	US Survey Feet
08450485.las	US Survey Feet	US Survey Feet
08450490.las	US Survey Feet	US Survey Feet
08450495.las	US Survey Feet	US Survey Feet
08450500.las	US Survey Feet	US Survey Feet
08450505.las	US Survey Feet	US Survey Feet
08450510.las	US Survey Feet	US Survey Feet
08450515.las	US Survey Feet	US Survey Feet
08450520.las	US Survey Feet	US Survey Feet
08450525.las	US Survey Feet	US Survey Feet
08450530.las	US Survey Feet	US Survey Feet
08500430.las	US Survey Feet	US Survey Feet
08500435.las	US Survey Feet	US Survey Feet
08500440.las	US Survey Feet	US Survey Feet
08500445.las	US Survey Feet	US Survey Feet
08500450.las	US Survey Feet	US Survey Feet
08500455.las	US Survey Feet	US Survey Feet
08500460.las	US Survey Feet	US Survey Feet
08500465.las	US Survey Feet	US Survey Feet
08500470.las	US Survey Feet	US Survey Feet
08500475.las	US Survey Feet	US Survey Feet
08500480.las	US Survey Feet	US Survey Feet
08500485.las	US Survey Feet	US Survey Feet
08500490.las	US Survey Feet	US Survey Feet
08500495.las	US Survey Feet	US Survey Feet
08500500.las	US Survey Feet	US Survey Feet
08500505.las	US Survey Feet	US Survey Feet
08500510.las	US Survey Feet	US Survey Feet
08500515.las	US Survey Feet	US Survey Feet
08500520.las	US Survey Feet	US Survey Feet
08500525.las	US Survey Feet	US Survey Feet
08500530.las	US Survey Feet	US Survey Feet
08550430.las	US Survey Feet	US Survey Feet
08550435.las	US Survey Feet	US Survey Feet
08550440.las	US Survey Feet	US Survey Feet
08550445.las	US Survey Feet	US Survey Feet
08550450.las	US Survey Feet	US Survey Feet
08550455.las	US Survey Feet	US Survey Feet
08550460.las	US Survey Feet	US Survey Feet
08550465.las	US Survey Feet	US Survey Feet
08550470.las	US Survey Feet	US Survey Feet
08550475.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
08550480.las	US Survey Feet	US Survey Feet
08550485.las	US Survey Feet	US Survey Feet
08550490.las	US Survey Feet	US Survey Feet
08550495.las	US Survey Feet	US Survey Feet
08550500.las	US Survey Feet	US Survey Feet
08550505.las	US Survey Feet	US Survey Feet
08550510.las	US Survey Feet	US Survey Feet
08550515.las	US Survey Feet	US Survey Feet
08550520.las	US Survey Feet	US Survey Feet
08550525.las	US Survey Feet	US Survey Feet
08550530.las	US Survey Feet	US Survey Feet
08600430.las	US Survey Feet	US Survey Feet
08600435.las	US Survey Feet	US Survey Feet
08600440.las	US Survey Feet	US Survey Feet
08600445.las	US Survey Feet	US Survey Feet
08600450.las	US Survey Feet	US Survey Feet
08600455.las	US Survey Feet	US Survey Feet
08600460.las	US Survey Feet	US Survey Feet
08600465.las	US Survey Feet	US Survey Feet
08600470.las	US Survey Feet	US Survey Feet
08600475.las	US Survey Feet	US Survey Feet
08600480.las	US Survey Feet	US Survey Feet
08600485.las	US Survey Feet	US Survey Feet
08600490.las	US Survey Feet	US Survey Feet
08600495.las	US Survey Feet	US Survey Feet
08600500.las	US Survey Feet	US Survey Feet
08600505.las	US Survey Feet	US Survey Feet
08600510.las	US Survey Feet	US Survey Feet
08600515.las	US Survey Feet	US Survey Feet
08600520.las	US Survey Feet	US Survey Feet
08600525.las	US Survey Feet	US Survey Feet
08600530.las	US Survey Feet	US Survey Feet
08650430.las	US Survey Feet	US Survey Feet
08650435.las	US Survey Feet	US Survey Feet
08650440.las	US Survey Feet	US Survey Feet
08650445.las	US Survey Feet	US Survey Feet
08650450.las	US Survey Feet	US Survey Feet
08650455.las	US Survey Feet	US Survey Feet
08650460.las	US Survey Feet	US Survey Feet
08650465.las	US Survey Feet	US Survey Feet
08650470.las	US Survey Feet	US Survey Feet
08650475.las	US Survey Feet	US Survey Feet
08650480.las	US Survey Feet	US Survey Feet
08650485.las	US Survey Feet	US Survey Feet
08650490.las	US Survey Feet	US Survey Feet
08650495.las	US Survey Feet	US Survey Feet
08650500.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data) - continued

File	Horizontal Unit	Vertical Unit
08650505.las	US Survey Feet	US Survey Feet
08650510.las	US Survey Feet	US Survey Feet
08650515.las	US Survey Feet	US Survey Feet
08650520.las	US Survey Feet	US Survey Feet
08650525.las	US Survey Feet	US Survey Feet
08650530.las	US Survey Feet	US Survey Feet
08700430.las	US Survey Feet	US Survey Feet
08700435.las	US Survey Feet	US Survey Feet
08700440.las	US Survey Feet	US Survey Feet
08700445.las	US Survey Feet	US Survey Feet
08700450.las	US Survey Feet	US Survey Feet
08700455.las	US Survey Feet	US Survey Feet
08700460.las	US Survey Feet	US Survey Feet
08700465.las	US Survey Feet	US Survey Feet
08700470.las	US Survey Feet	US Survey Feet
08700475.las	US Survey Feet	US Survey Feet
08700480.las	US Survey Feet	US Survey Feet
08700485.las	US Survey Feet	US Survey Feet
08700490.las	US Survey Feet	US Survey Feet
08700495.las	US Survey Feet	US Survey Feet
08700500.las	US Survey Feet	US Survey Feet
08700505.las	US Survey Feet	US Survey Feet
08700510.las	US Survey Feet	US Survey Feet
08700515.las	US Survey Feet	US Survey Feet
08700520.las	US Survey Feet	US Survey Feet
08700525.las	US Survey Feet	US Survey Feet
08700530.las	US Survey Feet	US Survey Feet
08750430.las	US Survey Feet	US Survey Feet
08750435.las	US Survey Feet	US Survey Feet
08750440.las	US Survey Feet	US Survey Feet
08750445.las	US Survey Feet	US Survey Feet
08750450.las	US Survey Feet	US Survey Feet
08750455.las	US Survey Feet	US Survey Feet
08750460.las	US Survey Feet	US Survey Feet
08750465.las	US Survey Feet	US Survey Feet
08750470.las	US Survey Feet	US Survey Feet
08750475.las	US Survey Feet	US Survey Feet
08750480.las	US Survey Feet	US Survey Feet
08750485.las	US Survey Feet	US Survey Feet
08750490.las	US Survey Feet	US Survey Feet
08750495.las	US Survey Feet	US Survey Feet
08750500.las	US Survey Feet	US Survey Feet
08750505.las	US Survey Feet	US Survey Feet
08750510.las	US Survey Feet	US Survey Feet
08750515.las	US Survey Feet	US Survey Feet
08750520.las	US Survey Feet	US Survey Feet
08750525.las	US Survey Feet	US Survey Feet

2.6 Report on Units of Reference (Tiled Data)

- continued

<u>File</u>	<u>Horizontal Unit</u>	<u>Vertical Unit</u>
08750530.las	US Survey Feet	US Survey Feet

2.7 Report on Swath Size and Segmentation (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "Swath files will be 2 gigabytes (GB) in size or less. Long swaths (those which result in a LAS file larger than 2 GB) will be split into segments no greater than 2 GB each.

- (1) Each sub-swath will retain the original File Source ID of the original complete swath.
- (2) Points within each sub-swath will retain the Point Source ID of the original complete swath.
- (3) Each sub-swath file will be named identically to the original complete swath, with the addition of an ordered alphabetic suffix to the name ("-a", "-b" ... "-n"). The order of the named sub-swaths shall be consistent with the collection order of the points ("-a" will be the chronological beginning of the swath; "-n" will be the chronological end of the swath).
- (4) Point families shall be maintained intact within each sub-swath.
- (5) Sub-swaths should be broken at the edge of the scan line.
- (6) Other swath segmentation approaches may be acceptable, with prior approval."

The purpose of this section is to show the files sizes of the LAS files for the LiDAR swath data.

[Boresighted Files - E:\Franklin County\swath](#)

File	File Size (bytes)	KB	MB	GB
140417_224329_1-1.las	1,967,067,941	1,920,964	1875.94	1.83
140417_224329_1-2.las	872,700,337	852,246	832.27	0.81
140417_230025_1-1.las	1,967,080,349	1,920,976	1875.95	1.83
140417_230025_1-2.las	1,259,994,717	1,230,463	1201.62	1.17
140417_231322_1-1.las	1,967,472,799	1,921,360	1876.33	1.83
140417_231322_1-2.las	1,339,917,561	1,308,513	1277.84	1.25
140417_232632_1-1.las	1,967,242,781	1,921,135	1876.11	1.83
140417_232632_1-2.las	1,338,015,497	1,306,655	1276.03	1.25
140417_233933_1-1.las	1,967,404,273	1,921,293	1876.26	1.83
140417_233933_1-2.las	1,375,872,381	1,343,625	1312.13	1.28
140417_235212_1-1.las	1,967,238,645	1,921,131	1876.10	1.83
140417_235212_1-2.las	1,362,860,589	1,330,918	1299.73	1.27
140418_000524_1-1.las	1,967,383,123	1,921,272	1876.24	1.83
140418_000524_1-2.las	1,715,115,469	1,674,917	1635.66	1.60
140418_001909_1-1.las	1,967,246,917	1,921,139	1876.11	1.83
140418_001909_1-2.las	1,666,487,863	1,627,429	1589.29	1.55
140418_003250_1-1.las	1,967,455,503	1,921,343	1876.31	1.83
140418_003250_1-2.las	1,832,136,981	1,789,196	1747.26	1.71
140418_004640_1-1.las	1,967,237,705	1,921,130	1876.10	1.83
140418_004640_1-2.las	1,668,739,365	1,629,628	1591.43	1.55
140418_010058_1-1.las	1,967,458,041	1,921,345	1876.31	1.83
140418_010058_1-2.las	1,865,708,795	1,821,981	1779.28	1.74
140418_011447_1-1.las	1,967,303,693	1,921,195	1876.17	1.83
140418_011447_1-2.las	1,663,529,131	1,624,540	1586.47	1.55
140418_012827_1-1.las	1,967,587,385	1,921,472	1876.44	1.83
140418_012827_1-2.las	1,814,886,897	1,772,350	1730.81	1.69
140418_014215_1-1.las	1,967,219,939	1,921,113	1876.09	1.83
140418_014215_1-2.las	1,520,098,553	1,484,471	1449.68	1.42
140418_020434_1.las	1,867,152,115	1,823,390	1780.66	1.74
140418_145120_1.las	1,139,656,275	1,112,945	1086.86	1.06
140418_150350_1-1.las	1,967,320,519	1,921,211	1876.18	1.83
140418_150350_1-2.las	1,326,007,451	1,294,929	1264.58	1.23
140418_151646_1-1.las	1,967,240,337	1,921,133	1876.11	1.83
140418_151646_1-2.las	1,243,216,093	1,214,078	1185.62	1.16

2.7 Report on Swath Size and Segmentation (Swath Data) - continued

File	File Size (bytes)	KB	MB	GB
140418_152909_1-1.las	1,967,283,765	1,921,175	1876.15	1.83
140418_152909_1-2.las	1,128,213,983	1,101,771	1075.95	1.05
140418_154201_1-1.las	1,967,105,447	1,921,001	1875.98	1.83
140418_154201_1-2.las	1,033,056,415	1,008,844	985.20	0.96
140418_155420_1-1.las	1,967,063,993	1,920,960	1875.94	1.83
140418_155420_1-2.las	1,016,815,245	992,983	969.71	0.95
140418_160651_1-1.las	1,966,965,011	1,920,864	1875.84	1.83
140418_160651_1-2.las	870,857,043	850,446	830.51	0.81
140418_161920_1-1.las	1,967,024,231	1,920,922	1875.90	1.83
140418_161920_1-2.las	1,021,639,533	997,694	974.31	0.95
140418_163158_1-1.las	1,966,647,667	1,920,554	1875.54	1.83
140418_163158_1-2.las	907,071,759	885,812	865.05	0.84
140418_164429_1-1.las	1,966,756,143	1,920,660	1875.64	1.83
140418_164429_1-2.las	934,910,857	912,998	891.60	0.87
140418_165715_1-1.las	1,966,456,377	1,920,367	1875.36	1.83
140418_165715_1-2.las	873,077,711	852,614	832.63	0.81
140418_171610_1.las	1,111,772,547	1,085,715	1060.27	1.04

2.8 Report on File Source ID (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "Each swath will be assigned a unique File Source ID. It is required that the Point Source ID field for each point within each LAS swath file be set equal to the File Source ID before any processing of the data. See the LAS v1.3 Specification (ASPRS, 2011)."

