

CWCB_Priority

Detailed USGS National Geospatial Program
Lidar Base Specification
Version 1.2 Report

Quality level tested: QL2

Report generated on 8/23/2018

This document reports on compliance with the USGS National Geospatial Program Lidar Base Specification Version 1.2. The complete specification, which also contains a list of abbreviations, acronyms, and a glossary of related terms, can be found [here](#).

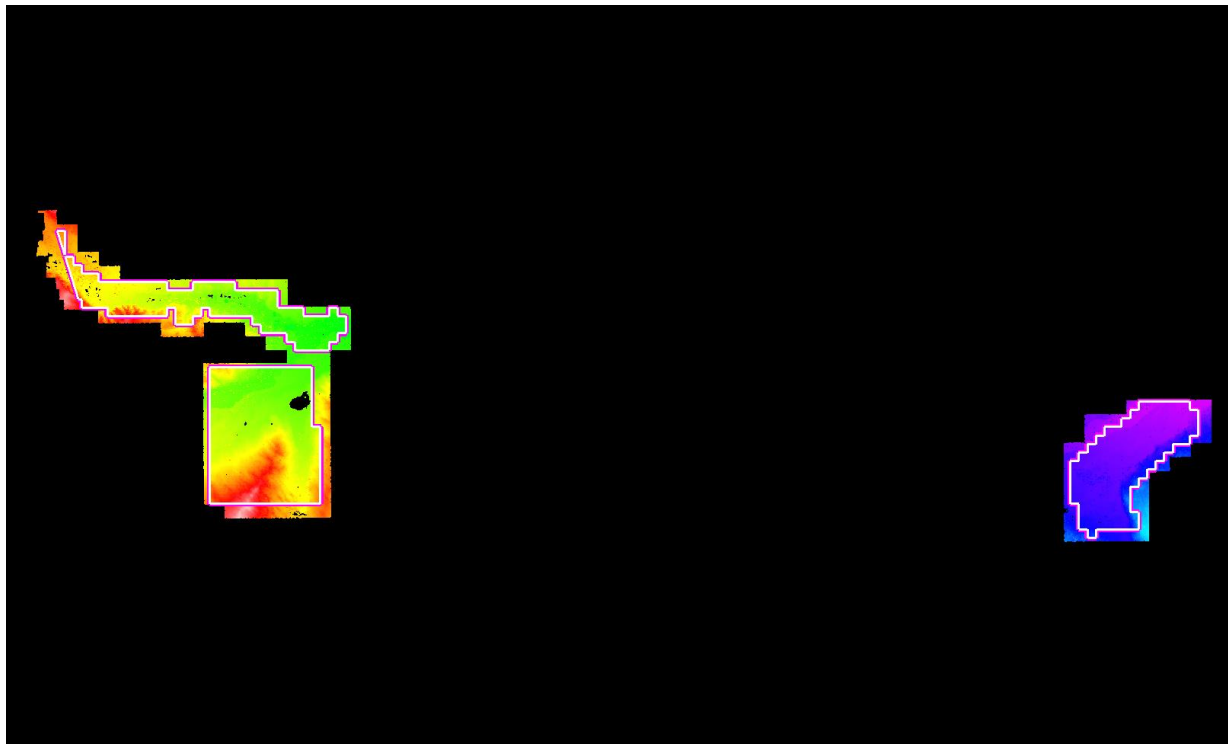
C-1 Report on Collection Area (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "The defined project area (DPA) shall be buffered by a minimum of 100 meters (m) to create a buffered project area (BPA). Data collection is required for the full extent of the BPA. In order for all products to be consistent to the edge of the DPA, all products shall be generated to the full extent of the BPA. Because data and products are generated for the complete BPA, they shall also be delivered to the customer."

The purpose of this section is to show swath lidar coverage to the extent of a 100 meter buffer of the defined project area boundary.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[Result Path - D:\00_CWCB\Priority\QC\C_1\CollectionArea_Swath.jpg](#)



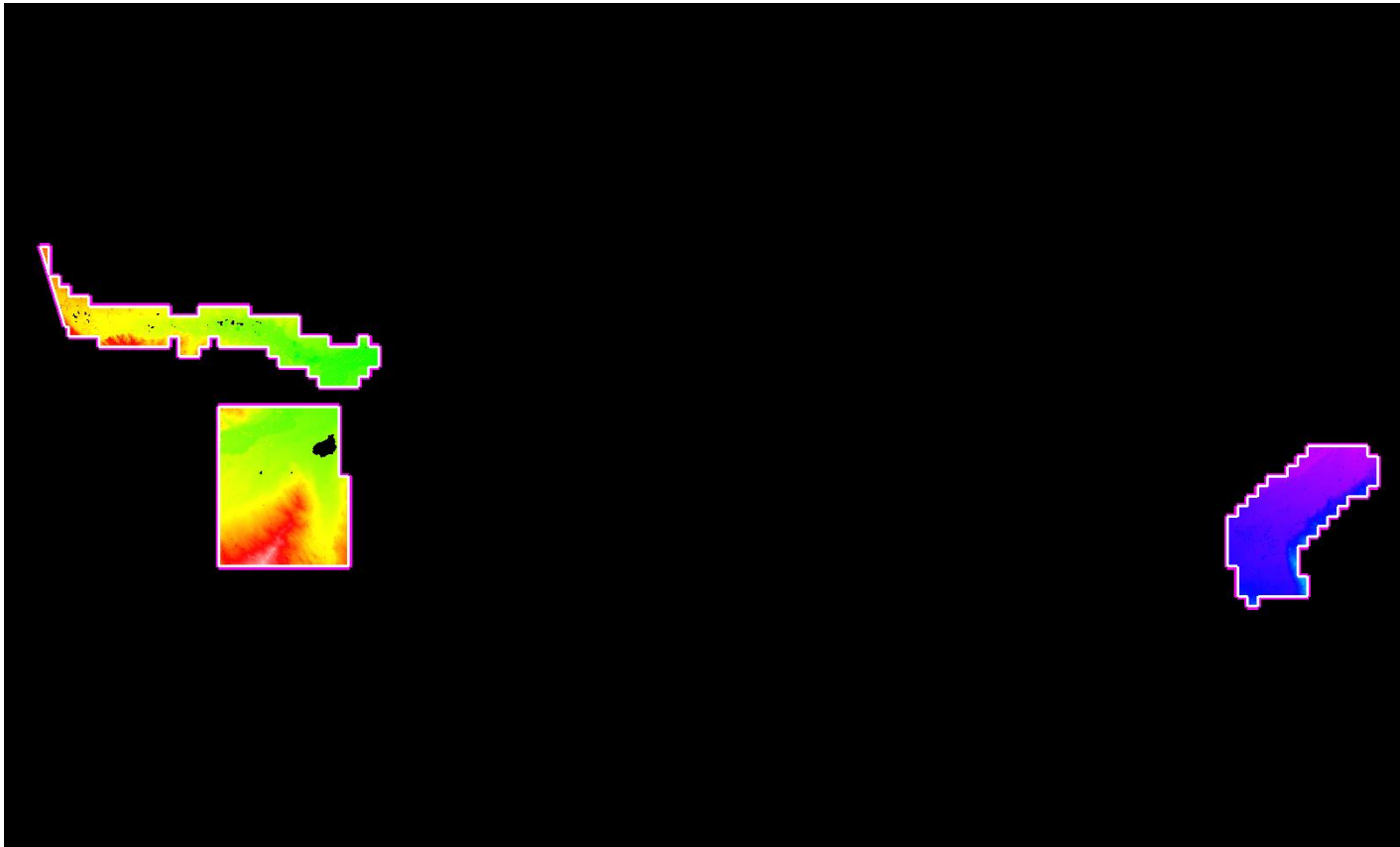
White polygon is defined project area (DPA) boundary
Purple polygon is buffered project area (BPA) boundary

C-1 Report on Collection Area (Tiled Data)

The purpose of this section is to show tiled lidar coverage to the extent of a 100 meter buffer of the defined project area boundary.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\C_1\CollectionArea_Tiles.jpg](D:\00_CWCB\Priority\QC\C_1\CollectionArea_Tiles.jpg)



White polygon is defined project area (DPA) boundary
Purple polygon is buffered project area (BPA) boundary

C-2 Report on Multiple Discrete Returns (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "Deriving and delivering multiple discrete returns is required in all data collection efforts. Data collection shall be capable of at least three returns per pulse. Full waveform collection is acceptable and will be promoted; however, full waveform data are regarded as supplemental information."

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	First return	Second return	Third return	Other returns	Total points
1004.las	48,659,531	1,088,956	84,073	1,754	49,834,314
1007.las	49,394,007	1,784,103	188,338	6,934	51,373,382
1015.las	69,551,979	3,688,797	414,840	17,697	73,673,313
1017.las	21,959,263	1,558,279	177,411	9,396	23,704,349
1020.las	45,793,460	1,798,618	151,126	3,835	47,747,039
1044.las	2,294,328	1,011	11	00	2,295,350
1045.las	15,012,632	30,434	2,782	51	15,045,899
1046.las	16,681,458	58,164	4,682	90	16,744,394
1047.las	23,264,106	192,006	20,593	559	23,477,264
1048.las	21,723,868	80,258	6,612	146	21,810,884
1049.las	29,359,647	305,819	24,000	569	29,690,035
1050.las	30,984,142	360,242	22,488	329	31,367,201
1051.las	55,199,629	491,806	36,557	572	55,728,564
1052.las	50,258,951	680,573	59,497	1,235	51,000,256
1053.las	53,172,232	822,728	67,901	1,363	54,064,224
1054.las	48,441,357	1,205,523	95,572	2,129	49,744,581
1055.las	43,347,319	759,567	73,656	2,021	44,182,563
1056.las	37,625,666	328,283	27,490	625	37,982,064
1057.las	21,791,391	195,423	14,771	292	22,001,877
1081.las	36,706,366	1,265,165	141,984	6,189	38,119,704
1082.las	18,893,546	501,688	44,240	978	19,440,452
1083.las	30,102,280	1,070,272	103,530	3,082	31,279,164
1084.las	46,890,206	2,526,252	301,042	13,416	49,730,916
1158.las	15,347,267	630,755	62,339	2,442	16,042,803
1159.las	15,411,743	301,355	25,893	831	15,739,822

C-2 Report on Multiple Discrete Returns (Swath Data) - continued

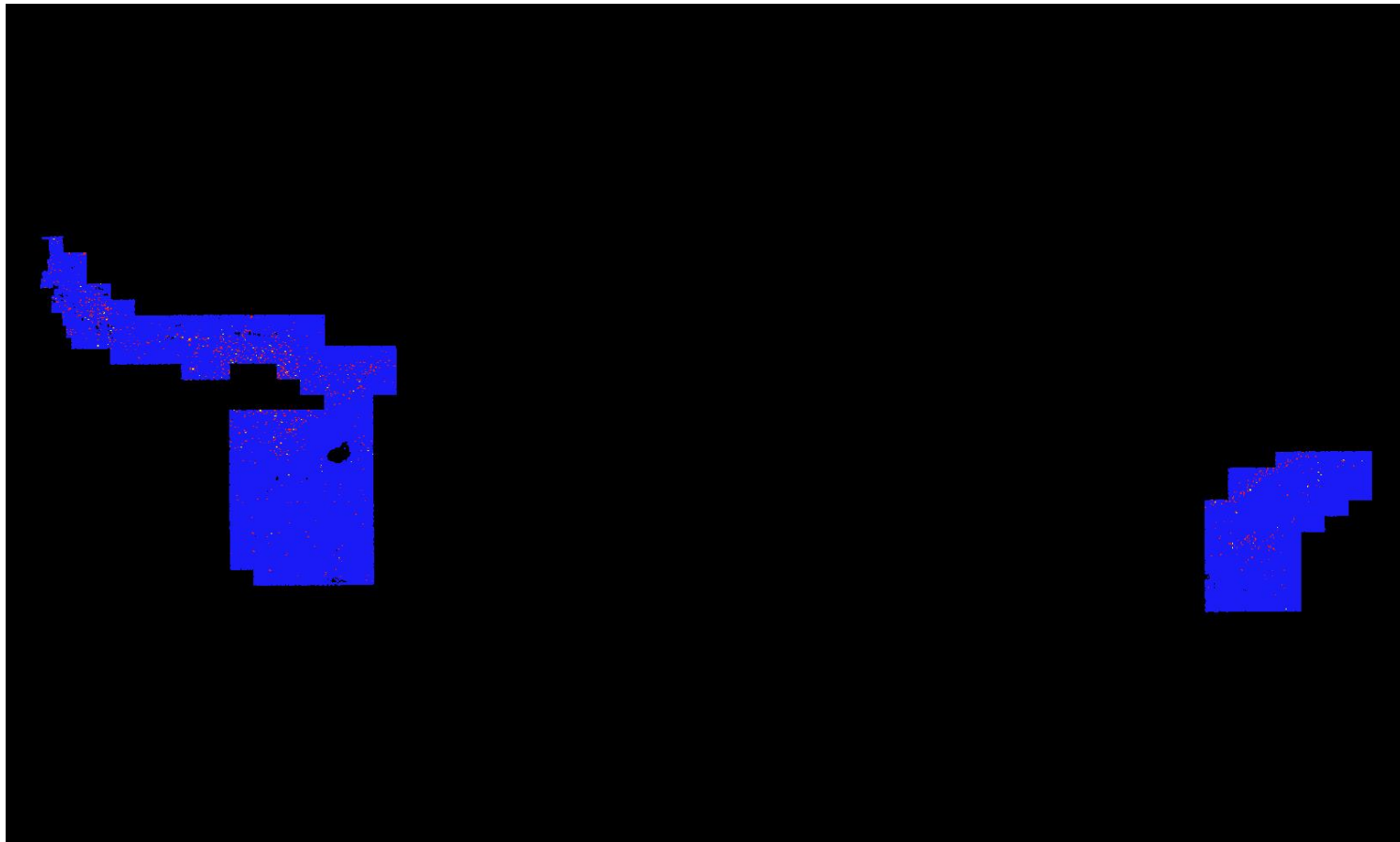
File	First return	Second return	Third return	Other returns	Total points
1160.las	12,872,578	231,611	16,795	467	13,121,451
1177.las	76,029,753	1,856,837	126,474	3,912	78,016,976
1178.las	50,704,051	1,296,923	132,261	5,002	52,138,237
1197.las	10,613,380	49,732	3,953	65	10,667,130
1218.las	29,433,431	171,498	9,877	324	29,615,130
1219.las	38,001,062	155,485	12,962	474	38,169,983
1220.las	38,475,200	124,246	8,142	325	38,607,913
1221.las	38,400,800	196,081	13,663	430	38,610,974
1222.las	38,402,287	152,938	11,715	372	38,567,312
1223.las	38,399,020	156,743	12,740	544	38,569,047
1224.las	38,306,097	141,935	11,760	327	38,460,119
1225.las	39,087,676	216,354	18,078	485	39,322,593
1226.las	38,443,889	191,981	16,171	428	38,652,469
1227.las	38,500,892	130,299	11,007	268	38,642,466
1229.las	30,609,537	226,551	21,138	557	30,857,783
1236.las	862,349	23,277	1,614	21	887,261
1237.las	3,356,596	72,792	7,156	201	3,436,745
1238.las	10,193,719	260,233	6,636	139	10,460,727
2002.las	45,328,056	191,548	24,757	1,415	45,545,776
2012.las	89,708,642	3,577,349	442,575	25,135	93,753,701
2041.las	43,085,886	268,505	34,253	1,767	43,390,411
2048.las	42,729,145	951,314	120,855	5,253	43,806,567
2049.las	49,605,748	1,676,482	199,719	6,642	51,488,591
2103.las	43,239,903	2,009,217	235,130	9,908	45,494,158
2104.las	28,389,779	546,314	52,283	2,248	28,990,624
Total	1,760,645,850	36,602,322	3,703,142	143,244	1,801,094,558

C-2 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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[Result Path - D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Boresighted.jpg](#)



C-2 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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