The purpose of this section is to report on the File Source ID and Point Source ID values for the LiDAR swath data. Note that sub-swaths of original swaths (see Test 2.7) may violate the unique values specification described in this test.

[Boresighted Files - E:\Franklin_County\swath](#)

File	File Source ID	Point Source ID
140417_224329_1-1.las	2806	2806
140417_224329_1-2.las	2806	2806
140417_230025_1-1.las	2808	2808
140417_230025_1-2.las	2808	2808
140417_231322_1-1.las	2809	2809
140417_231322_1-2.las	2809	2809
140417_232632_1-1.las	2810	2810
140417_232632_1-2.las	2810	2810
140417_233933_1-1.las	2811	2811
140417_233933_1-2.las	2811	2811
140417_235212_1-1.las	2812	2812
140417_235212_1-2.las	2812	2812
140418_000524_1-1.las	2813	2813
140418_000524_1-2.las	2813	2813
140418_001909_1-1.las	2814	2814
140418_001909_1-2.las	2814	2814
140418_003250_1-1.las	2815	2815
140418_003250_1-2.las	2815	2815
140418_004640_1-1.las	2816	2816
140418_004640_1-2.las	2816	2816
140418_010058_1-1.las	2817	2817
140418_010058_1-2.las	2817	2817
140418_011447_1-1.las	2818	2818
140418_011447_1-2.las	2818	2818
140418_012827_1-1.las	2819	2819
140418_012827_1-2.las	2819	2819
140418_014215_1-1.las	2820	2820
140418_014215_1-2.las	2820	2820
140418_020434_1.las	2807	2807
140418_145120_1.las	2821	2821
140418_150350_1-1.las	2823	2823
140418_150350_1-2.las	2823	2823
140418_151646_1-1.las	2824	2824
140418_151646_1-2.las	2824	2824
140418_152909_1-1.las	2825	2825
140418_152909_1-2.las	2825	2825
140418_154201_1-1.las	2826	2826
140418_154201_1-2.las	2826	2826
140418_155420_1-1.las	2827	2827
140418_155420_1-2.las	2827	2827
140418_160651_1-1.las	2828	2828
140418_160651_1-2.las	2828	2828

2.8 Report on File Source ID (Swath Data) - continued

File	File Source ID	Point Source ID
140418_161920_1-1.las	2829	2829
140418_161920_1-2.las	2829	2829
140418_163158_1-1.las	2830	2830
140418_163158_1-2.las	2830	2830
140418_164429_1-1.las	2831	2831
140418_164429_1-2.las	2831	2831
140418_165715_1-1.las	2832	2832
140418_165715_1-2.las	2832	2832
140418_171610_1.las	2822	2822

2.9 Report on Point Families (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "Point families (multiple return "children" of a single "parent" pulse) shall be maintained intact through all processing before tiling. Multiple returns from a given pulse will be stored in sequential (collected) order."

The purpose of this section is to report on the presence and integrity of point families for the LiDAR swath data.

[Boresighted Files - E:\Franklin_County\swath](#)

File	Point Families Present
140417_224329_1-1.las	Yes
140417_224329_1-2.las	Yes
140417_230025_1-1.las	Yes
140417_230025_1-2.las	Yes
140417_231322_1-1.las	Yes
140417_231322_1-2.las	Yes
140417_232632_1-1.las	Yes
140417_232632_1-2.las	Yes
140417_233933_1-1.las	Yes
140417_233933_1-2.las	Yes
140417_235212_1-1.las	Yes
140417_235212_1-2.las	Yes
140418_000524_1-1.las	Yes
140418_000524_1-2.las	Yes
140418_001909_1-1.las	Yes
140418_001909_1-2.las	Yes
140418_003250_1-1.las	Yes
140418_003250_1-2.las	Yes
140418_004640_1-1.las	Yes
140418_004640_1-2.las	Yes
140418_010058_1-1.las	Yes
140418_010058_1-2.las	Yes
140418_011447_1-1.las	Yes
140418_011447_1-2.las	Yes
140418_012827_1-1.las	Yes
140418_012827_1-2.las	Yes
140418_014215_1-1.las	Yes
140418_014215_1-2.las	Yes
140418_020434_1.las	Yes
140418_145120_1.las	Yes
140418_150350_1-1.las	Yes
140418_150350_1-2.las	Yes
140418_151646_1-1.las	Yes
140418_151646_1-2.las	Yes
140418_152909_1-1.las	Yes
140418_152909_1-2.las	Yes
140418_154201_1-1.las	Yes
140418_154201_1-2.las	Yes
140418_155420_1-1.las	Yes
140418_155420_1-2.las	Yes
140418_160651_1-1.las	Yes
140418_160651_1-2.las	Yes
140418_161920_1-1.las	Yes

2.9 Report on Point Families (Swath Data) - continued

<u>File</u>	<u>Point Families Present</u>
140418_161920_1-2.las	Yes
140418_163158_1-1.las	Yes
140418_163158_1-2.las	Yes
140418_164429_1-1.las	Yes
140418_164429_1-2.las	Yes
140418_165715_1-1.las	Yes
140418_165715_1-2.las	Yes
140418_171610_1.las	Yes

2.9 Report on Point Families (Tiled Data)

The purpose of this section is to report on the presence and integrity of point families for tiled data.

[Classified Files - E:\Franklin County\las](#)