File	First return	Second return	Third return	Other returns	Total points
LD31531420.las	258,165	267	09	01	258,442
LD31531423.las	1,180,342	11,430	450	08	1,192,230
LD31531426.las	2,022,261	13,140	1,309	33	2,036,743
LD31561408.las	40	00	00	00	40
LD31561411.las	546,697	33,908	3,483	78	584,166
LD31561414.las	1,003,387	64,159	6,900	332	1,074,778
LD31561417.las	1,799,964	77,800	6,527	244	1,884,535
LD31591405.las	1,585,257	57,668	6,100	241	1,649,266
LD31591408.las	2,355,826	59,356	6,329	184	2,421,695
LD31591411.las	2,278,818	231,795	25,309	850	2,536,772
LD31591414.las	2,022,163	191,938	23,168	1,318	2,238,587
LD31621402.las	2,128,626	46,228	2,851	91	2,177,796
LD31621405.las	2,435,920	67,618	6,407	183	2,510,128
LD31621408.las	2,300,665	133,126	12,501	298	2,446,590
LD31621411.las	2,609,589	283,162	32,495	1,464	2,926,710
LD31651402.las	2,317,599	98,479	7,542	258	2,423,878
LD31651405.las	2,621,376	107,320	8,779	273	2,737,748
LD31651408.las	2,172,261	179,538	17,421	642	2,369,862
LD31651411.las	2,606,429	295,941	33,500	1,571	2,937,441
LD31681402.las	2,007,396	95,171	9,726	322	2,112,615
LD31681405.las	2,748,016	168,846	16,197	459	2,933,518
LD31681408.las	3,152,557	85,417	8,257	311	3,246,542
LD31711399.las	2,253,306	80,836	8,657	308	2,343,107
LD31711402.las	2,144,307	141,530	13,043	289	2,299,169
LD31711405.las	3,144,839	27,750	2,696	106	3,175,391
LD31711408.las	3,006,956	42,479	4,415	191	3,054,041
LD31741399.las	2,162,684	11,181	874	64	2,174,803
LD31741402.las	2,256,254	99,720	6,003	129	2,362,106
LD31741405.las	3,198,878	46,480	3,218	129	3,248,705

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD31741408.las	3,053,659	36,192	2,110	71	3,092,032
LD31771399.las	2,208,418	13,469	446	25	2,222,358
LD31771402.las	2,211,860	75,442	6,940	191	2,294,433
LD31771405.las	3,097,431	16,902	1,665	99	3,116,097
LD31771408.las	3,059,057	38,343	2,086	60	3,099,546
LD31801399.las	2,085,802	9,827	674	19	2,096,322
LD31801402.las	2,245,133	68,233	6,996	177	2,320,539
LD31801405.las	3,295,659	9,818	641	08	3,306,126
LD31801408.las	3,170,951	81,934	1,281	17	3,254,183
LD31831399.las	2,102,051	23,306	2,591	122	2,128,070
LD31831402.las	1,980,028	42,195	4,098	100	2,026,421
LD31831405.las	2,752,522	46,321	3,251	59	2,802,153
LD31831408.las	3,044,059	41,136	4,285	192	3,089,672
LD31861399.las	2,058,443	7,193	840	45	2,066,521
LD31861402.las	1,898,098	25,565	2,598	86	1,926,347
LD31861405.las	2,223,288	178,395	10,786	127	2,412,596
LD31861408.las	2,657,379	43,219	4,191	138	2,704,927
LD31891399.las	2,121,139	52,590	9,106	748	2,183,583
LD31891402.las	2,153,549	59,413	4,243	94	2,217,299
LD31891405.las	3,004,148	57,454	3,273	47	3,064,922
LD31891408.las	3,130,603	31,224	2,906	81	3,164,814
LD31921402.las	2,718,654	190,662	20,504	695	2,930,515
LD31921405.las	2,829,633	217,177	19,343	497	3,066,650
LD31951396.las	2,570,357	47,015	6,540	387	2,624,299
LD31951399.las	2,527,724	116,490	15,815	1,055	2,661,084
LD31951402.las	4,164,254	428,163	55,862	2,555	4,650,834
LD31951405.las	4,296,858	69,615	6,152	147	4,372,772
LD31981396.las	2,467,696	90,751	9,497	429	2,568,373
LD31981399.las	2,620,630	107,682	13,572	739	2,742,623
LD31981402.las	4,304,180	123,116	15,022	685	4,443,003
LD31981405.las	4,287,040	195,667	18,022	497	4,501,226
LD32011399.las	2,324,348	231,464	29,012	1,787	2,586,611
LD32011402.las	3,862,688	444,938	56,280	1,671	4,365,577
LD32011405.las	3,631,793	104,273	9,816	235	3,746,117

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD32011408.las	3,004,210	8,525	369	14	3,013,118
LD32041402.las	2,741,634	286,440	38,683	1,613	3,068,370
LD32041405.las	3,466,988	150,952	12,317	320	3,630,577
LD32041408.las	4,164,012	53,628	5,543	202	4,223,385
LD32071333.las	2,634,920	4,446	359	09	2,639,734
LD32071336.las	2,424,901	20,950	2,010	56	2,447,917
LD32071339.las	2,422,634	13,581	1,288	50	2,437,553
LD32071342.las	2,266,275	13,660	1,249	34	2,281,218
LD32071345.las	2,092,485	5,941	496	13	2,098,935
LD32071348.las	2,480,567	14,947	1,499	59	2,497,072
LD32071351.las	2,475,129	29,935	1,884	45	2,506,993
LD32071354.las	2,452,929	21,230	2,006	56	2,476,221
LD32071357.las	2,561,488	8,656	944	39	2,571,127
LD32071360.las	3,055,030	6,645	728	31	3,062,434
LD32071363.las	2,653,881	4,282	85	01	2,658,249
LD32071366.las	2,566,514	35,117	5,023	240	2,606,894
LD32071369.las	2,300,343	144,323	17,911	488	2,463,065
LD32071372.las	2,141,902	147,344	16,417	452	2,306,115
LD32071375.las	2,850,532	313,572	40,178	1,860	3,206,142
LD32071378.las	2,911,549	56,999	6,649	270	2,975,467
LD32071399.las	2,128,035	247,324	34,058	2,237	2,411,654
LD32071402.las	2,756,106	70,485	6,554	225	2,833,370
LD32071405.las	2,476,474	92,246	5,793	172	2,574,685
LD32071408.las	4,808,789	28,333	2,361	93	4,839,576
LD32101333.las	2,455,364	13,185	1,665	73	2,470,287
LD32101336.las	2,299,281	42,584	3,213	46	2,345,124
LD32101339.las	2,392,452	34,089	2,961	110	2,429,612
LD32101342.las	2,290,233	10,183	1,031	44	2,301,491
LD32101345.las	2,186,806	5,449	25	00	2,192,280
LD32101348.las	2,471,111	9,468	728	54	2,481,361
LD32101351.las	2,446,280	6,874	534	13	2,453,701
LD32101354.las	2,470,180	4,748	410	19	2,475,357
LD32101357.las	2,503,922	3,125	177	02	2,507,226
LD32101360.las	3,087,503	17,870	2,455	197	3,108,025

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD32101363.las	2,987,454	7,653	479	17	2,995,603
LD32101366.las	2,689,998	32,010	3,960	168	2,726,136
LD32101369.las	2,357,418	15,013	1,865	77	2,374,373
LD32101372.las	2,386,618	155,518	20,326	725	2,563,187
LD32101375.las	2,866,844	88,267	10,356	460	2,965,927
LD32101378.las	2,889,194	58,494	6,733	337	2,954,758
LD32101399.las	2,502,500	181,462	20,868	1,111	2,705,941
LD32101402.las	2,467,020	107,621	11,052	461	2,586,154
LD32101405.las	2,474,378	206,574	12,841	444	2,694,237
LD32101408.las	4,817,266	40,525	4,789	261	4,862,841
LD32131333.las	2,569,147	295	04	00	2,569,446
LD32131336.las	2,351,850	2,492	142	05	2,354,489
LD32131339.las	2,413,195	4,920	98	00	2,418,213
LD32131342.las	2,355,867	3,780	307	04	2,359,958
LD32131345.las	2,273,136	966	06	00	2,274,108
LD32131348.las	2,500,531	4,391	404	17	2,505,343
LD32131351.las	2,493,878	1,679	138	02	2,495,697
LD32131354.las	2,462,244	14,818	1,447	53	2,478,562
LD32131357.las	2,422,665	8,275	474	07	2,431,421
LD32131360.las	3,054,681	1,829	13	01	3,056,524
LD32131363.las	2,932,517	11,774	419	10	2,944,720
LD32131366.las	2,476,647	15,072	1,670	92	2,493,481
LD32131369.las	2,233,163	26,244	3,365	118	2,262,890
LD32131372.las	2,150,872	156,663	22,019	728	2,330,282
LD32131375.las	2,921,868	103,618	9,222	266	3,034,974
LD32131378.las	2,810,828	184,889	16,191	714	3,012,622
LD32131399.las	2,360,014	274,715	38,106	2,247	2,675,082
LD32131402.las	2,652,679	118,464	11,493	475	2,783,111
LD32131405.las	3,245,216	231,741	21,178	676	3,498,811
LD32131408.las	4,944,855	9,545	513	18	4,954,931
LD32161333.las	2,430,906	8,016	470	08	2,439,400
LD32161336.las	2,348,092	11,271	325	07	2,359,695
LD32161339.las	2,235,785	6,713	71	01	2,242,570
LD32161342.las	1,929,695	8,826	676	15	1,939,212

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD32161345.las	2,223,916	2,823	113	06	2,226,858
LD32161348.las	2,546,423	3,441	312	14	2,550,190
LD32161351.las	2,477,243	5,838	439	13	2,483,533
LD32161354.las	2,467,315	2,779	86	03	2,470,183
LD32161357.las	2,340,095	6,409	171	04	2,346,679
LD32161360.las	4,025,084	16,747	1,667	101	4,043,599
LD32161363.las	4,353,728	22,176	2,181	71	4,378,156
LD32161366.las	2,826,494	24,931	1,363	62	2,852,850
LD32161369.las	2,241,498	53,158	5,882	280	2,300,818
LD32161372.las	2,100,099	171,184	22,320	695	2,294,298
LD32161375.las	2,682,876	160,518	16,391	453	2,860,238
LD32161378.las	2,822,165	173,245	18,512	821	3,014,743
LD32161399.las	2,070,845	236,395	31,070	1,680	2,339,990
LD32161402.las	2,637,046	147,016	15,077	581	2,799,720
LD32161405.las	2,232,603	94,597	9,017	232	2,336,449
LD32191333.las	2,412,267	3,007	207	06	2,415,487
LD32191336.las	2,297,974	2,498	277	09	2,300,758
LD32191339.las	2,393,953	1,453	92	14	2,395,512
LD32191342.las	2,255,761	3,691	18	00	2,259,470
LD32191345.las	2,312,408	7,193	276	02	2,319,879
LD32191348.las	2,569,682	6,829	296	07	2,576,814
LD32191351.las	2,476,771	8,625	830	23	2,486,249
LD32191354.las	2,447,860	9,037	925	28	2,457,850
LD32191357.las	2,453,061	7,412	520	17	2,461,010
LD32191360.las	2,920,598	4,276	346	17	2,925,237
LD32191363.las	4,006,354	3,302	289	05	4,009,950
LD32191366.las	2,769,379	109,973	13,269	615	2,893,236
LD32191369.las	2,388,696	200,735	24,432	1,121	2,614,984
LD32191372.las	2,438,427	187,556	22,223	753	2,648,959
LD32191375.las	2,927,934	246,389	22,629	520	3,197,472
LD32191378.las	2,949,820	257,976	27,692	1,115	3,236,603
LD32191399.las	2,047,961	192,733	23,005	1,342	2,265,041
LD32191402.las	2,730,680	139,353	20,133	1,265	2,891,431
LD32191405.las	2,491,408	97,409	9,936	442	2,599,195

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD32221333.las	2,306,598	1,368	01	00	2,307,967
LD32221336.las	2,339,436	19,304	1,227	18	2,359,985
LD32221339.las	2,484,992	11,123	889	24	2,497,028
LD32221342.las	2,276,634	4,778	304	03	2,281,719
LD32221345.las	2,347,949	14,098	1,006	40	2,363,093
LD32221348.las	2,424,131	18,582	964	27	2,443,704
LD32221351.las	2,456,040	8,727	724	23	2,465,514
LD32221354.las	2,433,634	7,276	805	33	2,441,748
LD32221357.las	2,485,860	2,769	200	08	2,488,837
LD32221360.las	4,374,859	29,660	3,345	173	4,408,037
LD32221363.las	4,168,699	13,627	1,297	35	4,183,658
LD32221366.las	2,674,069	20,738	2,612	147	2,697,566
LD32221369.las	2,224,698	57,940	7,604	466	2,290,708
LD32221372.las	2,410,343	54,891	6,323	267	2,471,824
LD32221375.las	2,522,582	324,715	32,745	861	2,880,903
LD32221378.las	3,054,820	226,015	24,300	953	3,306,088
LD32221396.las	2,218,607	192,634	24,571	1,256	2,437,068
LD32221399.las	2,137,759	160,944	16,704	820	2,316,227
LD32221402.las	2,819,700	134,469	13,220	580	2,967,969
LD32221405.las	2,909,416	94,371	8,723	328	3,012,838
LD32251333.las	2,392,851	766	13	00	2,393,630
LD32251336.las	2,460,629	1,401	32	08	2,462,070
LD32251339.las	2,425,462	21,017	1,851	38	2,448,368
LD32251342.las	2,169,352	6,824	572	20	2,176,768
LD32251345.las	2,508,579	694	14	01	2,509,288
LD32251348.las	2,497,856	1,834	03	00	2,499,693
LD32251351.las	2,490,769	10,534	584	14	2,501,901
LD32251354.las	2,491,056	6,274	703	35	2,498,068
LD32251357.las	2,545,546	6,437	710	33	2,552,726
LD32251360.las	4,180,867	20,624	2,792	136	4,204,419
LD32251363.las	4,098,514	5,507	465	15	4,104,501
LD32251366.las	2,780,981	2,762	206	08	2,783,957
LD32251369.las	2,341,934	11,655	1,369	97	2,355,055
LD32251372.las	2,632,115	43,921	4,393	182	2,680,611

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD32251375.las	2,700,330	167,611	17,483	339	2,885,763
LD32251378.las	2,776,907	231,605	25,013	697	3,034,222
LD32251393.las	2,668,336	199,889	20,100	830	2,889,155
LD32251396.las	2,252,312	147,026	13,898	567	2,413,803
LD32251399.las	2,273,570	137,831	14,033	490	2,425,924
LD32251402.las	2,899,533	54,588	6,142	316	2,960,579
LD32251405.las	2,845,311	95,450	12,427	642	2,953,830
LD32281333.las	2,362,873	452	08	00	2,363,333
LD32281336.las	2,350,257	1,554	117	08	2,351,936
LD32281339.las	2,351,168	5,042	468	08	2,356,686
LD32281342.las	2,276,464	11,000	1,045	37	2,288,546
LD32281345.las	2,449,552	2,359	81	05	2,451,997
LD32281348.las	2,413,858	27,232	2,535	84	2,443,709
LD32281351.las	2,437,401	15,991	1,314	37	2,454,743
LD32281354.las	2,360,070	16,425	1,695	64	2,378,254
LD32281357.las	2,359,587	9,379	1,006	25	2,369,997
LD32281360.las	3,971,963	60,240	1,858	64	4,034,125
LD32281363.las	4,246,961	29,849	796	24	4,277,630
LD32281366.las	2,725,592	9,704	1,262	68	2,736,626
LD32281369.las	2,149,884	14,048	1,247	48	2,165,227
LD32281372.las	2,661,445	4,769	520	25	2,666,759
LD32281375.las	2,898,111	25,071	3,188	115	2,926,485
LD32281378.las	2,567,451	105,142	10,728	261	2,683,582
LD32281393.las	2,608,417	62,460	3,666	150	2,674,693
LD32281396.las	2,109,573	83,097	8,067	251	2,200,988
LD32281399.las	2,113,979	48,353	4,268	174	2,166,774
LD32281402.las	2,878,501	3,181	249	25	2,881,956
LD32281405.las	2,916,544	11,023	1,312	71	2,928,950
LD32311333.las	2,380,454	5,938	318	03	2,386,713
LD32311336.las	2,293,935	3,495	124	03	2,297,557
LD32311339.las	2,402,492	21,934	2,197	67	2,426,690
LD32311342.las	2,334,944	9,014	777	31	2,344,766
LD32311345.las	2,347,613	18,775	1,617	42	2,368,047
LD32311348.las	2,510,283	38,026	5,258	226	2,553,793

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD32311351.las	2,400,250	7,139	580	20	2,407,989
LD32311354.las	2,571,769	9,797	852	42	2,582,460
LD32311357.las	2,542,059	14,579	1,295	52	2,557,985
LD32311360.las	4,091,022	18,200	1,297	44	4,110,563
LD32311363.las	4,086,039	25,604	3,294	155	4,115,092
LD32311366.las	2,752,479	3,700	363	25	2,756,567
LD32311369.las	2,118,878	11,033	1,337	69	2,131,317
LD32311372.las	2,481,505	9,597	696	19	2,491,817
LD32311375.las	2,862,433	5,725	461	16	2,868,635
LD32311378.las	2,866,661	42,292	5,407	213	2,914,573
LD32311393.las	2,545,036	115,086	11,632	423	2,672,177
LD32311396.las	2,228,468	53,960	3,590	86	2,286,104
LD32311399.las	2,204,694	20,098	2,122	86	2,227,000
LD32341333.las	2,433,868	6,799	604	09	2,441,280
LD32341336.las	2,361,113	10,060	838	28	2,372,039
LD32341339.las	2,312,411	7,216	658	14	2,320,299
LD32341342.las	2,322,955	6,286	670	32	2,329,943
LD32341345.las	2,526,811	7,656	689	16	2,535,172
LD32341348.las	2,523,239	23,701	2,655	92	2,549,687
LD32341351.las	2,448,888	3,209	68	05	2,452,170
LD32341354.las	2,574,311	3,612	209	07	2,578,139
LD32341357.las	2,517,219	14,952	1,614	79	2,533,864
LD32341360.las	4,339,763	27,310	2,084	78	4,369,235
LD32341363.las	4,367,420	8,889	1,103	68	4,377,480
LD32341366.las	982,679	803	29	00	983,511
LD32341369.las	1,820,609	768	11	00	1,821,388
LD32341372.las	2,723,961	2,808	95	01	2,726,865
LD32341375.las	3,057,623	6,634	505	16	3,064,778
LD32341378.las	2,918,248	15,618	1,498	35	2,935,399
LD32341390.las	2,746,668	88,004	9,947	386	2,845,005
LD32341393.las	2,563,816	61,787	6,362	259	2,632,224
LD32341396.las	2,244,901	38,219	4,103	129	2,287,352
LD32341399.las	2,353,628	14,947	1,665	80	2,370,320
LD32371333.las	2,324,243	28,145	2,637	60	2,355,085

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD32371336.las	2,117,681	51,559	5,529	157	2,174,926
LD32371339.las	2,195,994	52,249	4,775	91	2,253,109
LD32371342.las	2,332,047	5,331	459	13	2,337,850
LD32371345.las	2,498,067	2,611	143	03	2,500,824
LD32371348.las	2,483,616	9,161	808	21	2,493,606
LD32371351.las	2,467,097	8,773	516	18	2,476,404
LD32371354.las	2,615,526	11,611	1,462	64	2,628,663
LD32371357.las	2,517,510	8,356	678	16	2,526,560
LD32371360.las	3,975,552	2,232	52	01	3,977,837
LD32371363.las	3,757,543	2,572	145	03	3,760,263
LD32371366.las	13,678	08	00	00	13,686
LD32371369.las	924,691	9,502	1,140	14	935,347
LD32371372.las	2,370,757	4,320	148	02	2,375,227
LD32371375.las	2,771,259	21,965	2,081	91	2,795,396
LD32371378.las	2,789,247	4,244	320	06	2,793,817
LD32371387.las	2,473,015	195,767	15,600	276	2,684,658
LD32371390.las	3,008,343	87,980	9,311	309	3,105,943
LD32371393.las	2,651,402	139,708	14,317	312	2,805,739
LD32371396.las	2,254,546	45,959	3,512	90	2,304,107
LD32371399.las	2,329,076	8,493	940	38	2,338,547
LD32401333.las	2,136,141	3,374	117	01	2,139,633
LD32401336.las	2,269,454	13,684	1,246	19	2,284,403
LD32401339.las	2,349,102	21,162	2,397	58	2,372,719
LD32401342.las	2,341,560	17,987	1,547	29	2,361,123
LD32401345.las	2,464,889	2,798	106	08	2,467,801
LD32401348.las	2,485,109	12,220	409	05	2,497,743
LD32401351.las	2,492,651	473	00	00	2,493,124
LD32401354.las	2,476,629	1,379	28	00	2,478,036
LD32401357.las	2,465,559	10,157	727	27	2,476,470
LD32401360.las	4,289,094	7,763	730	46	4,297,633
LD32401363.las	4,199,162	7,231	740	18	4,207,151
LD32401366.las	867,124	6,627	1,632	115	875,498
LD32401369.las	620,376	1,322	134	02	621,834
LD32401372.las	2,055,007	19,583	2,500	143	2,077,233

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD32401375.las	2,978,463	19,377	2,275	107	3,000,222
LD32401378.las	2,886,336	8,418	553	08	2,895,315
LD32401387.las	2,465,221	155,190	12,807	175	2,633,393
LD32401390.las	2,765,633	56,523	6,443	216	2,828,815
LD32401393.las	2,610,761	210,356	17,985	277	2,839,379
LD32401396.las	2,257,915	94,411	10,426	250	2,363,002
LD32431333.las	2,400,230	1,485	48	00	2,401,763
LD32431336.las	2,294,428	3,593	104	00	2,298,125
LD32431339.las	2,358,122	3,558	110	07	2,361,797
LD32431342.las	2,423,379	13,094	1,411	52	2,437,936
LD32431345.las	2,607,170	2,851	153	03	2,610,177
LD32431348.las	2,466,451	23,702	1,248	46	2,491,447
LD32431351.las	2,383,003	6,196	399	12	2,389,610
LD32431354.las	2,512,884	27,517	980	23	2,541,404
LD32431357.las	2,500,765	5,075	488	11	2,506,339
LD32431387.las	2,740,543	82,655	9,138	226	2,832,562
LD32431390.las	2,570,311	186,486	17,034	285	2,774,116
LD32431393.las	2,715,736	116,056	12,284	238	2,844,314
LD32431396.las	2,173,961	122,112	13,151	265	2,309,489
LD32461387.las	2,707,120	41,879	3,216	115	2,752,330
LD32461390.las	2,717,599	56,688	6,341	212	2,780,840
LD32461393.las	2,599,021	169,966	16,413	286	2,785,686
LD32461396.las	2,095,101	79,121	8,120	189	2,182,531
LD32491390.las	2,786,865	26,521	2,879	82	2,816,347
LD32491393.las	2,732,532	160,492	15,674	235	2,908,933
LD32491396.las	1,919,133	110,953	11,805	284	2,042,175
LD32491399.las	2,332,807	41,226	882	25	2,374,940
LD32521393.las	2,745,635	10,148	1,324	62	2,757,169
LD32521396.las	2,064,317	100,565	9,921	223	2,175,026
LD35101333.las	2,773,715	3,660	381	14	2,777,770
LD35101336.las	2,542,703	5,314	616	20	2,548,653
LD35101339.las	2,557,783	6,541	550	24	2,564,898
LD35101342.las	2,509,120	15,110	1,928	65	2,526,223
LD35101345.las	2,378,687	21,125	2,702	82	2,402,596

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD35131324.las	2,403,190	2,683	55	00	2,405,928
LD35131327.las	2,641,240	27,761	2,290	20	2,671,311
LD35131330.las	2,881,100	9,799	798	17	2,891,714
LD35131333.las	2,905,675	857	32	00	2,906,564
LD35131336.las	2,837,663	5,384	528	11	2,843,586
LD35131339.las	2,824,677	71,621	7,436	271	2,904,005
LD35131342.las	2,950,126	123,044	13,790	497	3,087,457
LD35131345.las	2,778,047	4,307	409	08	2,782,771
LD35131348.las	2,838,585	15,746	1,768	54	2,856,153
LD35161321.las	2,827,178	33	00	00	2,827,211
LD35161324.las	2,469,564	8,976	610	09	2,479,159
LD35161327.las	2,817,673	4,096	276	04	2,822,049
LD35161330.las	2,701,906	35,852	3,477	53	2,741,288
LD35161333.las	2,733,852	17,119	1,320	05	2,752,296
LD35161336.las	2,817,989	18,751	1,625	34	2,838,399
LD35161339.las	2,753,961	220,827	23,738	864	2,999,390
LD35161342.las	2,851,282	43,477	4,160	125	2,899,044
LD35161345.las	2,811,053	14,845	1,328	29	2,827,255
LD35161348.las	2,780,669	16,684	1,231	26	2,798,610
LD35161351.las	2,815,394	32,844	3,243	65	2,851,546
LD35191324.las	2,032,632	1,440	03	00	2,034,075
LD35191327.las	2,367,421	957	01	00	2,368,379
LD35191330.las	2,247,756	2,964	255	02	2,250,977
LD35191333.las	2,445,303	39,800	2,171	135	2,487,409
LD35191336.las	2,427,938	123,433	2,749	42	2,554,162
LD35191339.las	2,406,912	202,860	19,506	569	2,629,847
LD35191342.las	2,592,379	204,383	19,666	514	2,816,942
LD35191345.las	2,593,847	18,417	1,431	36	2,613,731
LD35191348.las	2,686,224	51	00	00	2,686,275
LD35191351.las	2,771,681	4,283	406	10	2,776,380
LD35191354.las	2,858,060	134,602	12,682	189	3,005,533
LD35221324.las	2,435,842	937	13	00	2,436,792
LD35221327.las	2,384,871	12,937	1,420	35	2,399,263
LD35221330.las	2,323,496	7,514	676	11	2,331,697

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD35221333.las	2,269,113	3,809	267	06	2,273,195
LD35221336.las	2,310,502	69,972	6,800	158	2,387,432
LD35221339.las	2,105,314	207,430	19,917	531	2,333,192
LD35221342.las	2,167,013	160,299	16,082	413	2,343,807
LD35221345.las	2,174,662	12,635	993	13	2,188,303
LD35221348.las	2,223,798	6,605	708	13	2,231,124
LD35221351.las	2,235,135	6,661	816	24	2,242,636
LD35221354.las	2,196,181	28,294	2,541	64	2,227,080
LD35221357.las	2,187,722	59,426	5,005	112	2,252,265
LD35251324.las	2,975,191	8,423	743	07	2,984,364
LD35251327.las	2,924,877	2,331	177	05	2,927,390
LD35251330.las	2,981,748	32,057	2,951	68	3,016,824
LD35251333.las	3,012,661	10,532	496	08	3,023,697
LD35251336.las	3,134,804	37,497	2,602	64	3,174,967
LD35251339.las	2,844,288	61,461	4,869	108	2,910,726
LD35251342.las	3,048,989	14,397	1,072	34	3,064,492
LD35251345.las	2,842,353	3,203	334	09	2,845,899
LD35251348.las	2,742,446	5,240	654	22	2,748,362
LD35251351.las	2,691,151	5,647	602	21	2,697,421
LD35251354.las	2,664,324	12,306	1,100	28	2,677,758
LD35251357.las	2,700,740	8,171	571	19	2,709,501
LD35281324.las	2,844,013	38,758	3,349	73	2,886,193
LD35281327.las	2,772,002	9,246	762	18	2,782,028
LD35281330.las	2,881,840	21,671	2,063	53	2,905,627
LD35281333.las	2,981,754	49,899	5,243	146	3,037,042
LD35281336.las	3,004,606	46,246	4,221	104	3,055,177
LD35281339.las	2,846,974	142,001	13,782	366	3,003,123
LD35281342.las	2,927,171	127,563	12,187	244	3,067,165
LD35281345.las	2,835,696	21,745	2,314	53	2,859,808
LD35281348.las	2,841,823	14,409	1,722	66	2,858,020
LD35281351.las	2,916,469	10,849	1,340	39	2,928,697
LD35281354.las	2,869,152	4,015	267	08	2,873,442
LD35281357.las	2,929,300	6,062	388	13	2,935,763
LD35281360.las	2,797,582	17,737	1,538	25	2,816,882

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD35311324.las	2,649,440	16,097	1,719	49	2,667,305
LD35311327.las	2,646,770	2,140	129	05	2,649,044
LD35311339.las	2,858,615	7,005	195	00	2,865,815
LD35311342.las	2,921,659	41,907	4,339	108	2,968,013
LD35311345.las	2,765,604	46,063	4,572	78	2,816,317
LD35311348.las	2,781,054	19,751	1,740	76	2,802,621
LD35311351.las	2,867,726	9,616	1,151	28	2,878,521
LD35311354.las	2,835,641	6,460	1,137	49	2,843,287
LD35311357.las	2,861,232	4,769	542	19	2,866,562
LD35311360.las	2,846,614	10,354	798	16	2,857,782
LD35311363.las	2,699,152	221,492	14,423	173	2,935,240
LD35341342.las	2,494,059	227	25	00	2,494,311
LD35341345.las	2,477,941	10,488	714	20	2,489,163
LD35341348.las	2,474,061	21,459	1,882	38	2,497,440
LD35341351.las	2,544,049	8,719	646	12	2,553,426
LD35341354.las	2,597,779	1,417	138	02	2,599,336
LD35341357.las	2,710,643	5,312	458	04	2,716,417
LD35341360.las	2,721,542	862	22	00	2,722,426
LD35341363.las	2,869,198	32,484	2,065	26	2,903,773
LD35341366.las	2,621,272	218,499	13,693	119	2,853,583
LD35371345.las	2,282,560	439	03	00	2,283,002
LD35371348.las	2,193,950	1,225	61	02	2,195,238
LD35371351.las	2,177,914	24,280	2,667	74	2,204,935
LD35371354.las	2,043,819	21,254	2,370	62	2,067,505
LD35371357.las	2,075,631	11,557	1,119	27	2,088,334
LD35371360.las	2,183,626	1,538	188	05	2,185,357
LD35371363.las	2,119,283	8,590	827	22	2,128,722
LD35371366.las	1,883,588	165,274	8,490	64	2,057,416
LD35401348.las	3,052,118	82	00	00	3,052,200
LD35401351.las	3,026,871	16,991	1,862	47	3,045,771
LD35401354.las	3,087,411	25,472	2,587	54	3,115,524
LD35401357.las	2,819,437	42,248	4,629	154	2,866,468
LD35401360.las	2,779,754	15,655	1,640	47	2,797,096
LD35401363.las	2,644,521	18,908	2,157	80	2,665,666

C-2 Report on Multiple Discrete Returns (Tiled Data) - continued

File	First return	Second return	Third return	Other returns	Total points
LD35401366.las	2,568,219	136,738	6,291	99	2,711,347
LD35431351.las	2,868,948	1,681	112	01	2,870,742
LD35431354.las	2,929,156	6,257	466	05	2,935,884
LD35431357.las	2,865,807	12,260	898	14	2,878,979
LD35431360.las	2,833,952	31,303	2,981	54	2,868,290
LD35431363.las	2,823,878	56,079	5,283	110	2,885,350
LD35431366.las	2,982,818	5,384	549	09	2,988,760
LD35461354.las	2,853,561	2,616	185	01	2,856,363
LD35461357.las	2,884,240	37,239	3,726	99	2,925,304
LD35461360.las	2,822,973	3,866	390	04	2,827,233
LD35461363.las	2,906,685	11,274	1,091	26	2,919,076
LD35461366.las	2,940,842	17,868	1,584	35	2,960,329
LD35491354.las	2,476,626	17	00	00	2,476,643
LD35491357.las	2,533,149	8,754	754	19	2,542,676
LD35491360.las	2,451,253	6,272	511	10	2,458,046
LD35491363.las	2,634,431	64,255	6,666	182	2,705,534
LD35491366.las	2,601,032	104,406	10,846	292	2,716,576
LD35521357.las	2,306,540	15	00	00	2,306,555
LD35521360.las	2,191,284	293	07	00	2,191,584
LD35521363.las	2,243,113	18,480	1,937	49	2,263,579
Total	1,188,327,864	23,695,202	2,388,159	85,485	1,214,496,710

C-2 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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified.jpg](D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified.jpg)