File	Point Families Present
07350465.las	Yes
07400465.las	Yes
07400470.las	Yes
07400475.las	Yes
07450430.las	Yes
07450435.las	Yes
07450440.las	Yes
07450445.las	Yes
07450450.las	Yes
07450455.las	Yes
07450460.las	Yes
07450465.las	Yes
07450470.las	Yes
07450475.las	Yes
07450480.las	Yes
07450485.las	Yes
07450490.las	Yes
07450495.las	Yes
07450500.las	Yes
07500430.las	Yes
07500435.las	Yes
07500440.las	Yes
07500445.las	Yes
07500450.las	Yes
07500455.las	Yes
07500460.las	Yes
07500465.las	Yes
07500470.las	Yes
07500475.las	Yes
07500480.las	Yes
07500485.las	Yes
07500490.las	Yes
07500495.las	Yes
07500500.las	Yes
07500505.las	Yes
07500510.las	Yes
07500515.las	Yes
07500520.las	Yes
07500525.las	Yes
07500530.las	Yes
07550430.las	Yes
07550435.las	Yes
07550440.las	Yes
07550445.las	Yes
07550450.las	Yes
07550455.las	Yes
07550460.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
07550465.las	Yes
07550470.las	Yes
07550475.las	Yes
07550480.las	Yes
07550485.las	Yes
07550490.las	Yes
07550495.las	Yes
07550500.las	Yes
07550505.las	Yes
07550510.las	Yes
07550515.las	Yes
07550520.las	Yes
07550525.las	Yes
07550530.las	Yes
07600430.las	Yes
07600435.las	Yes
07600440.las	Yes
07600445.las	Yes
07600450.las	Yes
07600455.las	Yes
07600460.las	Yes
07600465.las	Yes
07600470.las	Yes
07600475.las	Yes
07600480.las	Yes
07600485.las	Yes
07600490.las	Yes
07600495.las	Yes
07600500.las	Yes
07600505.las	Yes
07600510.las	Yes
07600515.las	Yes
07600520.las	Yes
07600525.las	Yes
07600530.las	Yes
07650430.las	Yes
07650435.las	Yes
07650440.las	Yes
07650445.las	Yes
07650450.las	Yes
07650455.las	Yes
07650460.las	Yes
07650465.las	Yes
07650470.las	Yes
07650475.las	Yes
07650480.las	Yes
07650485.las	Yes
07650490.las	Yes
07650495.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
07650500.las	Yes
07650505.las	Yes
07650510.las	Yes
07650515.las	Yes
07650520.las	Yes
07650525.las	Yes
07650530.las	Yes
07700430.las	Yes
07700435.las	Yes
07700440.las	Yes
07700445.las	Yes
07700450.las	Yes
07700455.las	Yes
07700460.las	Yes
07700465.las	Yes
07700470.las	Yes
07700475.las	Yes
07700480.las	Yes
07700485.las	Yes
07700490.las	Yes
07700495.las	Yes
07700500.las	Yes
07700505.las	Yes
07700510.las	Yes
07700515.las	Yes
07700520.las	Yes
07700525.las	Yes
07700530.las	Yes
07750430.las	Yes
07750435.las	Yes
07750440.las	Yes
07750445.las	Yes
07750450.las	Yes
07750455.las	Yes
07750460.las	Yes
07750465.las	Yes
07750470.las	Yes
07750475.las	Yes
07750480.las	Yes
07750485.las	Yes
07750490.las	Yes
07750495.las	Yes
07750500.las	Yes
07750505.las	Yes
07750510.las	Yes
07750515.las	Yes
07750520.las	Yes
07750525.las	Yes
07750530.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
07800430.las	Yes
07800435.las	Yes
07800440.las	Yes
07800445.las	Yes
07800450.las	Yes
07800455.las	Yes
07800460.las	Yes
07800465.las	Yes
07800470.las	Yes
07800475.las	Yes
07800480.las	Yes
07800485.las	Yes
07800490.las	Yes
07800495.las	Yes
07800500.las	Yes
07800505.las	Yes
07800510.las	Yes
07800515.las	Yes
07800520.las	Yes
07800525.las	Yes
07800530.las	Yes
07850430.las	Yes
07850435.las	Yes
07850440.las	Yes
07850445.las	Yes
07850450.las	Yes
07850455.las	Yes
07850460.las	Yes
07850465.las	Yes
07850470.las	Yes
07850475.las	Yes
07850480.las	Yes
07850485.las	Yes
07850490.las	Yes
07850495.las	Yes
07850500.las	Yes
07850505.las	Yes
07850510.las	Yes
07850515.las	Yes
07850520.las	Yes
07850525.las	Yes
07850530.las	Yes
07900430.las	Yes
07900435.las	Yes
07900440.las	Yes
07900445.las	Yes
07900450.las	Yes
07900455.las	Yes
07900460.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
07900465.las	Yes
07900470.las	Yes
07900475.las	Yes
07900480.las	Yes
07900485.las	Yes
07900490.las	Yes
07900495.las	Yes
07900500.las	Yes
07900505.las	Yes
07900510.las	Yes
07900515.las	Yes
07900520.las	Yes
07900525.las	Yes
07900530.las	Yes
07950430.las	Yes
07950435.las	Yes
07950440.las	Yes
07950445.las	Yes
07950450.las	Yes
07950455.las	Yes
07950460.las	Yes
07950465.las	Yes
07950470.las	Yes
07950475.las	Yes
07950480.las	Yes
07950485.las	Yes
07950490.las	Yes
07950495.las	Yes
07950500.las	Yes
07950505.las	Yes
07950510.las	Yes
07950515.las	Yes
07950520.las	Yes
07950525.las	Yes
07950530.las	Yes
08000430.las	Yes
08000435.las	Yes
08000440.las	Yes
08000445.las	Yes
08000450.las	Yes
08000455.las	Yes
08000460.las	Yes
08000465.las	Yes
08000470.las	Yes
08000475.las	Yes
08000480.las	Yes
08000485.las	Yes
08000490.las	Yes
08000495.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
08000500.las	Yes
08000505.las	Yes
08000510.las	Yes
08000515.las	Yes
08000520.las	Yes
08000525.las	Yes
08000530.las	Yes
08050430.las	Yes
08050435.las	Yes
08050440.las	Yes
08050445.las	Yes
08050450.las	Yes
08050455.las	Yes
08050460.las	Yes
08050465.las	Yes
08050470.las	Yes
08050475.las	Yes
08050480.las	Yes
08050485.las	Yes
08050490.las	Yes
08050495.las	Yes
08050500.las	Yes
08050505.las	Yes
08050510.las	Yes
08050515.las	Yes
08050520.las	Yes
08050525.las	Yes
08050530.las	Yes
08100430.las	Yes
08100435.las	Yes
08100440.las	Yes
08100445.las	Yes
08100450.las	Yes
08100455.las	Yes
08100460.las	Yes
08100465.las	Yes
08100470.las	Yes
08100475.las	Yes
08100480.las	Yes
08100485.las	Yes
08100490.las	Yes
08100495.las	Yes
08100500.las	Yes
08100505.las	Yes
08100510.las	Yes
08100515.las	Yes
08100520.las	Yes
08100525.las	Yes
08100530.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
08150430.las	Yes
08150435.las	Yes
08150440.las	Yes
08150445.las	Yes
08150450.las	Yes
08150455.las	Yes
08150460.las	Yes
08150465.las	Yes
08150470.las	Yes
08150475.las	Yes
08150480.las	Yes
08150485.las	Yes
08150490.las	Yes
08150495.las	Yes
08150500.las	Yes
08150505.las	Yes
08150510.las	Yes
08150515.las	Yes
08150520.las	Yes
08150525.las	Yes
08150530.las	Yes
08200430.las	Yes
08200435.las	Yes
08200440.las	Yes
08200445.las	Yes
08200450.las	Yes
08200455.las	Yes
08200460.las	Yes
08200465.las	Yes
08200470.las	Yes
08200475.las	Yes
08200480.las	Yes
08200485.las	Yes
08200490.las	Yes
08200495.las	Yes
08200500.las	Yes
08200505.las	Yes
08200510.las	Yes
08200515.las	Yes
08200520.las	Yes
08200525.las	Yes
08200530.las	Yes
08250430.las	Yes
08250435.las	Yes
08250440.las	Yes
08250445.las	Yes
08250450.las	Yes
08250455.las	Yes
08250460.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
08250465.las	Yes
08250470.las	Yes
08250475.las	Yes
08250480.las	Yes
08250485.las	Yes
08250490.las	Yes
08250495.las	Yes
08250500.las	Yes
08250505.las	Yes
08250510.las	Yes
08250515.las	Yes
08250520.las	Yes
08250525.las	Yes
08250530.las	Yes
08300430.las	Yes
08300435.las	Yes
08300440.las	Yes
08300445.las	Yes
08300450.las	Yes
08300455.las	Yes
08300460.las	Yes
08300465.las	Yes
08300470.las	Yes
08300475.las	Yes
08300480.las	Yes
08300485.las	Yes
08300490.las	Yes
08300495.las	Yes
08300500.las	Yes
08300505.las	Yes
08300510.las	Yes
08300515.las	Yes
08300520.las	Yes
08300525.las	Yes
08300530.las	Yes
08350430.las	Yes
08350435.las	Yes
08350440.las	Yes
08350445.las	Yes
08350450.las	Yes
08350455.las	Yes
08350460.las	Yes
08350465.las	Yes
08350470.las	Yes
08350475.las	Yes
08350480.las	Yes
08350485.las	Yes
08350490.las	Yes
08350495.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
08350500.las	Yes
08350505.las	Yes
08350510.las	Yes
08350515.las	Yes
08350520.las	Yes
08350525.las	Yes
08350530.las	Yes
08400430.las	Yes
08400435.las	Yes
08400440.las	Yes
08400445.las	Yes
08400450.las	Yes
08400455.las	Yes
08400460.las	Yes
08400465.las	Yes
08400470.las	Yes
08400475.las	Yes
08400480.las	Yes
08400485.las	Yes
08400490.las	Yes
08400495.las	Yes
08400500.las	Yes
08400505.las	Yes
08400510.las	Yes
08400515.las	Yes
08400520.las	Yes
08400525.las	Yes
08400530.las	Yes
08450430.las	Yes
08450435.las	Yes
08450440.las	Yes
08450445.las	Yes
08450450.las	Yes
08450455.las	Yes
08450460.las	Yes
08450465.las	Yes
08450470.las	Yes
08450475.las	Yes
08450480.las	Yes
08450485.las	Yes
08450490.las	Yes
08450495.las	Yes
08450500.las	Yes
08450505.las	Yes
08450510.las	Yes
08450515.las	Yes
08450520.las	Yes
08450525.las	Yes
08450530.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
08500430.las	Yes
08500435.las	Yes
08500440.las	Yes
08500445.las	Yes
08500450.las	Yes
08500455.las	Yes
08500460.las	Yes
08500465.las	Yes
08500470.las	Yes
08500475.las	Yes
08500480.las	Yes
08500485.las	Yes
08500490.las	Yes
08500495.las	Yes
08500500.las	Yes
08500505.las	Yes
08500510.las	Yes
08500515.las	Yes
08500520.las	Yes
08500525.las	Yes
08500530.las	Yes
08550430.las	Yes
08550435.las	Yes
08550440.las	Yes
08550445.las	Yes
08550450.las	Yes
08550455.las	Yes
08550460.las	Yes
08550465.las	Yes
08550470.las	Yes
08550475.las	Yes
08550480.las	Yes
08550485.las	Yes
08550490.las	Yes
08550495.las	Yes
08550500.las	Yes
08550505.las	Yes
08550510.las	Yes
08550515.las	Yes
08550520.las	Yes
08550525.las	Yes
08550530.las	Yes
08600430.las	Yes
08600435.las	Yes
08600440.las	Yes
08600445.las	Yes
08600450.las	Yes
08600455.las	Yes
08600460.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
08600465.las	Yes
08600470.las	Yes
08600475.las	Yes
08600480.las	Yes
08600485.las	Yes
08600490.las	Yes
08600495.las	Yes
08600500.las	Yes
08600505.las	Yes
08600510.las	Yes
08600515.las	Yes
08600520.las	Yes
08600525.las	Yes
08600530.las	Yes
08650430.las	Yes
08650435.las	Yes
08650440.las	Yes
08650445.las	Yes
08650450.las	Yes
08650455.las	Yes
08650460.las	Yes
08650465.las	Yes
08650470.las	Yes
08650475.las	Yes
08650480.las	Yes
08650485.las	Yes
08650490.las	Yes
08650495.las	Yes
08650500.las	Yes
08650505.las	Yes
08650510.las	Yes
08650515.las	Yes
08650520.las	Yes
08650525.las	Yes
08650530.las	Yes
08700430.las	Yes
08700435.las	Yes
08700440.las	Yes
08700445.las	Yes
08700450.las	Yes
08700455.las	Yes
08700460.las	Yes
08700465.las	Yes
08700470.las	Yes
08700475.las	Yes
08700480.las	Yes
08700485.las	Yes
08700490.las	Yes
08700495.las	Yes

2.9 Report on Point Families (Tiled Data) - continued

File	Point Families Present
08700500.las	Yes
08700505.las	Yes
08700510.las	Yes
08700515.las	Yes
08700520.las	Yes
08700525.las	Yes
08700530.las	Yes
08750430.las	Yes
08750435.las	Yes
08750440.las	Yes
08750445.las	Yes
08750450.las	Yes
08750455.las	Yes
08750460.las	Yes
08750465.las	Yes
08750470.las	Yes
08750475.las	Yes
08750480.las	Yes
08750485.las	Yes
08750490.las	Yes
08750495.las	Yes
08750500.las	Yes
08750505.las	Yes
08750510.las	Yes
08750515.las	Yes
08750520.las	Yes
08750525.las	Yes
08750530.las	Yes

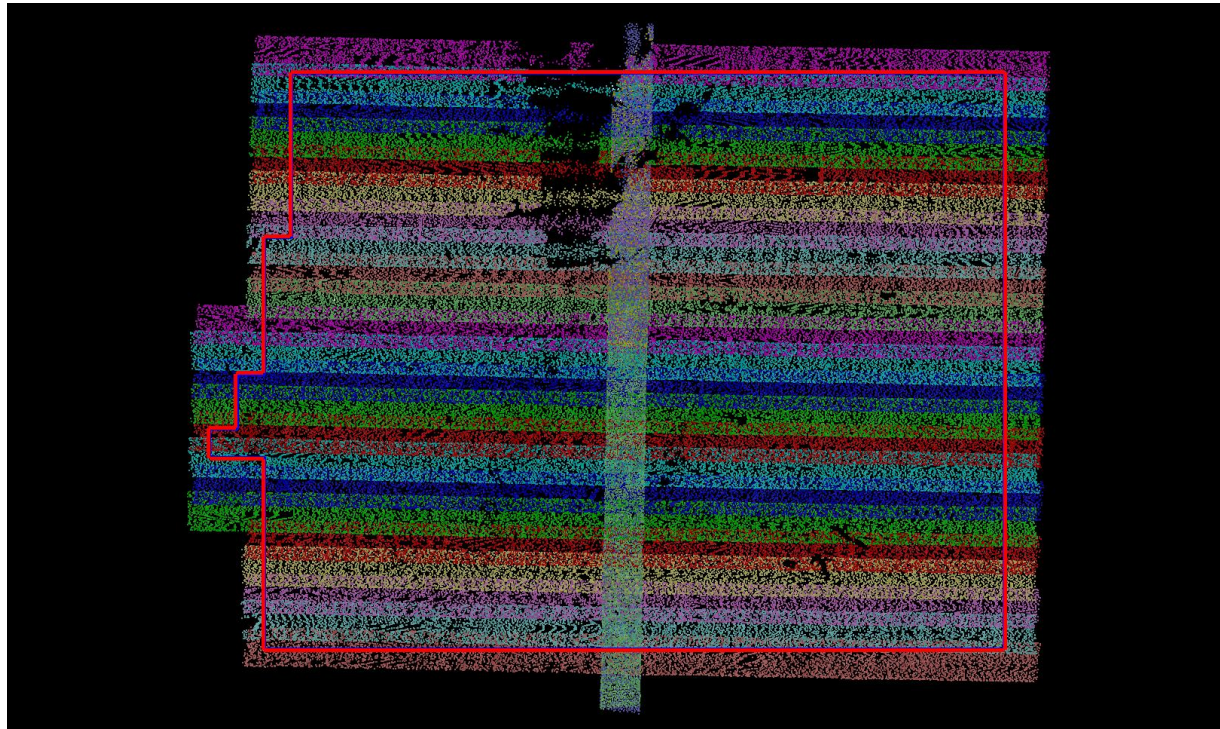
2.10 Report on Scope of Collection / Swath Coverage

The USGS LiDAR Base Specification Version 1.0 states: "All collected swaths are to be delivered as part of the Raw Data Deliverable. This includes calibration swaths and crossties. This in no way requires or implies that calibration swath data are to be included in product generation. All collected points are to be delivered. No points are to be deleted from the swath LAS files. Excepted from this are extraneous data outside of the buffered project area (aircraft turns, transit between the collection area and airport, transit between fill-in areas, and the like). These points may be permanently removed. Busted swaths that are being completely discarded by the vendor and re-flown do not need to be delivered."

The purpose of this section is to show the presence and extent of all LiDAR swath data files.

[Data Source - E:\Franklin_County\swath](#)

[Result Path - E:\Franklin_County\QAQC\2_10\CollectionArea.jpg](#)



Blue polygon is project boundary

Red polygon is project boundary buffered by 330 US Survey Feet

2.11 Report on Noise Classes and Withheld Points (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states: "Outliers, blunders, noise points, geometrically unreliable points near the extreme edge of the swath, and other points the vendor deems unusable are to be identified using the Withheld flag, as defined in the LAS specification. This applies primarily to points that are identified during pre-processing or through automated post-processing routines. If processing software is not capable of populating the Withheld bit, these points may be identified using Class=11. Noise points subsequently identified during manual Classification and Quality Assurance/Quality Control (QA/QC) may be assigned the standard LAS classification value for Noise (Class=7), regardless of whether the noise is "low" or "high" relative to the ground surface."

The purpose of this section is to list the presence and quantities of noise and withheld points for all LiDAR swath data files.

[Boresighted Files - E:\Franklin County\swath](#)

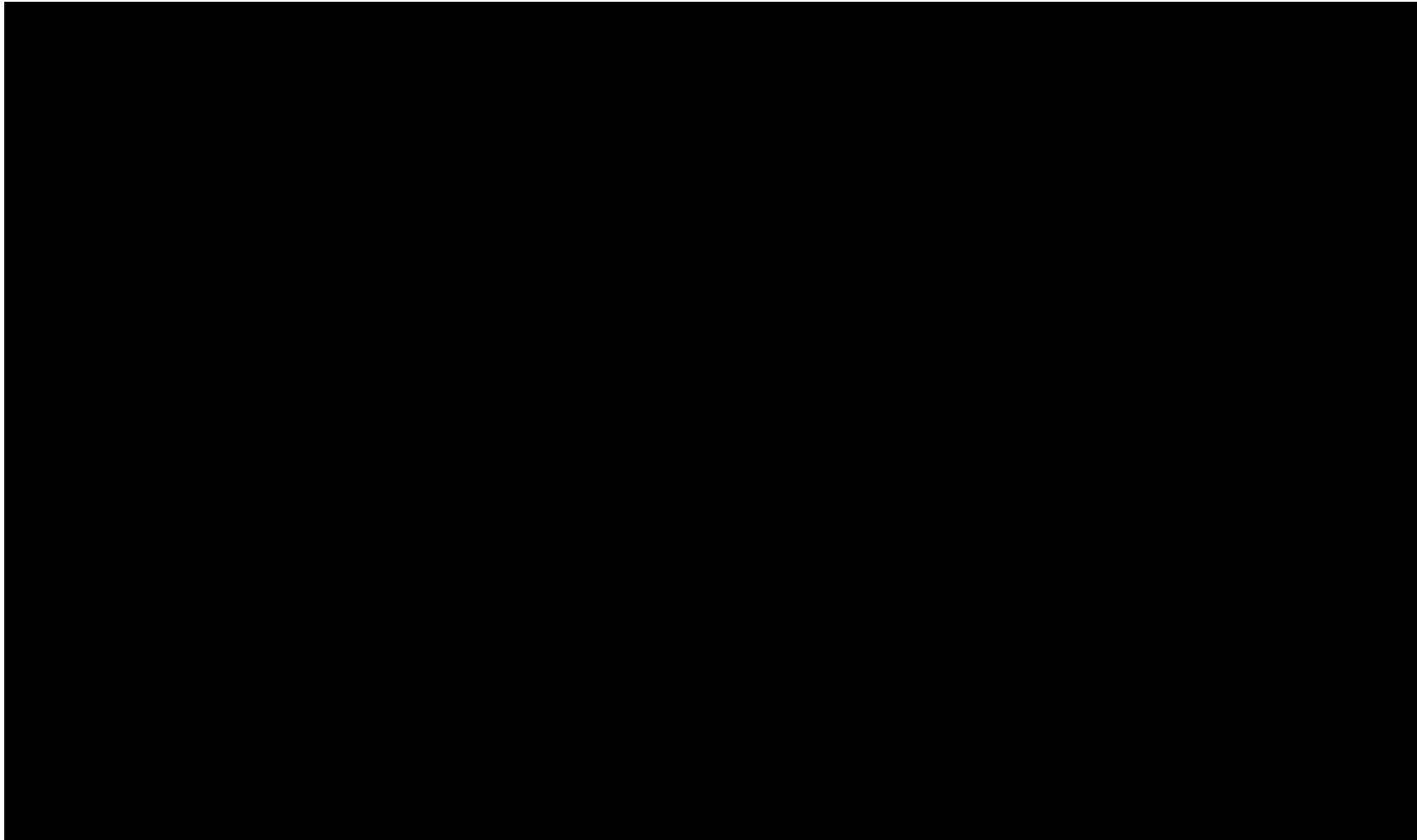
Class 7	0
Class 11	0
Withheld	0

2.11 Report on Noise Classes and Withheld Points (Swath Data)

The purpose of this section is to show the presence and extent of noise and withheld points for all LiDAR swath data files.

[Data Source - E:\Franklin County\swath](#)

[Result Path - E:\Franklin County\QAQC2\2_11\Boresighted.jpg](#)



2.11 Report on Noise Classes and Withheld Points (Tiled Data)

The purpose of this section is to list the presence and quantities of noise and withheld points for all LiDAR tiled data files.

[Classified Files - E:\Franklin County\las](#)

Class 7	1190132
Class 11	0
Withheld	0

2.11 Report on Noise Classes and Withheld Points (Tiled Data)

The purpose of this section is to show the presence and extent of noise and withheld points for all LiDAR tiled data files.

[Data Source - E:\Franklin County\las](#)

[Result Path - E:\Franklin County\QAQC2\2_11\Classified.jpg](#)



2.12 Report on Overlap Points (Swath Data)

The USGS LiDAR Base Specification Version 1.0 states:

- (1) ALL points not identified as Withheld are to be classified.
- (2) No points in the Classified LAS deliverable will be assigned Class=0.
- (3) Use of the ASPRS/LAS Overlap classification (Class=12) is prohibited.

If overlap points are required to be differentiated by the data producer or cooperating partner, they must be identified using a method that does not interfere with their classification:

- (1) Overlap points are tagged using Bit:0 of the User Data byte, as defined in the LAS specification. (SET=Overlap).
- (2) Overlap points are classified using the Standard Class values + 16.
- (3) Other techniques as agreed upon in advance.

The technique used to identify overlap must be clearly described in the project metadata files.

Note: A standard bit flag for identification of overlap points has been included in LAS v1.4, released on November 14, 2011.

The purpose of this section is to list the presence and quantities of overlap and unclassified points for all LiDAR swath data files.

[Boresighted Files - E:\Franklin_County\swath](#)

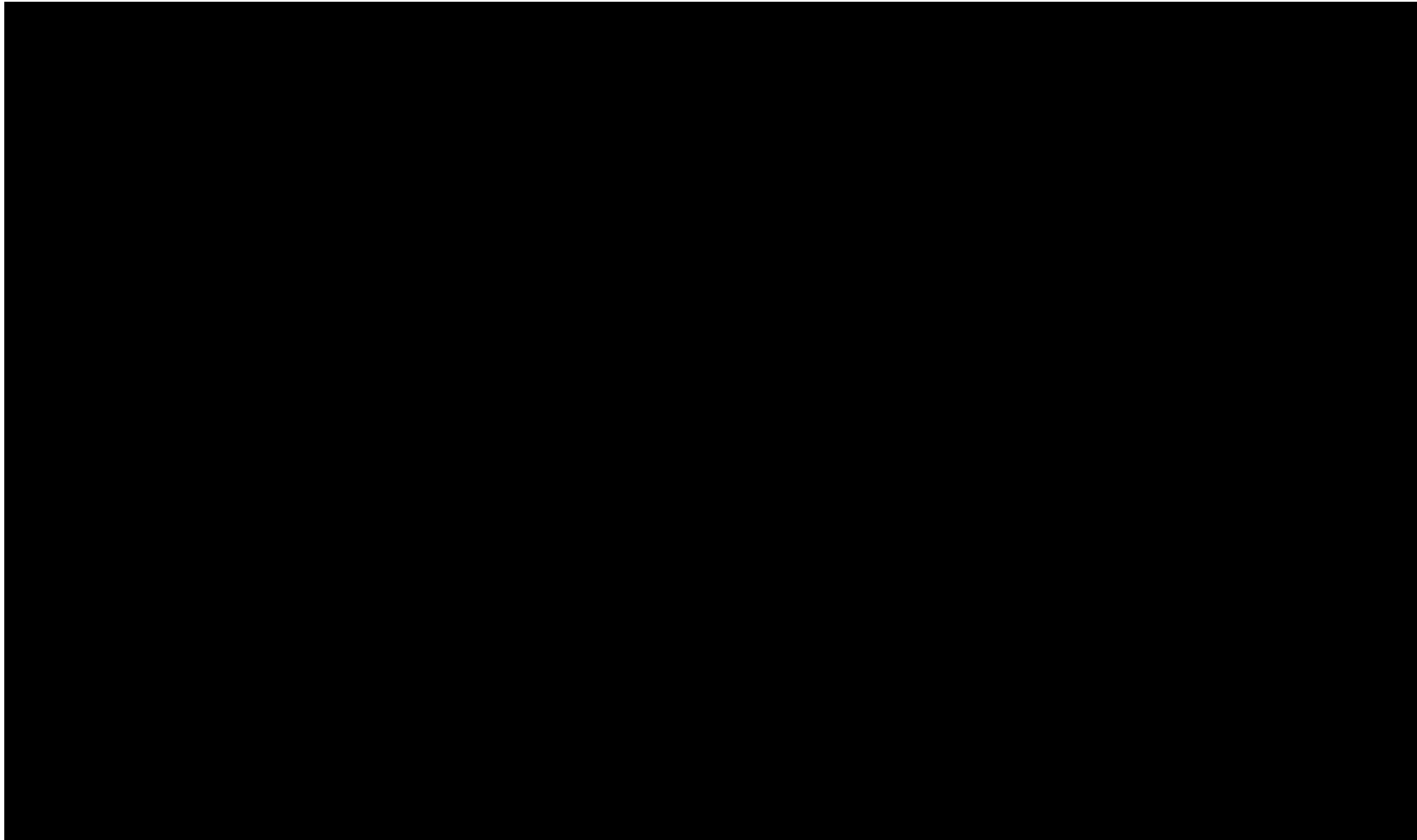
Class 12	0
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2.12 Report on Overlap Points (Swath Data)

The purpose of this section is to show the presence and extent of overlap and unclassified points for all LiDAR swath data files.

[Data Source - E:\Franklin County\swath](#)

[Result Path - E:\Franklin County\QAQC\2_12\Boresighted.jpg](#)



2.12 Report on Overlap Points (Tiled Data)

The purpose of this section is to list the presence and quantities of overlap and unclassified points for all LiDAR tiled data files.