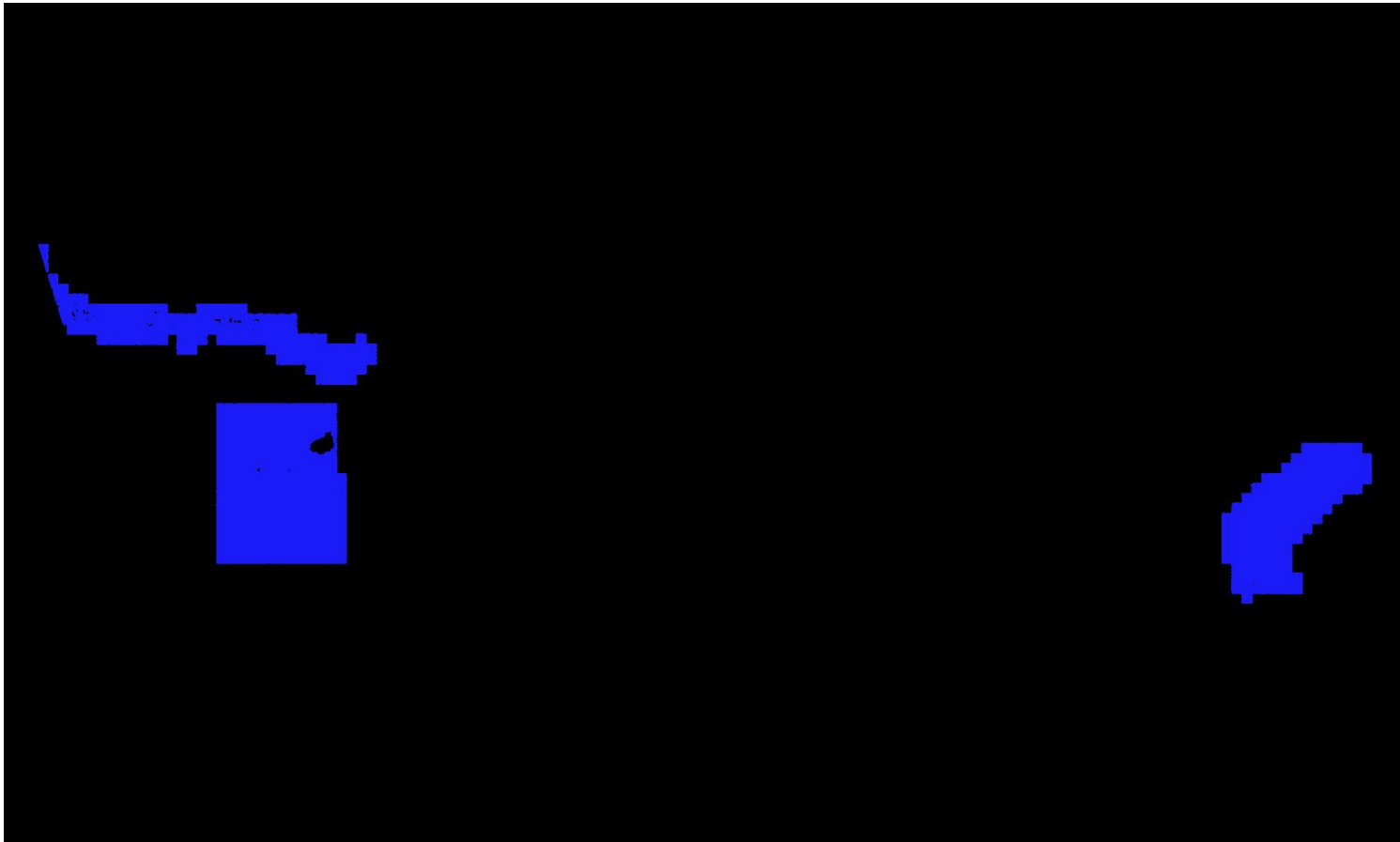


C-2 Report on Multiple Discrete Returns (Tiled Data) - First Returns

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified_FirstReturns.jpg](D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified_FirstReturns.jpg)



C-2 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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified_SecondReturns.jpg](D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified_SecondReturns.jpg)



C-2 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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified_ThirdReturns.jpg](D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified_ThirdReturns.jpg)

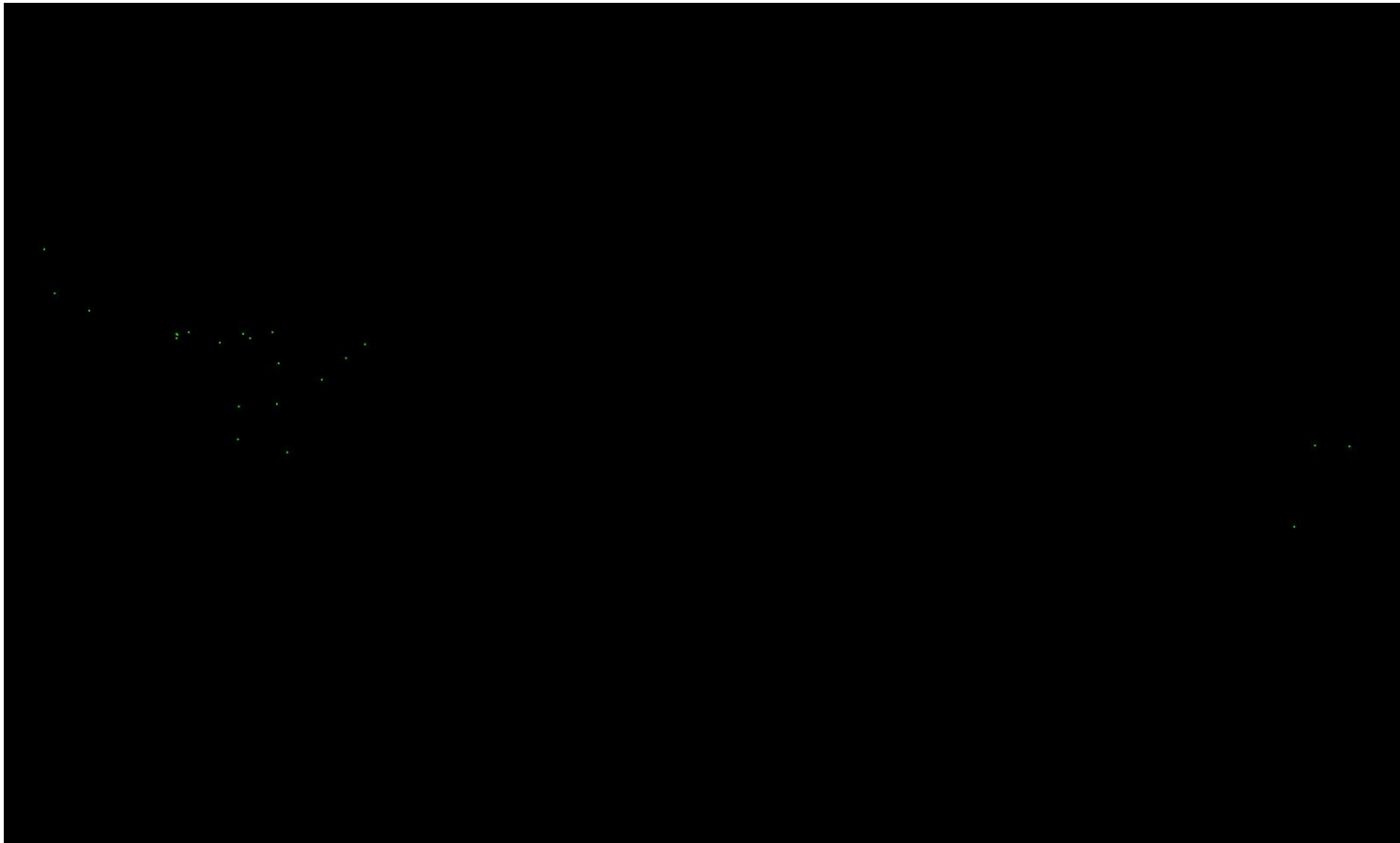


C-2 Report on Multiple Discrete Returns (Tiled Data) - Other Returns

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified_OtherReturns.jpg](D:\00_CWCB\Priority\QC\C_2\ColorByReturns_Classified_OtherReturns.jpg)



C-3 Report on Intensity Values (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "Intensity values are required for each multiple discrete return. The values recorded in the LAS files shall be normalized to 16 bit, as described in the LAS Specification version 1.4 (American Society for Photogrammetry and Remote Sensing, 2011)."

The purpose of this section is to report on the presence and quantities of lidar intensity in the LAS swath data.

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	Minimum	Maximum	Mean	Median	Mode
1004.las	16	65,520	3,826	3,920	3,920
1007.las	16	65,520	3,719	4,000	4,240
1015.las	16	65,520	3,617	3,872	4,176
1017.las	16	65,520	3,185	3,216	3,632
1020.las	16	65,520	3,740	3,904	3,936
1044.las	448	7,136	3,905	3,872	3,904
1045.las	320	65,520	4,056	4,128	4,208
1046.las	112	65,520	3,934	4,016	4,096
1047.las	64	65,520	3,962	4,016	4,224
1048.las	320	65,520	4,172	4,160	4,320
1049.las	192	65,520	4,085	4,048	4,080
1050.las	16	65,520	3,908	3,952	4,064
1051.las	64	65,520	3,958	4,016	4,112
1052.las	16	65,520	3,910	3,968	4,160
1053.las	16	65,520	3,914	3,920	3,920
1054.las	16	65,520	3,813	3,936	3,968
1055.las	16	65,520	4,010	4,064	4,080
1056.las	16	65,520	4,142	4,160	4,176
1057.las	48	65,520	3,887	3,904	3,872
1081.las	16	65,520	3,594	3,872	4,096
1082.las	16	65,520	3,821	4,064	4,224
1083.las	16	65,520	3,783	4,064	4,272
1084.las	16	65,520	3,565	3,840	4,112
1158.las	16	65,520	3,254	3,440	3,488
1159.las	16	65,520	3,787	3,872	3,632
1160.las	16	65,520	3,598	3,696	3,808

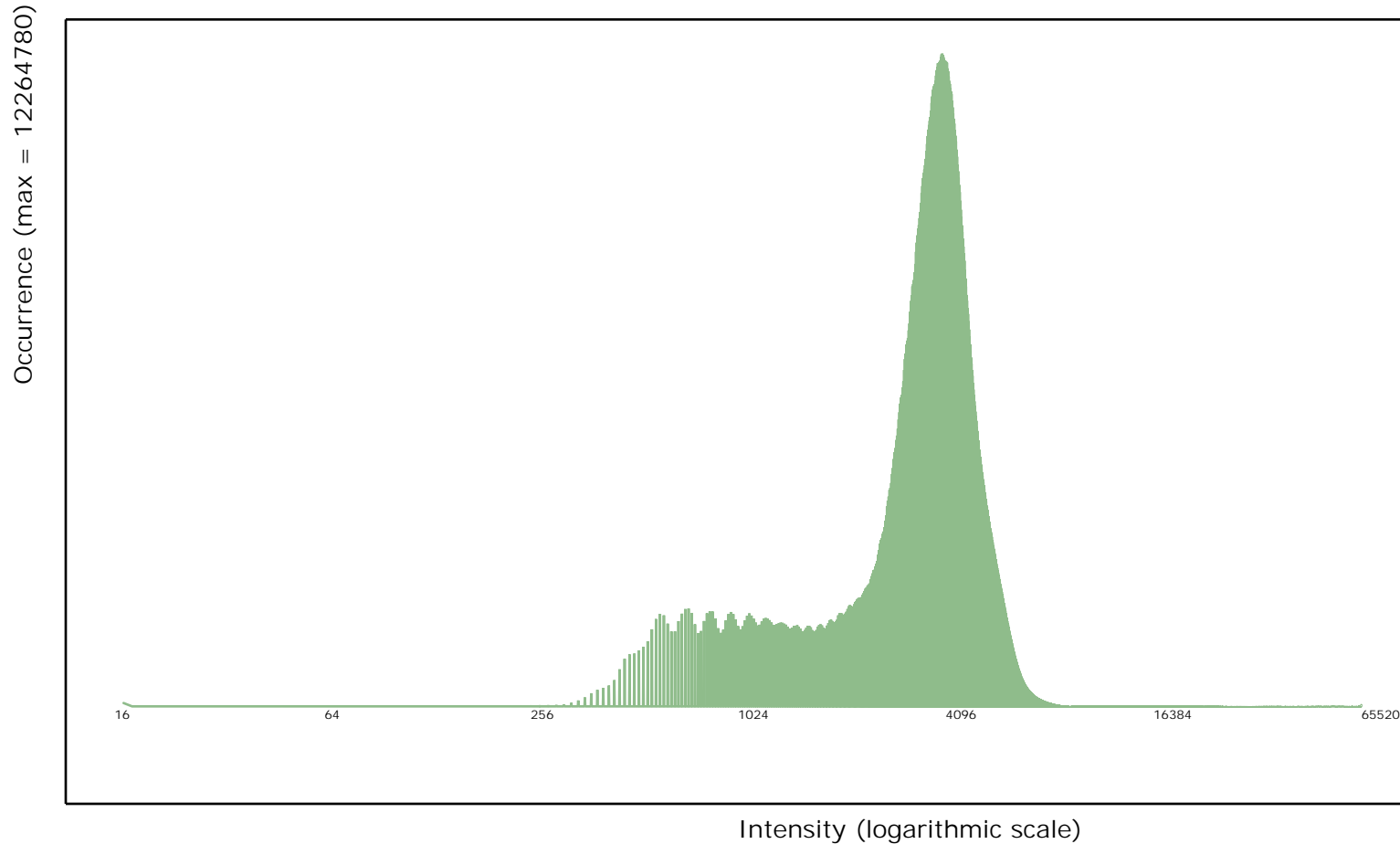
C-3 Report on Intensity Values (Swath Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
1177.las	16	65,520	3,766	3,824	3,920
1178.las	16	65,520	3,792	3,888	3,936
1197.las	16	65,520	4,405	4,496	4,512
1218.las	16	65,520	4,838	4,880	5,136
1219.las	16	65,520	4,724	4,608	3,888
1220.las	16	65,520	4,518	4,384	3,792
1221.las	16	65,520	4,258	4,144	3,552
1222.las	16	65,520	4,272	4,192	3,936
1223.las	16	65,520	4,480	4,544	4,832
1224.las	16	65,520	4,579	4,656	4,768
1225.las	16	65,520	4,805	4,800	4,720
1226.las	16	65,520	4,683	4,656	4,672
1227.las	32	65,520	4,503	4,464	4,384
1229.las	32	65,520	4,611	4,576	4,496
1236.las	352	60,144	3,633	3,760	3,696
1237.las	48	65,520	4,341	4,480	4,480
1238.las	160	65,520	3,746	3,888	4,032
2002.las	16	65,520	3,949	3,872	3,760
2012.las	16	65,520	3,296	3,456	3,504
2041.las	16	65,520	3,759	3,728	3,648
2048.las	16	65,520	3,488	3,600	3,632
2049.las	16	65,520	3,521	3,696	3,760
2103.las	16	65,520	3,223	3,408	3,520
2104.las	16	65,520	3,482	3,616	3,760
Overall Statistics	16	65,520	3,923	3,984	4,000

C-3 Report on Intensity Values (Swath Data) - continued

The purpose of this section is to show a frequency distribution chart of intensities throughout all of the lidar swath files.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

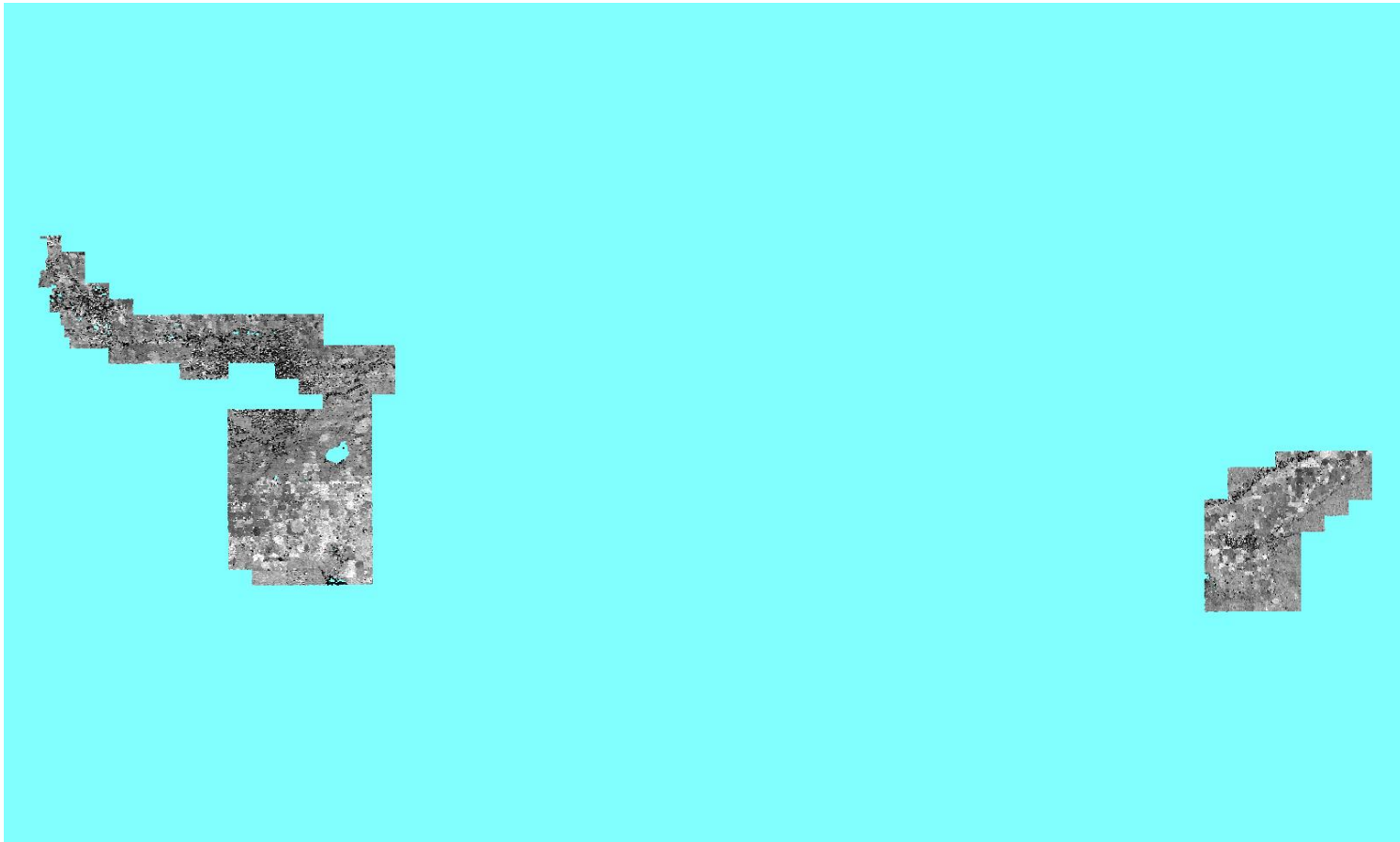


C-3 Report on Intensity Values (Swath Data) - continued

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths)

[Result Path - D:\00_CWCB\Priority\QC\C_3\ColorByIntensity_Boresighted.jpg](D:\00_CWCB\Priority\QC\C_3\ColorByIntensity_Boresighted.jpg)



C-3 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.

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

File	Minimum	Maximum	Mean	Median	Mode
LD31531420.las	16	8,832	4,653	4,784	4,816
LD31531423.las	16	12,416	3,269	3,504	3,680
LD31531426.las	16	65,520	3,486	3,488	3,568
LD31561408.las	512	4,240	2,391	2,384	912
LD31561411.las	16	65,520	3,811	4,336	4,656
LD31561414.las	16	65,520	2,982	2,928	1,904
LD31561417.las	16	65,520	3,011	3,072	1,408
LD31591405.las	16	65,520	3,502	3,504	3,424
LD31591408.las	16	65,520	3,896	4,080	4,128
LD31591411.las	16	65,520	3,428	3,760	720
LD31591414.las	16	65,520	2,858	2,464	1,328
LD31621402.las	256	65,520	4,039	4,096	4,144
LD31621405.las	16	65,520	3,808	3,888	4,016
LD31621408.las	16	65,520	4,352	4,656	6,304
LD31621411.las	16	65,520	3,021	2,624	1,104
LD31651402.las	16	65,520	3,396	3,376	1,216
LD31651405.las	16	65,520	3,664	3,584	3,792
LD31651408.las	16	65,520	3,016	2,656	736
LD31651411.las	16	65,520	2,869	2,480	1,232
LD31681402.las	256	65,520	3,470	3,696	3,680
LD31681405.las	16	65,520	3,503	3,712	3,872
LD31681408.las	16	65,520	3,326	3,296	3,248
LD31711399.las	16	65,520	3,437	3,456	3,360
LD31711402.las	16	58,480	3,396	3,664	3,664
LD31711405.las	16	65,520	3,448	3,520	3,584
LD31711408.las	16	65,520	4,223	4,272	3,440
LD31741399.las	16	65,520	3,627	3,616	3,776
LD31741402.las	16	56,352	3,296	3,424	3,248
LD31741405.las	16	65,520	3,464	3,584	3,664

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD31741408.las	16	65,520	3,475	3,616	3,632
LD31771399.las	240	42,640	3,272	3,248	3,136
LD31771402.las	16	36,016	3,664	3,744	3,648
LD31771405.las	16	65,520	3,648	3,632	3,776
LD31771408.las	16	65,520	3,694	3,824	4,176
LD31801399.las	208	62,464	3,947	3,920	3,488
LD31801402.las	16	16,624	4,034	4,112	4,048
LD31801405.las	16	65,520	3,800	3,728	3,424
LD31801408.las	16	65,520	3,432	3,520	3,424
LD31831399.las	16	65,520	3,665	3,696	3,632
LD31831402.las	16	65,520	4,206	4,224	4,384
LD31831405.las	16	64,416	3,901	4,016	4,096
LD31831408.las	272	65,520	4,049	4,176	4,160
LD31861399.las	224	33,424	3,757	3,632	3,536
LD31861402.las	16	65,520	3,948	3,856	3,344
LD31861405.las	16	65,520	3,332	3,680	4,272
LD31861408.las	16	65,520	3,989	4,096	4,736
LD31891399.las	16	65,520	3,833	3,904	3,920
LD31891402.las	16	65,520	3,792	4,048	4,048
LD31891405.las	16	65,520	3,838	3,904	3,840
LD31891408.las	16	65,520	4,195	4,416	4,576
LD31921402.las	16	65,520	3,318	3,648	3,856
LD31921405.las	16	65,520	3,271	3,488	3,424
LD31951396.las	16	65,520	3,669	3,520	3,232
LD31951399.las	16	65,520	3,372	3,472	864
LD31951402.las	16	65,520	3,049	3,296	3,536
LD31951405.las	64	65,520	4,123	4,256	4,736
LD31981396.las	16	65,520	3,604	3,760	3,888
LD31981399.las	16	65,520	3,298	3,536	3,488
LD31981402.las	16	65,520	3,777	3,904	3,888
LD31981405.las	16	65,520	3,685	3,920	4,016
LD32011399.las	16	65,520	2,752	2,448	1,200
LD32011402.las	16	65,520	3,013	3,440	3,728

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32011405.las	16	65,520	3,562	3,680	3,792
LD32011408.las	16	65,520	3,707	3,728	3,952
LD32041402.las	64	65,520	2,943	3,232	3,280
LD32041405.las	16	65,520	3,462	3,616	3,648
LD32041408.las	16	65,520	3,571	3,696	3,888
LD32071333.las	400	65,520	4,461	4,480	4,592
LD32071336.las	320	65,520	4,297	4,304	4,480
LD32071339.las	16	65,520	4,696	4,640	4,256
LD32071342.las	16	65,520	3,838	3,392	2,944
LD32071345.las	16	18,256	3,898	3,792	3,040
LD32071348.las	416	65,520	3,617	3,200	2,816
LD32071351.las	240	65,520	4,290	4,272	4,096
LD32071354.las	32	65,520	3,483	3,280	2,784
LD32071357.las	16	65,520	3,347	3,248	3,104
LD32071360.las	256	65,520	3,476	3,424	3,168
LD32071363.las	256	65,520	3,316	3,376	3,408
LD32071366.las	16	65,520	3,505	3,504	3,360
LD32071369.las	224	51,616	3,250	3,504	3,504
LD32071372.las	16	65,520	3,216	3,680	3,920
LD32071375.las	16	65,520	2,958	2,944	4,368
LD32071378.las	16	65,520	3,938	4,144	4,240
LD32071399.las	16	65,520	2,727	2,496	1,232
LD32071402.las	16	65,520	3,567	3,728	3,712
LD32071405.las	16	65,520	3,118	3,312	3,536
LD32071408.las	16	65,520	4,041	4,096	4,240
LD32101333.las	384	27,568	4,248	4,192	4,240
LD32101336.las	304	65,520	4,560	4,512	4,496
LD32101339.las	336	65,520	4,630	4,528	4,240
LD32101342.las	16	65,520	4,248	3,904	3,360
LD32101345.las	16	16,224	3,580	3,264	3,072
LD32101348.las	160	65,520	3,668	3,280	2,816
LD32101351.las	16	65,520	3,653	3,472	2,976
LD32101354.las	16	65,520	3,227	3,008	2,816

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32101357.las	16	65,520	3,568	3,520	3,408
LD32101360.las	240	65,520	3,780	3,824	3,872
LD32101363.las	192	50,688	3,525	3,632	3,760
LD32101366.las	16	65,520	3,564	3,680	3,760
LD32101369.las	192	65,520	3,661	3,664	3,472
LD32101372.las	32	65,520	3,198	3,568	3,760
LD32101375.las	16	65,520	3,736	4,048	4,144
LD32101378.las	16	65,520	3,708	4,000	4,128
LD32101399.las	16	65,520	2,906	3,056	3,504
LD32101402.las	128	65,520	3,179	3,456	3,728
LD32101405.las	16	65,520	3,373	3,584	3,792
LD32101408.las	16	65,520	4,287	4,464	5,136
LD32131333.las	464	10,656	4,921	4,688	4,304
LD32131336.las	448	65,520	5,618	5,552	4,608
LD32131339.las	16	45,216	4,587	4,480	4,208
LD32131342.las	16	36,528	3,664	3,728	2,304
LD32131345.las	464	19,408	3,119	3,200	3,344
LD32131348.las	464	65,520	3,533	3,392	3,280
LD32131351.las	384	65,520	3,660	3,616	3,616
LD32131354.las	144	65,520	4,213	3,952	3,792
LD32131357.las	448	65,520	4,275	4,064	3,776
LD32131360.las	256	65,520	4,244	4,048	3,888
LD32131363.las	16	65,520	3,953	3,888	3,760
LD32131366.las	224	65,520	3,574	3,648	3,648
LD32131369.las	240	31,040	3,562	3,632	3,552
LD32131372.las	192	65,520	3,237	3,632	3,744
LD32131375.las	16	65,520	3,495	3,712	3,904
LD32131378.las	16	65,520	2,929	2,864	960
LD32131399.las	48	65,520	2,898	2,720	752
LD32131402.las	16	65,520	3,183	3,424	3,744
LD32131405.las	16	65,520	3,229	3,440	3,632
LD32131408.las	16	19,632	3,675	3,584	3,616
LD32161333.las	416	65,520	4,875	4,928	4,400

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32161336.las	16	62,112	3,995	3,856	3,808
LD32161339.las	400	65,520	4,129	4,080	4,144
LD32161342.las	16	40,784	4,491	4,464	4,496
LD32161345.las	16	65,520	3,865	3,712	3,072
LD32161348.las	16	65,520	4,334	4,160	3,696
LD32161351.las	16	25,904	4,071	3,984	3,792
LD32161354.las	464	28,096	3,950	3,792	3,664
LD32161357.las	16	65,520	4,376	4,176	3,936
LD32161360.las	48	65,520	4,226	3,952	3,408
LD32161363.las	16	65,520	3,532	3,504	3,408
LD32161366.las	16	65,520	3,382	3,488	3,584
LD32161369.las	16	65,520	2,884	2,720	2,672
LD32161372.las	144	65,520	3,129	3,568	3,888
LD32161375.las	16	65,520	3,359	3,568	3,808
LD32161378.las	16	65,520	3,320	3,712	4,096
LD32161399.las	16	65,520	2,864	2,800	1,328
LD32161402.las	128	65,520	3,120	3,456	3,744
LD32161405.las	16	65,520	3,360	3,616	3,744
LD32191333.las	368	11,552	4,670	4,832	4,768
LD32191336.las	400	25,488	4,279	4,304	3,984
LD32191339.las	48	65,520	5,212	4,880	4,304
LD32191342.las	352	28,896	5,553	5,408	4,512
LD32191345.las	448	65,520	4,784	4,752	5,184
LD32191348.las	432	26,496	4,085	3,936	3,104
LD32191351.las	16	18,688	3,465	3,344	3,344
LD32191354.las	416	65,520	3,862	3,728	3,488
LD32191357.las	16	65,520	4,382	4,304	4,256
LD32191360.las	256	65,520	4,086	3,952	3,776
LD32191363.las	256	14,304	3,658	3,648	3,632
LD32191366.las	64	65,520	2,970	3,248	3,424
LD32191369.las	16	65,520	2,697	2,512	1,072
LD32191372.las	16	65,520	2,992	3,376	3,456
LD32191375.las	16	65,520	3,022	3,296	3,744

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32191378.las	16	65,520	2,948	2,848	2,032
LD32191399.las	16	65,520	2,842	2,640	1,328
LD32191402.las	16	65,520	3,047	3,008	3,744
LD32191405.las	16	65,520	3,027	3,264	3,744
LD32221333.las	400	65,520	4,510	4,512	4,512
LD32221336.las	16	65,520	4,688	4,768	4,832
LD32221339.las	16	65,520	4,632	4,768	4,752
LD32221342.las	16	65,520	4,528	4,592	4,800
LD32221345.las	240	65,520	4,268	4,464	2,864
LD32221348.las	384	65,520	4,067	3,920	3,760
LD32221351.las	16	65,520	3,749	3,600	3,760
LD32221354.las	16	52,272	3,322	3,152	3,024
LD32221357.las	464	36,688	3,992	3,568	3,280
LD32221360.las	240	65,520	4,537	4,400	4,256
LD32221363.las	16	65,520	3,846	3,840	3,888
LD32221366.las	224	65,520	3,815	3,648	3,536
LD32221369.las	32	65,520	3,189	3,392	3,456
LD32221372.las	16	65,520	3,295	3,440	3,504
LD32221375.las	16	65,520	2,726	2,992	592
LD32221378.las	16	65,520	2,819	2,656	2,048
LD32221396.las	16	65,520	2,436	2,000	1,088
LD32221399.las	16	65,520	2,692	2,512	1,552
LD32221402.las	16	65,520	2,870	2,976	3,520
LD32221405.las	16	65,520	3,167	3,280	3,632
LD32251333.las	448	23,504	4,380	4,400	4,464
LD32251336.las	400	11,056	5,138	4,944	4,544
LD32251339.las	16	65,520	4,878	4,880	4,832
LD32251342.las	16	65,520	4,468	4,576	5,088
LD32251345.las	400	11,824	5,043	5,008	4,896
LD32251348.las	432	12,752	4,458	4,416	4,704
LD32251351.las	256	65,520	3,766	3,680	2,784
LD32251354.las	432	17,152	4,132	3,888	3,152
LD32251357.las	16	38,464	4,454	4,272	3,824

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32251360.las	224	63,216	4,574	4,464	4,288
LD32251363.las	16	65,520	4,041	3,984	3,904
LD32251366.las	256	9,552	3,659	3,616	3,552
LD32251369.las	16	65,520	3,383	3,456	3,472
LD32251372.las	64	65,520	3,480	3,616	3,760
LD32251375.las	16	65,520	3,447	3,856	4,032
LD32251378.las	16	65,520	3,048	3,248	3,824
LD32251393.las	16	65,520	2,853	2,640	2,144
LD32251396.las	16	65,520	3,042	2,784	2,032
LD32251399.las	16	65,520	3,142	3,360	3,632
LD32251402.las	48	65,520	3,701	3,808	4,016
LD32251405.las	16	65,520	3,450	3,552	3,616
LD32281333.las	368	21,264	4,476	4,464	4,528
LD32281336.las	16	65,520	4,576	4,672	4,800
LD32281339.las	432	28,464	4,446	4,560	4,656
LD32281342.las	16	65,520	4,722	4,720	4,688
LD32281345.las	16	65,520	4,711	4,576	4,384
LD32281348.las	400	65,520	4,715	4,640	4,432
LD32281351.las	352	54,064	4,909	4,960	5,040
LD32281354.las	352	65,520	4,619	4,688	4,704
LD32281357.las	432	65,520	4,152	4,032	4,016
LD32281360.las	240	65,520	4,530	4,464	4,256
LD32281363.las	16	18,992	4,995	5,264	5,664
LD32281366.las	112	65,520	3,725	3,712	3,648
LD32281369.las	80	65,520	3,441	3,424	3,328
LD32281372.las	256	65,520	3,232	3,248	3,280
LD32281375.las	16	65,520	3,885	3,984	4,048
LD32281378.las	16	65,520	3,419	3,600	3,520
LD32281393.las	16	65,520	3,500	3,536	3,968
LD32281396.las	16	65,520	3,461	3,584	3,760
LD32281399.las	64	65,520	3,421	3,504	3,632
LD32281402.las	256	52,368	3,123	3,152	3,120
LD32281405.las	224	65,520	3,058	3,088	3,152