[Classified Files - E:\Franklin County\las](#)

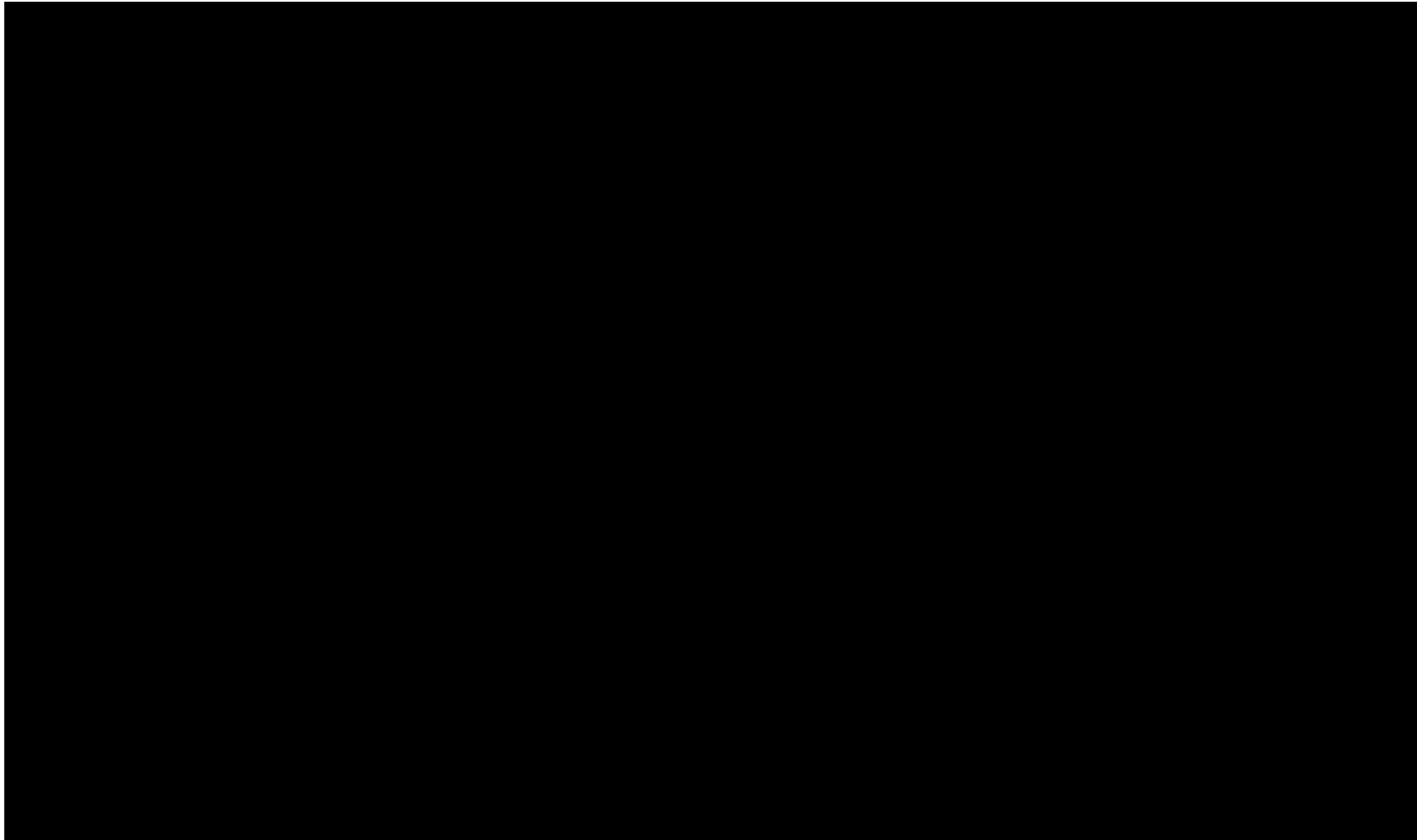
Class 12	0
----------	---

2.12 Report on Overlap Points (Tiled Data)

The purpose of this section is to show the presence and extent of overlap and unclassified points for all LiDAR tiled data files.

[Data Source - E:\Franklin County\las](#)

[Result Path - E:\Franklin County\QAQC\2_12\Classified.jpg](#)



2.13.1 Report on Positional Accuracy Validation

The USGS LiDAR Base Specification Version 1.0 states that: "Before classification of and development of derivative products from the point cloud, verification of the vertical accuracy of the point cloud, absolute and relative, is required. The Fundamental Vertical Accuracy (absolute) is to be assessed in clear, open areas as described in the section called Vertical Accuracy above. Swath-to-swath and within swath accuracies (relative) are to be documented. A detailed report of this validation process is a required deliverable."

The purpose of this section is to compare the fundamental vertical accuracy of the LiDAR swath data and the tiled data measured against surveyed ground check points. The reason for this comparison is to ensure that inappropriate steps were not taken after the filtering process to "warp" the LiDAR data to control/check points. The control check statistics of each dataset should look very similar, with only constant offsets as differences or variations due to the filtering process.

This reports only the Fundamental Vertical Accuracy (FVA)

E:\Franklin\QAQC\2_13\Report_PositionalAccuracy.csv

Vertical Units: US Survey Feet (/Meter)

	Boresighted Data	Classified Data
Control Points	26	26
Points with Coverage	26	26
Points With Required Accuracy	26	26
Percent of Points With Required Accuracy	100.00%	100.00%
Average Z Error	0.04/0.01	0.05/0.02
Maximum Z Error	0.41/0.13	0.45/0.14
Median Z Error	0.06/0.02	0.08/0.02
Minimum Z Error	-0.36/-0.11	-0.30/-0.09
NSSDA Vertical Accuracy	at the 95 confidence level	
	0.41/0.13	0.40/0.12
Standard Deviation (sigma) of Z for Sample	0.21/0.06	0.20/0.06
RMSE of Z for Sample	0.21/0.06	0.20/0.06
FGDC/NSSDA/FEMA Contour Interval	0.70/0.21	0.70/0.21
ASPRS Contour Interval	0.70/0.21	0.70/0.21
NMAS Contour Interval	0.70/0.21	0.70/0.21

ID	X	Y	Z	Covered	Z From LiDAR	Z Error	Covered	Z From LiDAR	Z Error
1002	763521.84	521707.30	455.00	True	455.04	0.05	True	455.05	0.05
1007	793648.43	521306.39	416.67	True	416.76	0.09	True	416.76	0.09
1011	794961.67	506836.55	428.21	True	428.07	-0.13	True	428.08	-0.13
1016	767471.17	501954.60	461.95	True	461.75	-0.20	True	461.75	-0.20

2.13.1 Report on Positional Accuracy Validation - continued

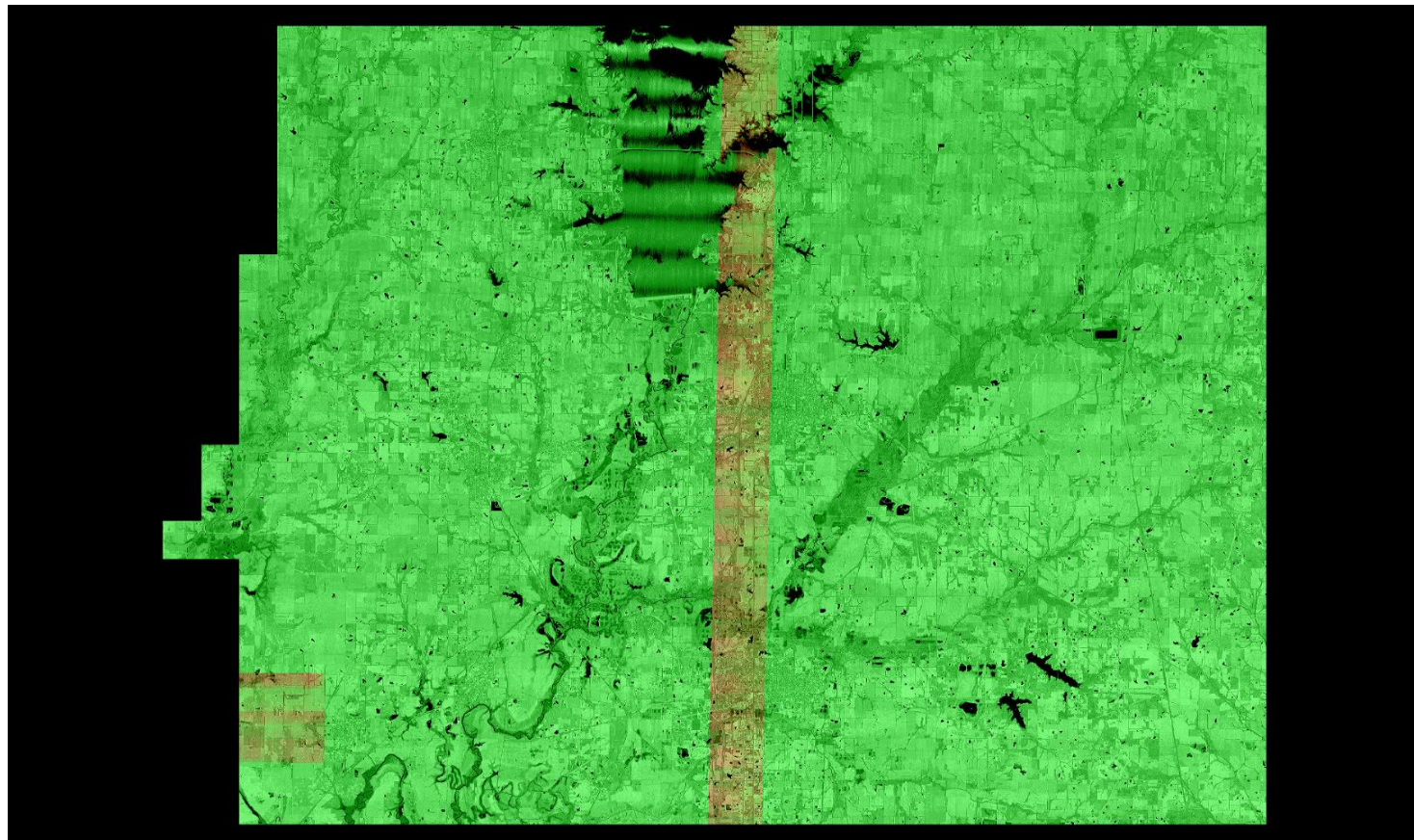
ID	X	Y	Z	Covered	Z From LiDAR	Z Error	Covered	Z From LiDAR	Z Error
1021	756803.56	483015.46	421.44	True	421.55	0.10	True	421.54	0.10
1026	759047.57	463217.64	442.47	True	442.52	0.05	True	442.53	0.05
1031	772182.53	446909.06	385.08	True	384.78	-0.29	True	384.85	-0.23
1037	807166.03	445064.92	410.22	True	410.42	0.20	True	410.34	0.12
1038	807166.05	445064.90	410.21	True	410.43	0.22	True	410.34	0.13
1044	796739.79	484895.40	387.59	True	387.32	-0.27	True	387.35	-0.24
1049	800633.07	469979.83	407.24	True	407.48	0.24	True	407.48	0.24
1054	772182.41	446909.07	385.14	True	384.79	-0.36	True	384.85	-0.30
1061	831220.36	446668.75	419.12	True	418.98	-0.14	True	419.01	-0.11
1066	860483.85	441418.59	502.78	True	503.20	0.41	True	502.95	0.16
1070	871529.88	460556.52	522.28	True	522.56	0.28	True	522.54	0.26
1074	831377.61	465312.69	447.02	True	446.84	-0.18	True	446.92	-0.10
1079	834245.38	478040.81	402.95	True	403.01	0.06	True	403.02	0.07
1083	866279.38	490681.62	427.62	True	427.55	-0.06	True	427.55	-0.06
1087	866279.52	490681.60	427.81	True	427.56	-0.25	True	427.56	-0.25
1090	866279.48	490681.64	427.49	True	427.56	0.07	True	427.56	0.07
1093	833338.99	508865.44	452.97	True	453.00	0.03	True	453.25	0.28
1100	866279.58	490681.61	427.45	True	427.57	0.12	True	427.56	0.12
2002	870427.96	498522.14	486.52	True	486.76	0.25	True	486.78	0.26
3001	871755.90	522888.13	510.20	True	510.27	0.07	True	510.51	0.31
4003	831322.45	528940.31	432.24	True	432.60	0.37	True	432.69	0.45
5001	866279.45	490681.61	427.36	True	427.56	0.20	True	427.56	0.20

2.13.2 Overview of Separation between Boresighted and Classified

The purpose of this section is to graphically show the vertical separation deltas (after removing any constant vertical distance offset – i.e., shift) between the swath data and the tiled data. The graphic should look entirely green. If there is a checkerboard pattern of colors, it is highly likely that the tiled data was warped to fit the control check points. This unauthorized practice is also known as custom error geoid adjustment.

This reports only the Fundamental Vertical Accuracy (FVA)

E:\Franklin\QAQC\2_13\Separation_Boresighted_With_Classified.jp2



2.14 Report on Classification Accuracy – Hillshade Displayed with 1 km X 1km tiles Overlayed

The USGS LiDAR Base Specification Version 1.0 states that: "It is required that due diligence in the classification process will produce data that meet the following tests:

- (1) Following classification processing, no non-withheld points should remain in Class 0.
- (2) Within any 1 kilometer (km) x 1 km area, no more than 2 percent of non-withheld points will possess a demonstrably erroneous classification value.
- (3) Points remaining in Class 1 that should be classified in any other required Class are subject to these accuracy requirements and will be counted towards the 2 percent threshold.