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32311333.las	432	12,336	4,507	4,528	4,560
LD32311336.las	16	23,616	4,998	4,912	4,800
LD32311339.las	16	28,032	4,661	4,608	4,528
LD32311342.las	16	63,328	4,904	4,768	4,672
LD32311345.las	16	38,656	4,853	4,800	4,528
LD32311348.las	16	32,288	4,720	4,816	4,880
LD32311351.las	16	65,520	4,495	4,576	4,720
LD32311354.las	368	65,520	4,559	4,464	4,224
LD32311357.las	336	65,520	5,432	5,456	5,408
LD32311360.las	16	65,520	4,787	4,864	5,312
LD32311363.las	16	65,520	4,801	5,056	5,488
LD32311366.las	256	65,520	4,176	4,016	3,984
LD32311369.las	16	65,520	3,877	3,840	3,792
LD32311372.las	256	65,520	3,607	3,488	3,408
LD32311375.las	16	65,520	4,083	4,176	4,320
LD32311378.las	16	65,520	3,813	3,904	4,096
LD32311393.las	16	65,520	3,680	3,904	4,000
LD32311396.las	16	65,520	3,569	3,568	3,408
LD32311399.las	224	65,520	3,470	3,504	3,376
LD32341333.las	368	65,520	4,456	4,496	4,560
LD32341336.las	16	65,520	4,711	4,672	4,704
LD32341339.las	16	21,008	5,222	5,312	5,616
LD32341342.las	416	65,520	5,734	5,808	5,776
LD32341345.las	16	23,776	5,614	5,648	5,664
LD32341348.las	16	65,520	4,945	5,184	5,264
LD32341351.las	16	41,328	4,324	4,272	4,240
LD32341354.las	416	63,696	5,527	5,616	5,696
LD32341357.las	416	65,520	5,559	5,696	5,872
LD32341360.las	240	65,520	4,245	3,920	3,760
LD32341363.las	16	19,680	3,790	3,808	3,776
LD32341366.las	224	49,152	3,695	3,856	3,984
LD32341369.las	256	30,336	3,951	3,936	3,904
LD32341372.las	240	65,520	4,503	4,512	3,776

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32341375.las	16	65,520	4,162	4,224	4,128
LD32341378.las	16	61,840	3,957	4,016	4,016
LD32341390.las	16	65,520	3,855	4,032	4,288
LD32341393.las	16	65,520	3,769	3,904	3,984
LD32341396.las	16	65,520	3,866	3,952	4,064
LD32341399.las	208	65,520	3,571	3,424	3,248
LD32371333.las	384	65,520	4,185	4,352	4,528
LD32371336.las	368	41,104	3,896	4,208	4,624
LD32371339.las	368	65,520	4,552	4,784	4,896
LD32371342.las	416	32,816	5,226	5,344	5,568
LD32371345.las	384	65,520	5,092	5,056	4,784
LD32371348.las	448	65,520	4,756	4,800	5,072
LD32371351.las	320	65,520	4,379	4,272	4,080
LD32371354.las	400	64,384	5,149	5,184	5,248
LD32371357.las	16	65,520	4,825	4,640	4,480
LD32371360.las	240	21,968	4,958	4,976	5,488
LD32371363.las	16	10,608	3,873	3,840	3,680
LD32371366.las	240	11,296	2,845	2,896	3,264
LD32371369.las	240	26,816	3,760	3,856	3,872
LD32371372.las	48	65,520	3,855	3,824	3,760
LD32371375.las	16	65,520	3,905	4,064	4,320
LD32371378.las	16	65,520	3,961	3,984	3,936
LD32371387.las	16	65,520	3,292	3,632	3,920
LD32371390.las	16	65,520	4,086	4,256	4,352
LD32371393.las	16	65,520	3,845	4,128	4,208
LD32371396.las	16	65,520	3,751	3,968	4,208
LD32371399.las	224	36,976	3,596	3,744	3,984
LD32401333.las	400	39,824	4,708	4,720	4,720
LD32401336.las	400	11,024	4,165	4,144	3,968
LD32401339.las	16	21,792	4,681	4,672	4,880
LD32401342.las	16	28,128	4,406	4,336	4,000
LD32401345.las	16	14,928	4,637	4,720	4,640
LD32401348.las	16	28,320	4,934	5,040	5,328

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32401351.las	496	13,840	5,391	5,216	5,040
LD32401354.las	480	37,152	5,517	5,600	5,792
LD32401357.las	448	65,520	4,758	4,688	4,640
LD32401360.las	272	65,072	5,393	5,456	5,520
LD32401363.las	16	60,016	4,706	4,640	3,968
LD32401366.las	208	61,696	3,694	3,952	4,096
LD32401369.las	240	21,760	4,012	4,064	4,080
LD32401372.las	224	65,520	3,762	3,824	3,904
LD32401375.las	16	65,520	3,743	3,856	4,176
LD32401378.las	16	65,520	4,052	4,128	4,192
LD32401387.las	16	65,520	3,476	3,824	4,064
LD32401390.las	16	65,520	4,043	4,256	4,432
LD32401393.las	16	65,520	3,595	4,032	4,224
LD32401396.las	16	65,520	3,789	4,144	4,032
LD32431333.las	32	65,520	4,824	4,720	3,216
LD32431336.las	32	65,520	4,615	4,688	3,712
LD32431339.las	384	65,520	5,220	5,104	4,960
LD32431342.las	32	65,520	4,823	4,848	4,848
LD32431345.las	368	28,240	4,702	4,672	4,624
LD32431348.las	16	65,520	4,986	4,896	4,544
LD32431351.las	16	65,520	5,412	5,440	5,584
LD32431354.las	48	65,520	5,334	5,664	5,888
LD32431357.las	464	65,520	4,552	4,480	4,464
LD32431387.las	16	65,520	4,076	4,320	4,304
LD32431390.las	16	65,520	3,444	3,904	4,368
LD32431393.las	16	65,520	3,357	3,408	3,200
LD32431396.las	16	65,520	3,386	3,648	3,984
LD32461387.las	16	65,520	3,740	4,080	4,368
LD32461390.las	16	65,520	3,953	4,128	4,336
LD32461393.las	16	65,520	3,440	3,776	3,952
LD32461396.las	16	65,520	3,687	3,936	4,208
LD32491390.las	16	65,520	4,257	4,448	4,656
LD32491393.las	16	64,080	3,975	4,288	4,432

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD32491396.las	16	65,520	3,541	3,840	4,304
LD32491399.las	176	65,520	3,760	3,952	4,144
LD32521393.las	16	65,520	4,167	4,160	4,000
LD32521396.las	16	65,520	3,601	3,856	4,400
LD35101333.las	256	65,520	4,641	4,624	4,384
LD35101336.las	144	65,520	5,272	5,408	6,336
LD35101339.las	48	65,520	4,080	4,144	4,592
LD35101342.las	48	65,520	4,165	3,952	3,408
LD35101345.las	336	65,520	4,215	4,288	4,656
LD35131324.las	352	65,520	3,463	3,504	3,456
LD35131327.las	352	65,520	4,180	4,288	4,256
LD35131330.las	352	32,688	4,065	4,048	4,112
LD35131333.las	352	65,520	4,929	4,960	5,856
LD35131336.las	368	22,720	4,129	3,616	3,168
LD35131339.las	16	65,520	3,807	3,776	3,040
LD35131342.las	208	65,520	3,773	3,888	3,952
LD35131345.las	368	61,360	4,608	4,672	4,464
LD35131348.las	368	65,520	4,368	4,304	4,064
LD35161321.las	384	7,200	3,976	3,984	3,968
LD35161324.las	320	65,520	3,618	3,712	3,792
LD35161327.las	336	65,520	4,334	4,368	4,336
LD35161330.las	304	65,520	4,154	4,240	4,256
LD35161333.las	368	65,520	4,606	4,592	4,336
LD35161336.las	64	65,520	4,144	4,016	3,760
LD35161339.las	48	65,520	3,139	2,976	1,264
LD35161342.las	48	65,520	3,631	3,760	3,584
LD35161345.las	16	65,520	3,840	3,936	4,256
LD35161348.las	224	65,520	4,640	4,368	4,096
LD35161351.las	352	65,520	3,745	3,712	3,584
LD35191324.las	320	65,520	3,562	3,568	3,776
LD35191327.las	368	47,408	4,218	4,144	3,952
LD35191330.las	384	65,520	4,436	4,384	4,400
LD35191333.las	48	65,520	3,764	3,568	3,312

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD35191336.las	112	65,520	3,997	4,032	3,856
LD35191339.las	176	65,520	2,692	2,496	1,248
LD35191342.las	64	65,520	3,357	3,888	4,272
LD35191345.las	16	65,520	3,744	3,872	4,032
LD35191348.las	432	54,176	3,928	3,920	3,952
LD35191351.las	400	38,640	4,163	4,096	3,776
LD35191354.las	16	26,304	4,033	4,288	4,192
LD35221324.las	400	65,520	3,849	3,840	3,824
LD35221327.las	256	39,792	4,028	3,936	3,696
LD35221330.las	16	65,520	4,127	3,968	3,840
LD35221333.las	352	65,520	3,928	3,808	3,456
LD35221336.las	64	65,520	4,029	4,176	4,128
LD35221339.las	64	65,520	2,555	2,368	1,360
LD35221342.las	48	65,520	3,080	3,456	3,792
LD35221345.las	320	65,520	4,180	4,096	3,808
LD35221348.las	400	65,520	3,848	3,936	3,968
LD35221351.las	400	39,648	3,945	3,920	3,936
LD35221354.las	160	65,520	4,565	4,448	3,904
LD35221357.las	368	36,720	4,185	4,240	4,144
LD35251324.las	400	10,656	3,772	3,728	3,712
LD35251327.las	400	9,232	3,716	3,728	3,712
LD35251330.las	384	52,992	4,240	4,304	4,256
LD35251333.las	128	65,520	4,164	4,096	4,048
LD35251336.las	256	65,520	4,557	4,464	4,144
LD35251339.las	80	65,520	3,697	3,824	3,840
LD35251342.las	256	65,520	3,598	3,584	3,600
LD35251345.las	48	65,520	3,664	3,632	3,552
LD35251348.las	384	23,456	3,780	3,728	3,776
LD35251351.las	336	65,520	4,180	4,080	3,920
LD35251354.las	320	65,520	4,118	4,144	4,160
LD35251357.las	384	65,520	4,104	4,144	4,128
LD35281324.las	336	65,520	3,961	4,112	4,240
LD35281327.las	368	65,520	4,265	4,224	4,128

C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD35281330.las	320	65,520	3,857	3,888	3,952
LD35281333.las	368	65,520	3,788	3,904	4,000
LD35281336.las	80	65,520	3,661	3,728	3,952
LD35281339.las	16	65,520	3,378	3,584	3,840
LD35281342.las	16	65,520	3,460	3,632	3,552
LD35281345.las	16	65,520	3,802	3,648	3,440
LD35281348.las	48	65,520	3,376	3,280	3,200
LD35281351.las	400	65,520	3,567	3,520	3,456
LD35281354.las	384	65,520	3,596	3,568	3,216
LD35281357.las	240	65,520	3,812	3,648	3,376
LD35281360.las	384	35,312	4,583	4,640	4,640
LD35311324.las	240	65,520	4,178	4,224	4,288
LD35311327.las	320	34,176	4,234	4,240	4,288
LD35311339.las	352	65,520	3,560	3,584	3,552
LD35311342.las	144	65,520	3,976	3,904	3,600
LD35311345.las	48	65,520	3,869	3,856	3,728
LD35311348.las	368	57,440	3,584	3,344	3,056
LD35311351.las	368	51,600	3,479	3,344	3,184
LD35311354.las	368	12,048	3,654	3,536	3,344
LD35311357.las	384	52,912	4,203	4,176	4,160
LD35311360.las	336	39,520	4,555	4,576	4,512
LD35311363.las	288	60,352	3,584	4,032	4,512
LD35341342.las	464	65,520	3,779	3,904	4,112
LD35341345.las	16	65,520	3,831	3,872	3,920
LD35341348.las	400	65,520	3,878	3,808	3,568
LD35341351.las	336	65,520	4,404	4,560	5,408
LD35341354.las	368	65,520	3,996	4,064	2,720
LD35341357.las	416	65,520	3,415	3,040	2,784
LD35341360.las	400	32,304	3,660	3,280	2,912
LD35341363.las	384	65,520	4,269	4,576	4,672
LD35341366.las	352	65,520	3,676	3,952	3,792
LD35371345.las	400	65,520	4,093	4,112	4,096
LD35371348.las	368	65,520	4,016	4,064	4,128

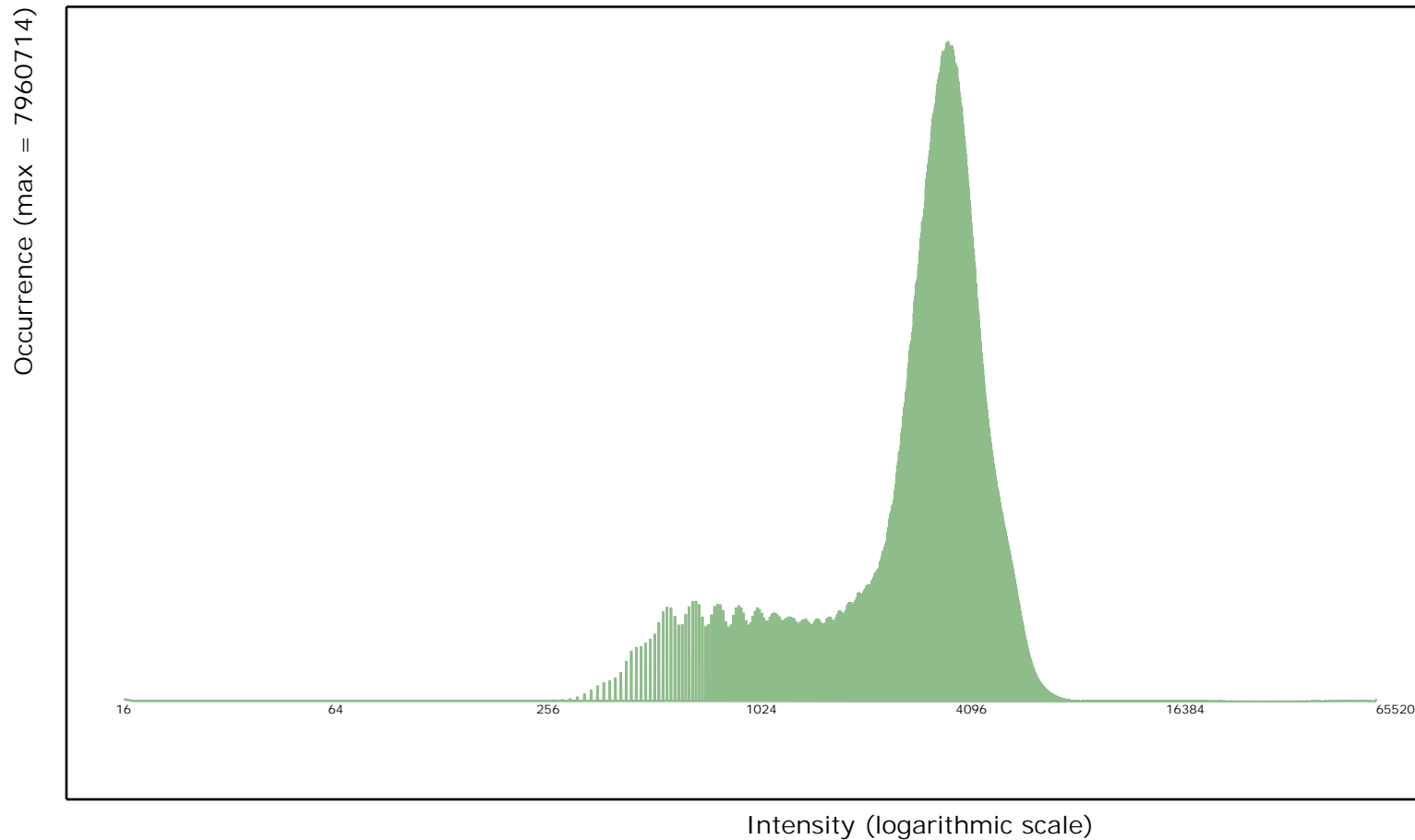
C-3 Report on Intensity Values (Tiled Data) - continued