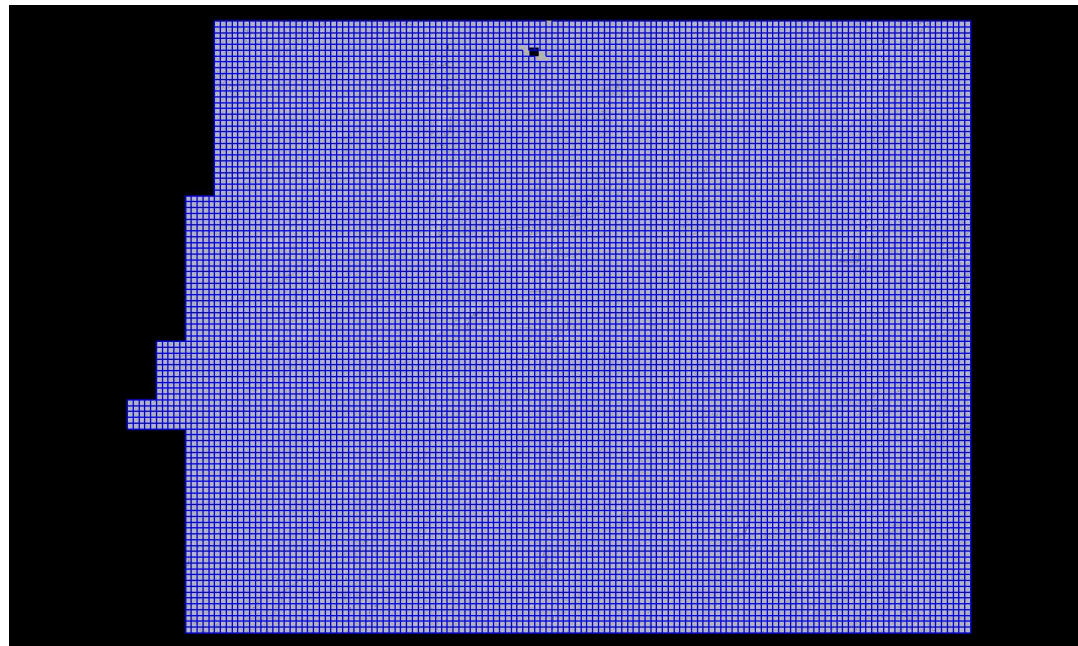
Note: These requirements may be relaxed to accommodate collections in areas where the USGS agrees classification to be particularly difficult.

The purpose of this section is to overlay a 1km x 1km tile scheme over the bare earth surface hillshade product to use for ground filter QC inspections.

[Data Source - E:\Franklin County\las](#)

[Result Path - E:\Franklin County\QAQC\2_14_15\Hillshade_SingleFile.jp2](#)

[Tile Shapefile - E:\Franklin County\QAQC\2_14_15\tile.shp](#)



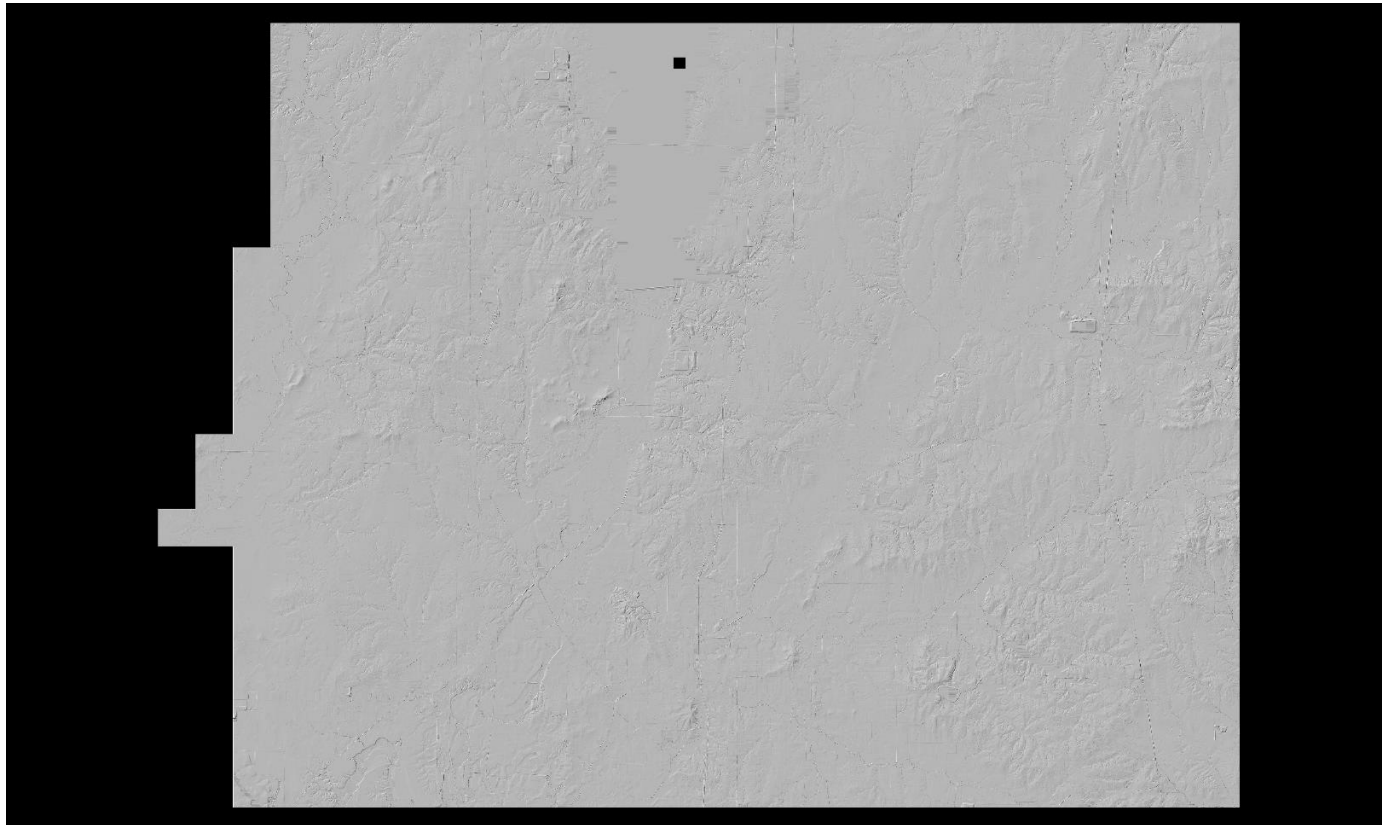
2.15 Report on Classification Consistency – Hillshade Displayed

The USGS LiDAR Base Specification Version 1.0 states that: "Point classification is to be consistent across the entire project. Noticeable variations in the character, texture, or quality of the classification between tiles, swaths, lifts, or other non-natural divisions will be cause for rejection of the entire deliverable."

The purpose of this section is to show the bare earth surface hillshade product for classification consistency inspection.

[Data Source - E:\Franklin County\las](#)

[Result Path - E:\Franklin County\QAQC\2_14_15\Hillshade_SingleFile.jp2](#)



2.16 Report on Tiles

The USGS LiDAR Base Specification Version 1.0 states that:

Tiles:

Note: This section assumes a projected coordinate reference system.

A single non-overlapped tiling scheme (the Project Tiling Scheme) will be established and agreed upon by the data producer and the USGS before collection. This scheme will be used for ALL tiled deliverables.

- (1) Tile size is required to be an integer multiple of the cell size of raster deliverables.
- (2) Tiles are required to be sized using the same units as the coordinate system of the data.
- (3) Tiles are required to be indexed in X and Y to an integer multiple of the tile's X-Y dimensions.
- (4) All tiled deliverables will conform to the Project Tiling Scheme, without added overlap.
- (5) Tiled deliverables will edge-match seamlessly and without gaps.

The purpose of this section is to report on the unallowed presence of skew and overlap in the project tile scheme.

[Tile File: E:\Franklin_County\tile_index\tile_index.shp](E:\Franklin_County\tile_index\tile_index.shp)