File	Minimum	Maximum	Mean	Median	Mode
LD35371351.las	272	65,520	4,819	4,800	4,464
LD35371354.las	368	65,520	4,190	4,368	2,832
LD35371357.las	80	65,520	3,374	3,120	2,816
LD35371360.las	416	65,520	3,029	2,944	2,288
LD35371363.las	352	65,520	4,270	4,272	6,288
LD35371366.las	336	65,520	3,713	4,112	4,432
LD35401348.las	464	51,728	3,952	3,968	3,984
LD35401351.las	368	65,520	4,011	4,096	4,480
LD35401354.las	384	47,568	3,983	3,776	3,600
LD35401357.las	288	65,520	4,182	3,888	3,504
LD35401360.las	400	17,392	3,285	3,152	3,184
LD35401363.las	384	65,520	4,280	4,080	6,096
LD35401366.las	336	30,144	4,394	4,688	6,096
LD35431351.las	384	44,896	4,081	4,144	4,192
LD35431354.las	192	65,520	3,912	4,000	4,288
LD35431357.las	336	65,520	3,723	3,600	3,488
LD35431360.las	400	13,840	4,479	4,368	4,144
LD35431363.las	368	65,520	4,038	4,272	4,368
LD35431366.las	400	65,520	4,702	5,120	6,000
LD35461354.las	400	65,520	4,063	4,144	4,192
LD35461357.las	64	65,520	3,902	4,032	4,336
LD35461360.las	400	65,520	3,501	3,296	3,136
LD35461363.las	368	65,520	4,009	3,712	3,216
LD35461366.las	320	65,520	4,524	4,768	5,392
LD35491354.las	432	6,672	4,138	4,160	4,160
LD35491357.las	256	65,520	3,752	3,856	4,048
LD35491360.las	400	23,472	3,980	3,680	3,408
LD35491363.las	112	65,520	3,631	3,584	3,360
LD35491366.las	176	65,520	3,532	3,776	4,032
LD35521357.las	496	7,936	4,071	4,080	4,080
LD35521360.las	112	65,520	3,622	3,648	3,584
LD35521363.las	416	47,248	3,964	4,000	4,256
Overall Statistics	16	65,520	3,920	3,936	3,888

C-3 Report on Intensity Values (Tiled Data) - continued

The purpose of this section is to show a frequency distribution chart of intensities throughout all of the lidar tiled files.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

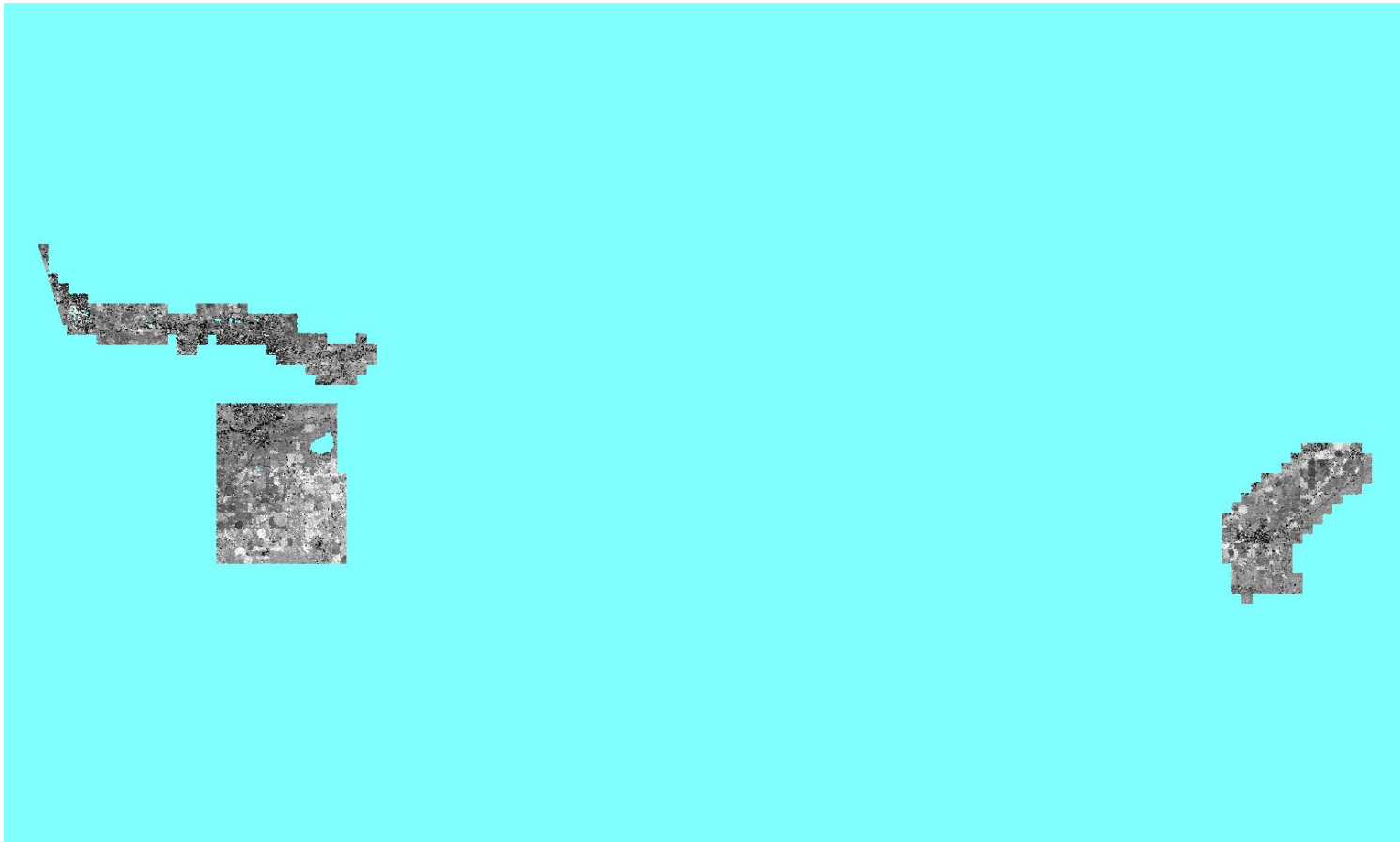


C-3 Report on Intensity Values (Tiled Data) - continued

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\C_3\ColorByIntensity_Classified.jpg](D:\00_CWCB\Priority\QC\C_3\ColorByIntensity_Classified.jpg)



C-4 Report on Nominal Pulse Spacing (NPS)

The USGS Lidar Base Specification Version 1.2 states: "Assessment and reporting of the NPS is made against single swath, single instrument, first return only data, including only the geometrically usable part of the swath (typically the center 95 percent) and excluding acceptable data voids. Higher net densities of lidar point measurements are being achieved more often by using multiple coverages, creating a need for a separate new term to prevent confusion with NPS and NPD. This specification will use the terms aggregate nominal pulse spacing (ANPS) and aggregate nominal pulse density (ANPD) to describe the net overall pulse spacing and density, respectively. The table "Aggregate nominal pulse spacing and density, Quality Level 0–Quality Level 3" (table 1) lists the required ANPS and ANPD by QL. Dependent on the local terrain and land cover conditions in a project, a greater pulse density may be required on specific projects."

Table 1. Aggregate nominal pulse spacing and density, Quality Level 0–Quality Level 3.

[m, meters; pls/m², pulses per square meter; ≤, less than or equal to; ≥, greater than or equal to]

Quality Level (QL)	Aggregate nominal pulse spacing (ANPS) (m)	Aggregate nominal pulse density (ANPD) (pls/m ²)
QL0	≤0.35	≥8.0
QL1	≤0.35	≥8.0
QL2	≤0.71	≥2.0
QL3	≤1.41	≥0.5

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

Quality level tested: QL2

File	Number of First Returns	Area of Swath	Point Density	NPS
1004.las	48,659,531	212,141,312	2.465/0.229	0.636/2.088
1007.las	49,394,007	210,828,544	2.519/0.234	0.630/2.066
1015.las	69,551,979	326,366,784	2.293/0.213	0.660/2.166

C-4 Report on Nominal Pulse Spacing (NPS) - continued

File	Number of First Returns	Area of Swath	Point Density	NPS
1017.las	21,959,263	104,904,512	2.250/0.209	0.666/2.186
1020.las	45,793,460	212,309,888	2.325/0.216	0.656/2.153
1044.las	2,294,328	6,530,496	3.778/0.351	0.514/1.687
1045.las	15,012,632	62,172,672	2.594/0.241	0.620/2.035
1046.las	16,681,458	73,680,896	2.433/0.226	0.641/2.102
1047.las	23,264,106	92,085,760	2.723/0.253	0.607/1.990
1048.las	21,723,868	97,860,864	2.390/0.222	0.647/2.122
1049.las	29,359,647	116,562,368	2.713/0.252	0.607/1.993
1050.las	30,984,142	135,780,416	2.454/0.228	0.638/2.093
1051.las	55,199,629	230,337,856	2.583/0.240	0.623/2.043
1052.las	50,258,951	229,002,176	2.357/0.219	0.651/2.135
1053.las	53,172,232	212,686,016	2.691/0.250	0.610/2.000
1054.las	48,441,357	209,864,512	2.486/0.231	0.634/2.081
1055.las	43,347,319	190,355,200	2.454/0.228	0.639/2.096
1056.las	37,625,666	162,521,216	2.497/0.232	0.633/2.078
1057.las	21,791,391	95,176,384	2.465/0.229	0.637/2.090
1081.las	36,706,366	160,521,984	2.465/0.229	0.637/2.091
1082.las	18,893,546	81,002,368	2.508/0.233	0.631/2.071
1083.las	30,102,280	137,023,616	2.368/0.220	0.650/2.134
1084.las	46,890,206	211,765,120	2.379/0.221	0.648/2.125
1158.las	15,347,267	69,446,592	2.379/0.221	0.648/2.127
1159.las	15,411,743	67,932,416	2.443/0.227	0.640/2.099
1160.las	12,872,578	55,026,944	2.519/0.234	0.630/2.068
1177.las	76,029,753	275,221,376	2.971/0.276	0.580/1.903
1178.las	50,704,051	229,851,456	2.379/0.221	0.649/2.129
1197.las	10,613,380	53,682,368	2.131/0.198	0.685/2.249
1218.las	29,433,431	135,934,528	2.336/0.217	0.655/2.149
1219.las	38,001,062	178,218,304	2.293/0.213	0.660/2.166
1220.las	38,475,200	181,990,656	2.271/0.211	0.663/2.175
1221.las	38,400,800	181,342,336	2.282/0.212	0.662/2.173
1222.las	38,402,287	181,946,368	2.271/0.211	0.664/2.177
1223.las	38,399,020	181,033,408	2.282/0.212	0.662/2.171
1224.las	38,306,097	181,646,848	2.271/0.211	0.664/2.178

C-4 Report on Nominal Pulse Spacing (NPS) - continued

File	Number of First Returns	Area of Swath	Point Density	NPS
1225.las	39,087,676	180,813,696	2.325/0.216	0.656/2.151
1226.las	38,443,889	181,092,160	2.282/0.212	0.661/2.170
1227.las	38,500,892	172,744,640	2.400/0.223	0.646/2.118
1229.las	30,609,537	146,498,176	2.250/0.209	0.667/2.188
1236.las	862,349	2,220,608	4.176/0.388	0.489/1.605
1237.las	3,356,596	16,784,960	2.153/0.200	0.682/2.236
1238.las	10,193,719	40,619,968	2.702/0.251	0.608/1.996
2002.las	45,328,056	208,283,776	2.347/0.218	0.653/2.144
2012.las	89,708,642	402,374,080	2.400/0.223	0.646/2.118
2041.las	43,085,886	190,665,408	2.433/0.226	0.641/2.104
2048.las	42,729,145	186,844,928	2.465/0.229	0.637/2.091
2049.las	49,605,748	206,110,016	2.594/0.241	0.621/2.038
2103.las	43,239,903	178,219,776	2.616/0.243	0.619/2.030
2104.las	28,389,779	129,694,464	2.357/0.219	0.651/2.137
Average			2.465/0.229	0.637/2.090
			pp Square Meter/ pp Square US Survey Foot	Meter/ US Survey Feet
Pilot2	519,405,586	1,809,000,000	3.089/0.287	0.569/1.866
Pilot3	337,137,350	1,143,000,000	3.175/0.295	0.561/1.841
Pilot1	328,813,011	1,105,830,343	3.197/0.297	0.559/1.834
Pilot1a	3,464,481	11,244,171	3.315/0.308	0.549/1.802
Aggregate	1,188,820,428	4,069,074,513	3.143/0.292	0.564/1.850
			pp Square Meter/ pp Square US Survey Foot	Meter/ US Survey Feet

C-5.1 Report on Data Voids

The USGS Lidar Base Specification Version 1.2 states: "Data voids, in lidar, are gaps in the point cloud coverage, caused by surface absorbance or refraction of the lidar pulse (or both absorbance and refraction simultaneously), instrument or processing anomalies or failure, obstruction of the lidar pulse, or improper collection because of flight plans. A data void is considered to be any area greater than or equal to 4(ANPS2), which is measured using first returns only. Data voids within a single swath are not acceptable, except in the following circumstances:

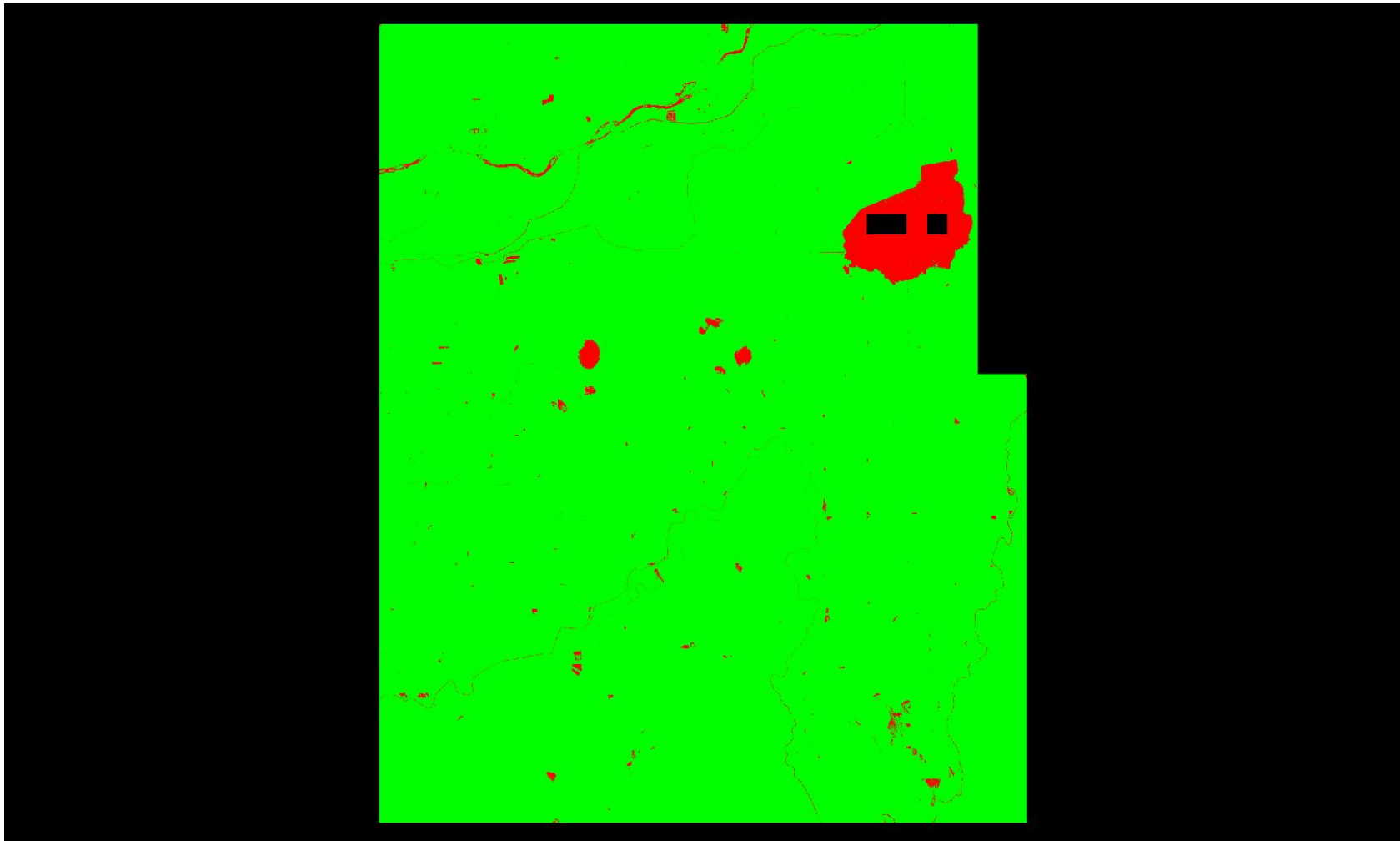
- (1) where caused by water bodies.
- (2) where caused by areas of low near infrared (NIR) reflectivity such as asphalt or composition roofing, or
- (3) where appropriately filled in by another swath. "