Units: US Survey Feet

Tile	Non-Skewed Tile	Width	Height	Overlap
07350465	YES	5000.00	5000.00	False
07400465	YES	5000.00	5000.00	False
07400470	YES	5000.00	5000.00	False
07400475	YES	5000.00	5000.00	False
07450430	YES	5000.00	5000.00	False
07450435	YES	5000.00	5000.00	False
07450440	YES	5000.00	5000.00	False
07450445	YES	5000.00	5000.00	False
07450450	YES	5000.00	5000.00	False
07450455	YES	5000.00	5000.00	False
07450460	YES	5000.00	5000.00	False
07450465	YES	5000.00	5000.00	False
07450470	YES	5000.00	5000.00	False
07450475	YES	5000.00	5000.00	False
07450480	YES	5000.00	5000.00	False
07450485	YES	5000.00	5000.00	False
07450490	YES	5000.00	5000.00	False
07450495	YES	5000.00	5000.00	False
07450500	YES	5000.00	5000.00	False
07500430	YES	5000.00	5000.00	False
07500435	YES	5000.00	5000.00	False
07500440	YES	5000.00	5000.00	False
07500445	YES	5000.00	5000.00	False
07500450	YES	5000.00	5000.00	False
07500455	YES	5000.00	5000.00	False
07500460	YES	5000.00	5000.00	False
07500465	YES	5000.00	5000.00	False
07500470	YES	5000.00	5000.00	False
07500475	YES	5000.00	5000.00	False
07500480	YES	5000.00	5000.00	False
07500485	YES	5000.00	5000.00	False
07500490	YES	5000.00	5000.00	False
07500495	YES	5000.00	5000.00	False
07500500	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
07500505	YES	5000.00	5000.00	False
07500510	YES	5000.00	5000.00	False
07500515	YES	5000.00	5000.00	False
07500520	YES	5000.00	5000.00	False
07500525	YES	5000.00	5000.00	False
07500530	YES	5000.00	5000.00	False
07550430	YES	5000.00	5000.00	False
07550435	YES	5000.00	5000.00	False
07550440	YES	5000.00	5000.00	False
07550445	YES	5000.00	5000.00	False
07550450	YES	5000.00	5000.00	False
07550455	YES	5000.00	5000.00	False
07550460	YES	5000.00	5000.00	False
07550465	YES	5000.00	5000.00	False
07550470	YES	5000.00	5000.00	False
07550475	YES	5000.00	5000.00	False
07550480	YES	5000.00	5000.00	False
07550485	YES	5000.00	5000.00	False
07550490	YES	5000.00	5000.00	False
07550495	YES	5000.00	5000.00	False
07550500	YES	5000.00	5000.00	False
07550505	YES	5000.00	5000.00	False
07550510	YES	5000.00	5000.00	False
07550515	YES	5000.00	5000.00	False
07550520	YES	5000.00	5000.00	False
07550525	YES	5000.00	5000.00	False
07550530	YES	5000.00	5000.00	False
07600430	YES	5000.00	5000.00	False
07600435	YES	5000.00	5000.00	False
07600440	YES	5000.00	5000.00	False
07600445	YES	5000.00	5000.00	False
07600450	YES	5000.00	5000.00	False
07600455	YES	5000.00	5000.00	False
07600460	YES	5000.00	5000.00	False
07600465	YES	5000.00	5000.00	False
07600470	YES	5000.00	5000.00	False
07600475	YES	5000.00	5000.00	False
07600480	YES	5000.00	5000.00	False
07600485	YES	5000.00	5000.00	False
07600490	YES	5000.00	5000.00	False
07600495	YES	5000.00	5000.00	False
07600500	YES	5000.00	5000.00	False
07600505	YES	5000.00	5000.00	False
07600510	YES	5000.00	5000.00	False
07600515	YES	5000.00	5000.00	False
07600520	YES	5000.00	5000.00	False
07600525	YES	5000.00	5000.00	False
07600530	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
07650430	YES	5000.00	5000.00	False
07650435	YES	5000.00	5000.00	False
07650440	YES	5000.00	5000.00	False
07650445	YES	5000.00	5000.00	False
07650450	YES	5000.00	5000.00	False
07650455	YES	5000.00	5000.00	False
07650460	YES	5000.00	5000.00	False
07650465	YES	5000.00	5000.00	False
07650470	YES	5000.00	5000.00	False
07650475	YES	5000.00	5000.00	False
07650480	YES	5000.00	5000.00	False
07650485	YES	5000.00	5000.00	False
07650490	YES	5000.00	5000.00	False
07650495	YES	5000.00	5000.00	False
07650500	YES	5000.00	5000.00	False
07650505	YES	5000.00	5000.00	False
07650510	YES	5000.00	5000.00	False
07650515	YES	5000.00	5000.00	False
07650520	YES	5000.00	5000.00	False
07650525	YES	5000.00	5000.00	False
07650530	YES	5000.00	5000.00	False
07700430	YES	5000.00	5000.00	False
07700435	YES	5000.00	5000.00	False
07700440	YES	5000.00	5000.00	False
07700445	YES	5000.00	5000.00	False
07700450	YES	5000.00	5000.00	False
07700455	YES	5000.00	5000.00	False
07700460	YES	5000.00	5000.00	False
07700465	YES	5000.00	5000.00	False
07700470	YES	5000.00	5000.00	False
07700475	YES	5000.00	5000.00	False
07700480	YES	5000.00	5000.00	False
07700485	YES	5000.00	5000.00	False
07700490	YES	5000.00	5000.00	False
07700495	YES	5000.00	5000.00	False
07700500	YES	5000.00	5000.00	False
07700505	YES	5000.00	5000.00	False
07700510	YES	5000.00	5000.00	False
07700515	YES	5000.00	5000.00	False
07700520	YES	5000.00	5000.00	False
07700525	YES	5000.00	5000.00	False
07700530	YES	5000.00	5000.00	False
07750430	YES	5000.00	5000.00	False
07750435	YES	5000.00	5000.00	False
07750440	YES	5000.00	5000.00	False
07750445	YES	5000.00	5000.00	False
07750450	YES	5000.00	5000.00	False
07750455	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
07750460	YES	5000.00	5000.00	False
07750465	YES	5000.00	5000.00	False
07750470	YES	5000.00	5000.00	False
07750475	YES	5000.00	5000.00	False
07750480	YES	5000.00	5000.00	False
07750485	YES	5000.00	5000.00	False
07750490	YES	5000.00	5000.00	False
07750495	YES	5000.00	5000.00	False
07750500	YES	5000.00	5000.00	False
07750505	YES	5000.00	5000.00	False
07750510	YES	5000.00	5000.00	False
07750515	YES	5000.00	5000.00	False
07750520	YES	5000.00	5000.00	False
07750525	YES	5000.00	5000.00	False
07750530	YES	5000.00	5000.00	False
07800430	YES	5000.00	5000.00	False
07800435	YES	5000.00	5000.00	False
07800440	YES	5000.00	5000.00	False
07800445	YES	5000.00	5000.00	False
07800450	YES	5000.00	5000.00	False
07800455	YES	5000.00	5000.00	False
07800460	YES	5000.00	5000.00	False
07800465	YES	5000.00	5000.00	False
07800470	YES	5000.00	5000.00	False
07800475	YES	5000.00	5000.00	False
07800480	YES	5000.00	5000.00	False
07800485	YES	5000.00	5000.00	False
07800490	YES	5000.00	5000.00	False
07800495	YES	5000.00	5000.00	False
07800500	YES	5000.00	5000.00	False
07800505	YES	5000.00	5000.00	False
07800510	YES	5000.00	5000.00	False
07800515	YES	5000.00	5000.00	False
07800520	YES	5000.00	5000.00	False
07800525	YES	5000.00	5000.00	False
07800530	YES	5000.00	5000.00	False
07850430	YES	5000.00	5000.00	False
07850435	YES	5000.00	5000.00	False
07850440	YES	5000.00	5000.00	False
07850445	YES	5000.00	5000.00	False
07850450	YES	5000.00	5000.00	False
07850455	YES	5000.00	5000.00	False
07850460	YES	5000.00	5000.00	False
07850465	YES	5000.00	5000.00	False
07850470	YES	5000.00	5000.00	False
07850475	YES	5000.00	5000.00	False
07850480	YES	5000.00	5000.00	False
07850485	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
07850490	YES	5000.00	5000.00	False
07850495	YES	5000.00	5000.00	False
07850500	YES	5000.00	5000.00	False
07850505	YES	5000.00	5000.00	False
07850510	YES	5000.00	5000.00	False
07850515	YES	5000.00	5000.00	False
07850520	YES	5000.00	5000.00	False
07850525	YES	5000.00	5000.00	False
07850530	YES	5000.00	5000.00	False
07900430	YES	5000.00	5000.00	False
07900435	YES	5000.00	5000.00	False
07900440	YES	5000.00	5000.00	False
07900445	YES	5000.00	5000.00	False
07900450	YES	5000.00	5000.00	False
07900455	YES	5000.00	5000.00	False
07900460	YES	5000.00	5000.00	False
07900465	YES	5000.00	5000.00	False
07900470	YES	5000.00	5000.00	False
07900475	YES	5000.00	5000.00	False
07900480	YES	5000.00	5000.00	False
07900485	YES	5000.00	5000.00	False
07900490	YES	5000.00	5000.00	False
07900495	YES	5000.00	5000.00	False
07900500	YES	5000.00	5000.00	False
07900505	YES	5000.00	5000.00	False
07900510	YES	5000.00	5000.00	False
07900515	YES	5000.00	5000.00	False
07900520	YES	5000.00	5000.00	False
07900525	YES	5000.00	5000.00	False
07900530	YES	5000.00	5000.00	False
07950430	YES	5000.00	5000.00	False
07950435	YES	5000.00	5000.00	False
07950440	YES	5000.00	5000.00	False
07950445	YES	5000.00	5000.00	False
07950450	YES	5000.00	5000.00	False
07950455	YES	5000.00	5000.00	False
07950460	YES	5000.00	5000.00	False
07950465	YES	5000.00	5000.00	False
07950470	YES	5000.00	5000.00	False
07950475	YES	5000.00	5000.00	False
07950480	YES	5000.00	5000.00	False
07950485	YES	5000.00	5000.00	False
07950490	YES	5000.00	5000.00	False
07950495	YES	5000.00	5000.00	False
07950500	YES	5000.00	5000.00	False
07950505	YES	5000.00	5000.00	False
07950510	YES	5000.00	5000.00	False
07950515	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
07950520	YES	5000.00	5000.00	False
07950525	YES	5000.00	5000.00	False
07950530	YES	5000.00	5000.00	False
08000430	YES	5000.00	5000.00	False
08000435	YES	5000.00	5000.00	False
08000440	YES	5000.00	5000.00	False
08000445	YES	5000.00	5000.00	False
08000450	YES	5000.00	5000.00	False
08000455	YES	5000.00	5000.00	False
08000460	YES	5000.00	5000.00	False
08000465	YES	5000.00	5000.00	False
08000470	YES	5000.00	5000.00	False
08000475	YES	5000.00	5000.00	False
08000480	YES	5000.00	5000.00	False
08000485	YES	5000.00	5000.00	False
08000490	YES	5000.00	5000.00	False
08000495	YES	5000.00	5000.00	False
08000500	YES	5000.00	5000.00	False
08000505	YES	5000.00	5000.00	False
08000510	YES	5000.00	5000.00	False
08000515	YES	5000.00	5000.00	False
08000520	YES	5000.00	5000.00	False
08000525	YES	5000.00	5000.00	False
08000530	YES	5000.00	5000.00	False
08050430	YES	5000.00	5000.00	False
08050435	YES	5000.00	5000.00	False
08050440	YES	5000.00	5000.00	False
08050445	YES	5000.00	5000.00	False
08050450	YES	5000.00	5000.00	False
08050455	YES	5000.00	5000.00	False
08050460	YES	5000.00	5000.00	False
08050465	YES	5000.00	5000.00	False
08050470	YES	5000.00	5000.00	False
08050475	YES	5000.00	5000.00	False
08050480	YES	5000.00	5000.00	False
08050485	YES	5000.00	5000.00	False
08050490	YES	5000.00	5000.00	False
08050495	YES	5000.00	5000.00	False
08050500	YES	5000.00	5000.00	False
08050505	YES	5000.00	5000.00	False
08050510	YES	5000.00	5000.00	False
08050515	YES	5000.00	5000.00	False
08050520	YES	5000.00	5000.00	False
08050525	YES	5000.00	5000.00	False
08050530	YES	5000.00	5000.00	False
08100430	YES	5000.00	5000.00	False
08100435	YES	5000.00	5000.00	False
08100440	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
08100445	YES	5000.00	5000.00	False
08100450	YES	5000.00	5000.00	False
08100455	YES	5000.00	5000.00	False
08100460	YES	5000.00	5000.00	False
08100465	YES	5000.00	5000.00	False
08100470	YES	5000.00	5000.00	False
08100475	YES	5000.00	5000.00	False
08100480	YES	5000.00	5000.00	False
08100485	YES	5000.00	5000.00	False
08100490	YES	5000.00	5000.00	False
08100495	YES	5000.00	5000.00	False
08100500	YES	5000.00	5000.00	False
08100505	YES	5000.00	5000.00	False
08100510	YES	5000.00	5000.00	False
08100515	YES	5000.00	5000.00	False
08100520	YES	5000.00	5000.00	False
08100525	YES	5000.00	5000.00	False
08100530	YES	5000.00	5000.00	False
08150430	YES	5000.00	5000.00	False
08150435	YES	5000.00	5000.00	False
08150440	YES	5000.00	5000.00	False
08150445	YES	5000.00	5000.00	False
08150450	YES	5000.00	5000.00	False
08150455	YES	5000.00	5000.00	False
08150460	YES	5000.00	5000.00	False
08150465	YES	5000.00	5000.00	False
08150470	YES	5000.00	5000.00	False
08150475	YES	5000.00	5000.00	False
08150480	YES	5000.00	5000.00	False
08150485	YES	5000.00	5000.00	False
08150490	YES	5000.00	5000.00	False
08150495	YES	5000.00	5000.00	False
08150500	YES	5000.00	5000.00	False
08150505	YES	5000.00	5000.00	False
08150510	YES	5000.00	5000.00	False
08150515	YES	5000.00	5000.00	False
08150520	YES	5000.00	5000.00	False
08150525	YES	5000.00	5000.00	False
08150530	YES	5000.00	5000.00	False
08200430	YES	5000.00	5000.00	False
08200435	YES	5000.00	5000.00	False
08200440	YES	5000.00	5000.00	False
08200445	YES	5000.00	5000.00	False
08200450	YES	5000.00	5000.00	False
08200455	YES	5000.00	5000.00	False
08200460	YES	5000.00	5000.00	False
08200465	YES	5000.00	5000.00	False
08200470	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
08200475	YES	5000.00	5000.00	False
08200480	YES	5000.00	5000.00	False
08200485	YES	5000.00	5000.00	False
08200490	YES	5000.00	5000.00	False
08200495	YES	5000.00	5000.00	False
08200500	YES	5000.00	5000.00	False
08200505	YES	5000.00	5000.00	False
08200510	YES	5000.00	5000.00	False
08200515	YES	5000.00	5000.00	False
08200520	YES	5000.00	5000.00	False
08200525	YES	5000.00	5000.00	False
08200530	YES	5000.00	5000.00	False
08250430	YES	5000.00	5000.00	False
08250435	YES	5000.00	5000.00	False
08250440	YES	5000.00	5000.00	False
08250445	YES	5000.00	5000.00	False
08250450	YES	5000.00	5000.00	False
08250455	YES	5000.00	5000.00	False
08250460	YES	5000.00	5000.00	False
08250465	YES	5000.00	5000.00	False
08250470	YES	5000.00	5000.00	False
08250475	YES	5000.00	5000.00	False
08250480	YES	5000.00	5000.00	False
08250485	YES	5000.00	5000.00	False
08250490	YES	5000.00	5000.00	False
08250495	YES	5000.00	5000.00	False
08250500	YES	5000.00	5000.00	False
08250505	YES	5000.00	5000.00	False
08250510	YES	5000.00	5000.00	False
08250515	YES	5000.00	5000.00	False
08250520	YES	5000.00	5000.00	False
08250525	YES	5000.00	5000.00	False
08250530	YES	5000.00	5000.00	False
08300430	YES	5000.00	5000.00	False
08300435	YES	5000.00	5000.00	False
08300440	YES	5000.00	5000.00	False
08300445	YES	5000.00	5000.00	False
08300450	YES	5000.00	5000.00	False
08300455	YES	5000.00	5000.00	False
08300460	YES	5000.00	5000.00	False
08300465	YES	5000.00	5000.00	False
08300470	YES	5000.00	5000.00	False
08300475	YES	5000.00	5000.00	False
08300480	YES	5000.00	5000.00	False
08300485	YES	5000.00	5000.00	False
08300490	YES	5000.00	5000.00	False
08300495	YES	5000.00	5000.00	False
08300500	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
08300505	YES	5000.00	5000.00	False
08300510	YES	5000.00	5000.00	False
08300515	YES	5000.00	5000.00	False
08300520	YES	5000.00	5000.00	False
08300525	YES	5000.00	5000.00	False
08300530	YES	5000.00	5000.00	False
08350430	YES	5000.00	5000.00	False
08350435	YES	5000.00	5000.00	False
08350440	YES	5000.00	5000.00	False
08350445	YES	5000.00	5000.00	False
08350450	YES	5000.00	5000.00	False
08350455	YES	5000.00	5000.00	False
08350460	YES	5000.00	5000.00	False
08350465	YES	5000.00	5000.00	False
08350470	YES	5000.00	5000.00	False
08350475	YES	5000.00	5000.00	False
08350480	YES	5000.00	5000.00	False
08350485	YES	5000.00	5000.00	False
08350490	YES	5000.00	5000.00	False
08350495	YES	5000.00	5000.00	False
08350500	YES	5000.00	5000.00	False
08350505	YES	5000.00	5000.00	False
08350510	YES	5000.00	5000.00	False
08350515	YES	5000.00	5000.00	False
08350520	YES	5000.00	5000.00	False
08350525	YES	5000.00	5000.00	False
08350530	YES	5000.00	5000.00	False
08400430	YES	5000.00	5000.00	False
08400435	YES	5000.00	5000.00	False
08400440	YES	5000.00	5000.00	False
08400445	YES	5000.00	5000.00	False
08400450	YES	5000.00	5000.00	False
08400455	YES	5000.00	5000.00	False
08400460	YES	5000.00	5000.00	False
08400465	YES	5000.00	5000.00	False
08400470	YES	5000.00	5000.00	False
08400475	YES	5000.00	5000.00	False
08400480	YES	5000.00	5000.00	False
08400485	YES	5000.00	5000.00	False
08400490	YES	5000.00	5000.00	False
08400495	YES	5000.00	5000.00	False
08400500	YES	5000.00	5000.00	False
08400505	YES	5000.00	5000.00	False
08400510	YES	5000.00	5000.00	False
08400515	YES	5000.00	5000.00	False
08400520	YES	5000.00	5000.00	False
08400525	YES	5000.00	5000.00	False
08400530	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
08450430	YES	5000.00	5000.00	False
08450435	YES	5000.00	5000.00	False
08450440	YES	5000.00	5000.00	False
08450445	YES	5000.00	5000.00	False
08450450	YES	5000.00	5000.00	False
08450455	YES	5000.00	5000.00	False
08450460	YES	5000.00	5000.00	False
08450465	YES	5000.00	5000.00	False
08450470	YES	5000.00	5000.00	False
08450475	YES	5000.00	5000.00	False
08450480	YES	5000.00	5000.00	False
08450485	YES	5000.00	5000.00	False
08450490	YES	5000.00	5000.00	False
08450495	YES	5000.00	5000.00	False
08450500	YES	5000.00	5000.00	False
08450505	YES	5000.00	5000.00	False
08450510	YES	5000.00	5000.00	False
08450515	YES	5000.00	5000.00	False
08450520	YES	5000.00	5000.00	False
08450525	YES	5000.00	5000.00	False
08450530	YES	5000.00	5000.00	False
08500430	YES	5000.00	5000.00	False
08500435	YES	5000.00	5000.00	False
08500440	YES	5000.00	5000.00	False
08500445	YES	5000.00	5000.00	False
08500450	YES	5000.00	5000.00	False
08500455	YES	5000.00	5000.00	False
08500460	YES	5000.00	5000.00	False
08500465	YES	5000.00	5000.00	False
08500470	YES	5000.00	5000.00	False
08500475	YES	5000.00	5000.00	False
08500480	YES	5000.00	5000.00	False
08500485	YES	5000.00	5000.00	False
08500490	YES	5000.00	5000.00	False
08500495	YES	5000.00	5000.00	False
08500500	YES	5000.00	5000.00	False
08500505	YES	5000.00	5000.00	False
08500510	YES	5000.00	5000.00	False
08500515	YES	5000.00	5000.00	False
08500520	YES	5000.00	5000.00	False
08500525	YES	5000.00	5000.00	False
08500530	YES	5000.00	5000.00	False
08550430	YES	5000.00	5000.00	False
08550435	YES	5000.00	5000.00	False
08550440	YES	5000.00	5000.00	False
08550445	YES	5000.00	5000.00	False
08550450	YES	5000.00	5000.00	False
08550455	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
08550460	YES	5000.00	5000.00	False
08550465	YES	5000.00	5000.00	False
08550470	YES	5000.00	5000.00	False
08550475	YES	5000.00	5000.00	False
08550480	YES	5000.00	5000.00	False
08550485	YES	5000.00	5000.00	False
08550490	YES	5000.00	5000.00	False
08550495	YES	5000.00	5000.00	False
08550500	YES	5000.00	5000.00	False
08550505	YES	5000.00	5000.00	False
08550510	YES	5000.00	5000.00	False
08550515	YES	5000.00	5000.00	False
08550520	YES	5000.00	5000.00	False
08550525	YES	5000.00	5000.00	False
08550530	YES	5000.00	5000.00	False
08600430	YES	5000.00	5000.00	False
08600435	YES	5000.00	5000.00	False
08600440	YES	5000.00	5000.00	False
08600445	YES	5000.00	5000.00	False
08600450	YES	5000.00	5000.00	False
08600455	YES	5000.00	5000.00	False
08600460	YES	5000.00	5000.00	False
08600465	YES	5000.00	5000.00	False
08600470	YES	5000.00	5000.00	False
08600475	YES	5000.00	5000.00	False
08600480	YES	5000.00	5000.00	False
08600485	YES	5000.00	5000.00	False
08600490	YES	5000.00	5000.00	False
08600495	YES	5000.00	5000.00	False
08600500	YES	5000.00	5000.00	False
08600505	YES	5000.00	5000.00	False
08600510	YES	5000.00	5000.00	False
08600515	YES	5000.00	5000.00	False
08600520	YES	5000.00	5000.00	False
08600525	YES	5000.00	5000.00	False
08600530	YES	5000.00	5000.00	False
08650430	YES	5000.00	5000.00	False
08650435	YES	5000.00	5000.00	False
08650440	YES	5000.00	5000.00	False
08650445	YES	5000.00	5000.00	False
08650450	YES	5000.00	5000.00	False
08650455	YES	5000.00	5000.00	False
08650460	YES	5000.00	5000.00	False
08650465	YES	5000.00	5000.00	False
08650470	YES	5000.00	5000.00	False
08650475	YES	5000.00	5000.00	False
08650480	YES	5000.00	5000.00	False
08650485	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
08650490	YES	5000.00	5000.00	False
08650495	YES	5000.00	5000.00	False
08650500	YES	5000.00	5000.00	False
08650505	YES	5000.00	5000.00	False
08650510	YES	5000.00	5000.00	False
08650515	YES	5000.00	5000.00	False
08650520	YES	5000.00	5000.00	False
08650525	YES	5000.00	5000.00	False
08650530	YES	5000.00	5000.00	False
08700430	YES	5000.00	5000.00	False
08700435	YES	5000.00	5000.00	False
08700440	YES	5000.00	5000.00	False
08700445	YES	5000.00	5000.00	False
08700450	YES	5000.00	5000.00	False
08700455	YES	5000.00	5000.00	False
08700460	YES	5000.00	5000.00	False
08700465	YES	5000.00	5000.00	False
08700470	YES	5000.00	5000.00	False
08700475	YES	5000.00	5000.00	False
08700480	YES	5000.00	5000.00	False
08700485	YES	5000.00	5000.00	False
08700490	YES	5000.00	5000.00	False
08700495	YES	5000.00	5000.00	False
08700500	YES	5000.00	5000.00	False
08700505	YES	5000.00	5000.00	False
08700510	YES	5000.00	5000.00	False
08700515	YES	5000.00	5000.00	False
08700520	YES	5000.00	5000.00	False
08700525	YES	5000.00	5000.00	False
08700530	YES	5000.00	5000.00	False
08750430	YES	5000.00	5000.00	False
08750435	YES	5000.00	5000.00	False
08750440	YES	5000.00	5000.00	False
08750445	YES	5000.00	5000.00	False
08750450	YES	5000.00	5000.00	False
08750455	YES	5000.00	5000.00	False
08750460	YES	5000.00	5000.00	False
08750465	YES	5000.00	5000.00	False
08750470	YES	5000.00	5000.00	False
08750475	YES	5000.00	5000.00	False
08750480	YES	5000.00	5000.00	False
08750485	YES	5000.00	5000.00	False
08750490	YES	5000.00	5000.00	False
08750495	YES	5000.00	5000.00	False
08750500	YES	5000.00	5000.00	False
08750505	YES	5000.00	5000.00	False
08750510	YES	5000.00	5000.00	False
08750515	YES	5000.00	5000.00	False

2.16 Report on Tiles - continued

<u>Tile</u>	<u>Non-Skewed Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
08750520	YES	5000.00	5000.00	False
08750525	YES	5000.00	5000.00	False
08750530	YES	5000.00	5000.00	False

Skipped Tests

- 1.7 Overview of Scan Angles Exceeding Limitations
- 1.12 Report on Collection Conditions
- 2.13 Report on Positional Accuracy Validation

USGS QC Module Input Requirements Matrix

Test number	Boresighted LAS (Swath Data)	Classified LAS (Tiled Data)	Shapefile Tile Scheme	Shapefile Boundary	Shapefile SBET(s)	NPS	LiDAR Check Points	Project Name	Description	Logo	Output Folder	PDF Name
0.0		X	X					X	O	O	X	X
1.1	X	X						X	O	O	X	X
1.2	X	X						X	O	O	X	X
1.3	X			O				X	O	O	X	X
1.4		X	X					X	O	O	X	X
1.5	X			O		X		X	O	O	X	X
1.6	X			O		X		X	O	O	X	X
1.7	X			O	X	X		X	O	O	X	X
1.8	X	X					X	X	O	O	X	X
1.9	X			O				X	O	O	X	X
1.10	X			O		X		X	O	O	X	X
1.11	X			X				X	O	O	X	X
1.12					X			X	O	O	X	X
2.1	X	X						X	O	O	X	X
2.2	X	X						X	O	O	X	X
2.3	X	X						X	O	O	X	X
2.4	X	X						X	O	O	X	X
2.5	X	X						X	O	O	X	X
2.6	X	X						X	O	O	X	X
2.7	X							X	O	O	X	X
2.8	X							X	O	O	X	X
2.9	X	X						X	O	O	X	X
2.10	X			X				X	O	O	X	X
2.11	X	X						X	O	O	X	X
2.12	X	X						X	O	O	X	X
2.13	X	X		X		X	X	X	O	O	X	X
2.14		X				X		X	O	O	X	X
2.15		X						X	O	O	X	X
2.16			X					X	O	O	X	X

X = Required

X = Will use Classified LAS if available, else Boresighted (Swath) LAS

O = Optional

O = Optional for single-area density reporting, but required for multi-area (multiple boundary) reporting of individual and aggregate areas