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\C_5\Area1\Boresighted_DataVoids_SingleFile.jp2](#)

C-5.1 Report on Data Voids



Cell size: 9.318 US Survey Feet

- Green: Cells containing at least 1 first return lidar point (number of cells = 20,254,193)
- Red: Cells containing no first return lidar points (number of cells = 535,392)
- Black: Background Color: Null data

C-5.2 Report on Data Voids

The USGS Lidar Base Specification Version 1.2 states: "Data voids, in lidar, are gaps in the point cloud coverage, caused by surface absorbance or refraction of the lidar pulse (or both absorbance and refraction simultaneously), instrument or processing anomalies or failure, obstruction of the lidar pulse, or improper collection because of flight plans. A data void is considered to be any area greater than or equal to 4(ANPS2), which is measured using first returns only. Data voids within a single swath are not acceptable, except in the following circumstances:

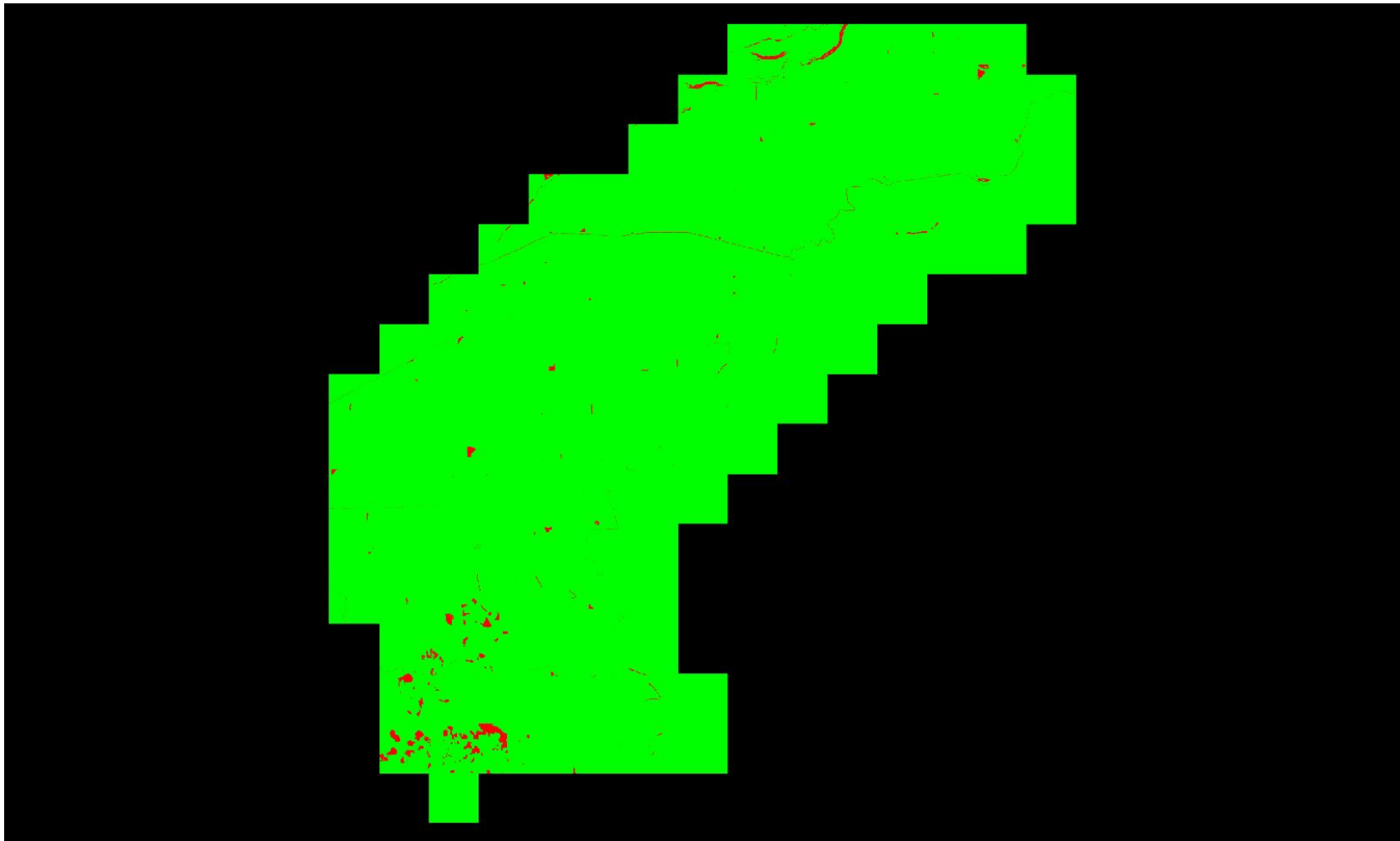
- (1) where caused by water bodies.
- (2) where caused by areas of low near infrared (NIR) reflectivity such as asphalt or composition roofing, or
- (3) where appropriately filled in by another swath. "

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\C_5\Area2\Boresighted_DataVoids_SingleFile.jp2](#)

C-5.2 Report on Data Voids



Cell size: 9.318 US Survey Feet

- Green: Cells containing at least 1 first return lidar point (number of cells = 13,054,885)
- Red: Cells containing no first return lidar points (number of cells = 117,167)
- Black: Background Color: Null data

C-5.3 Report on Data Voids

The USGS Lidar Base Specification Version 1.2 states: "Data voids, in lidar, are gaps in the point cloud coverage, caused by surface absorbance or refraction of the lidar pulse (or both absorbance and refraction simultaneously), instrument or processing anomalies or failure, obstruction of the lidar pulse, or improper collection because of flight plans. A data void is considered to be any area greater than or equal to 4(ANPS2), which is measured using first returns only. Data voids within a single swath are not acceptable, except in the following circumstances:

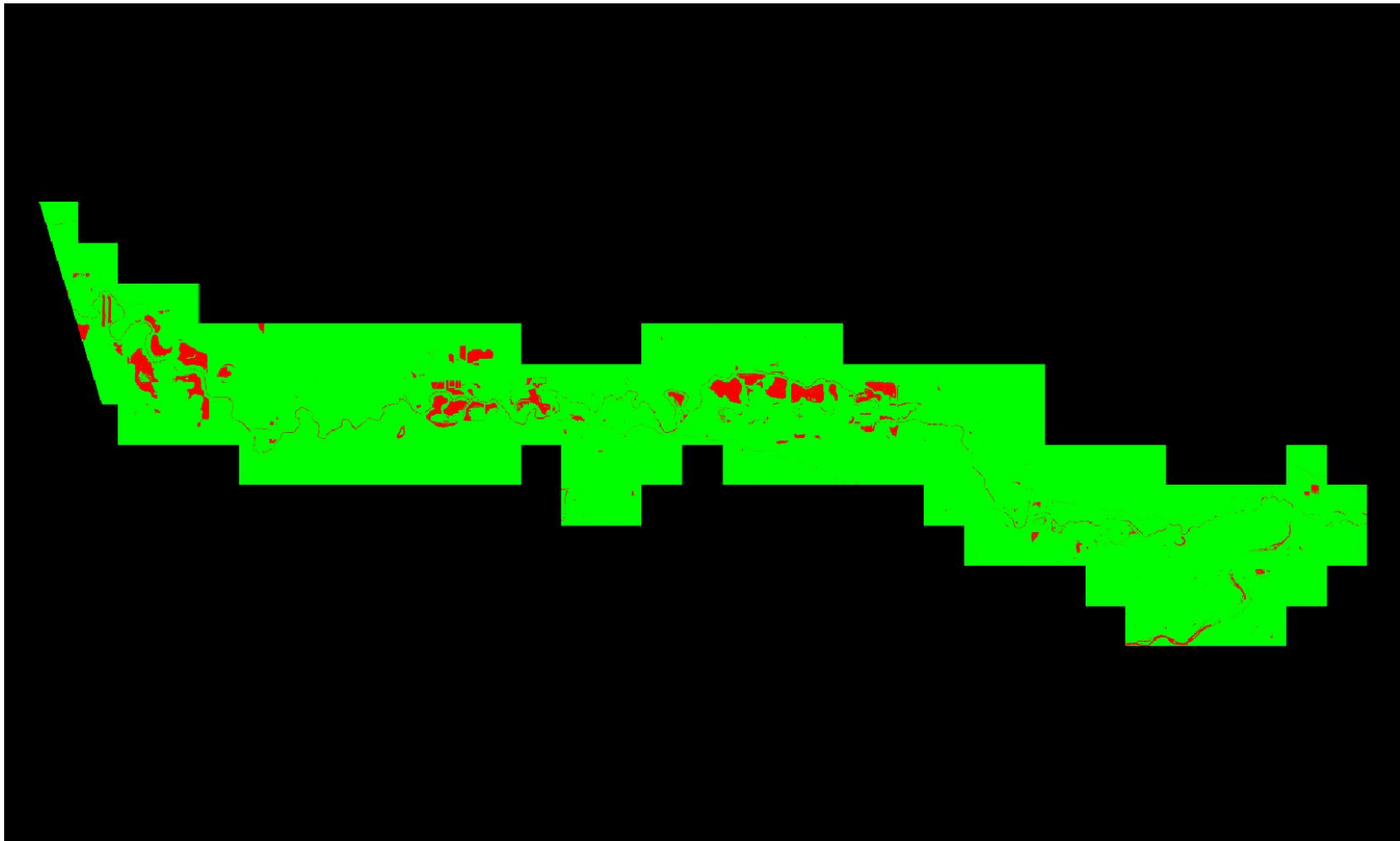
- (1) where caused by water bodies.
- (2) where caused by areas of low near infrared (NIR) reflectivity such as asphalt or composition roofing, or
- (3) where appropriately filled in by another swath. "

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\C_5\Area3\Boresighted_DataVoids_SingleFile.jp2](#)

C-5.3 Report on Data Voids



Cell size: 9.318 US Survey Feet

- Green: Cells containing at least 1 first return lidar point (number of cells = 12,189,833)
- Red: Cells containing no first return lidar points (number of cells = 562,264)
- Black: Background Color: Null data

C-5.4 Report on Data Voids

The USGS Lidar Base Specification Version 1.2 states: "Data voids, in lidar, are gaps in the point cloud coverage, caused by surface absorbance or refraction of the lidar pulse (or both absorbance and refraction simultaneously), instrument or processing anomalies or failure, obstruction of the lidar pulse, or improper collection because of flight plans. A data void is considered to be any area greater than or equal to 4(ANPS2), which is measured using first returns only. Data voids within a single swath are not acceptable, except in the following circumstances:

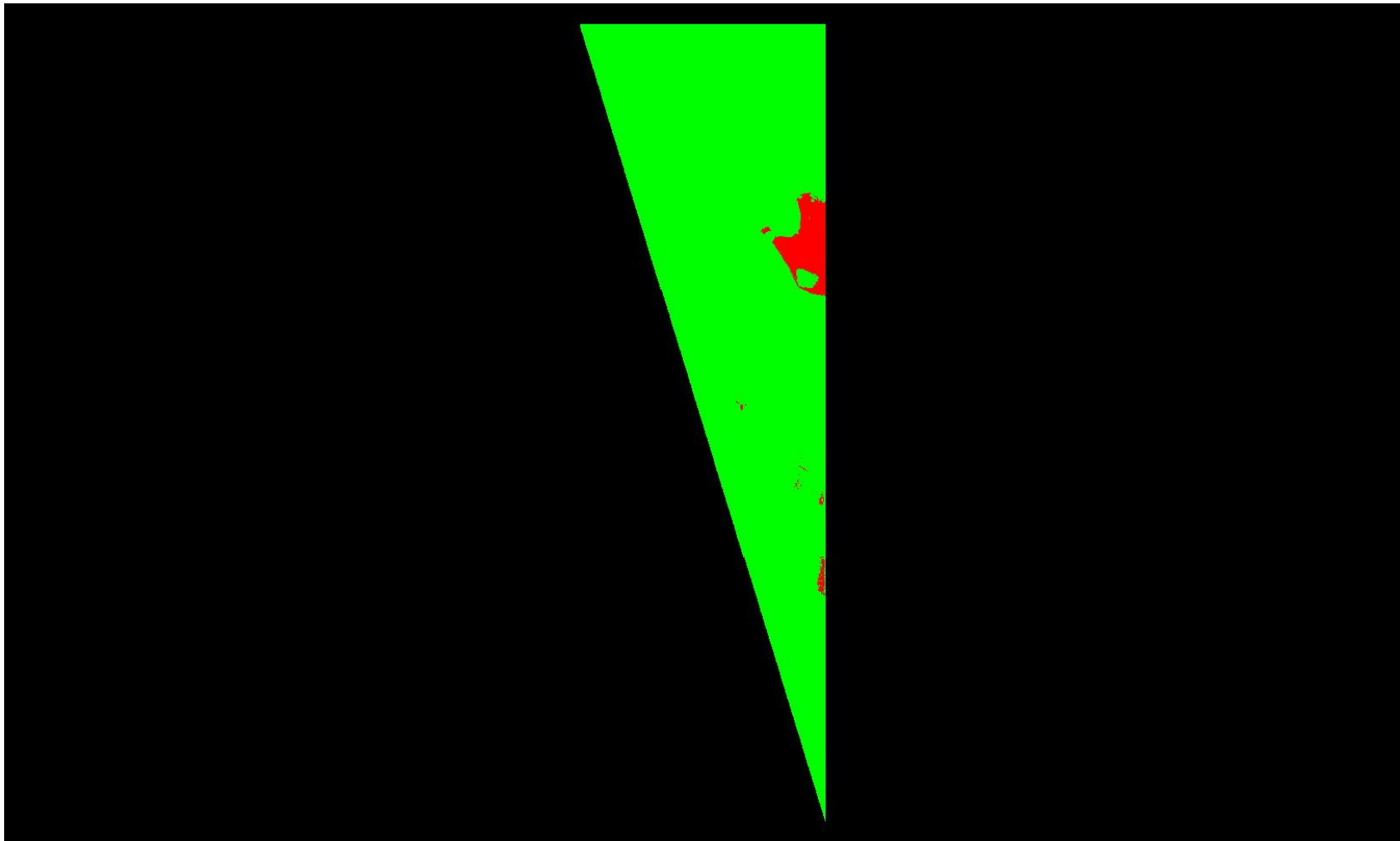
- (1) where caused by water bodies.
- (2) where caused by areas of low near infrared (NIR) reflectivity such as asphalt or composition roofing, or
- (3) where appropriately filled in by another swath. "

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\C_5\Area4\Boresighted_DataVoids_SingleFile.jp2](#)

C-5.4 Report on Data Voids



Cell size: 9.318 US Survey Feet

- Green: Cells containing at least 1 first return lidar point (number of cells = 125,512)
- Red: Cells containing no first return lidar points (number of cells = 4,259)
- Black: Background Color: Null data

C-6.1.1 Report on Spatial Distribution and Regularity

The USGS Lidar Base Specification Version 1.2 states: "The spatial distribution of geometrically usable points will be uniform and regular. Although lidar instruments do not produce regularly gridded points, collections shall be planned and executed to produce an aggregate 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 regularity of the point pattern and density throughout the dataset is important and will be assessed by using the following steps:

- (1) Generating a density grid from the data with cell sizes equal to twice the design ANPS and a radius equal to the design ANPS.
- (2) Ensuring at least 90 percent of the cells in the grid contain at least one lidar point.
- (3) Using individual (single) swaths, with only the first return points located within the geometrically usable center part (typically 95 percent) of each swath.
- (4) Excluding acceptable data voids previously identified in this specification.

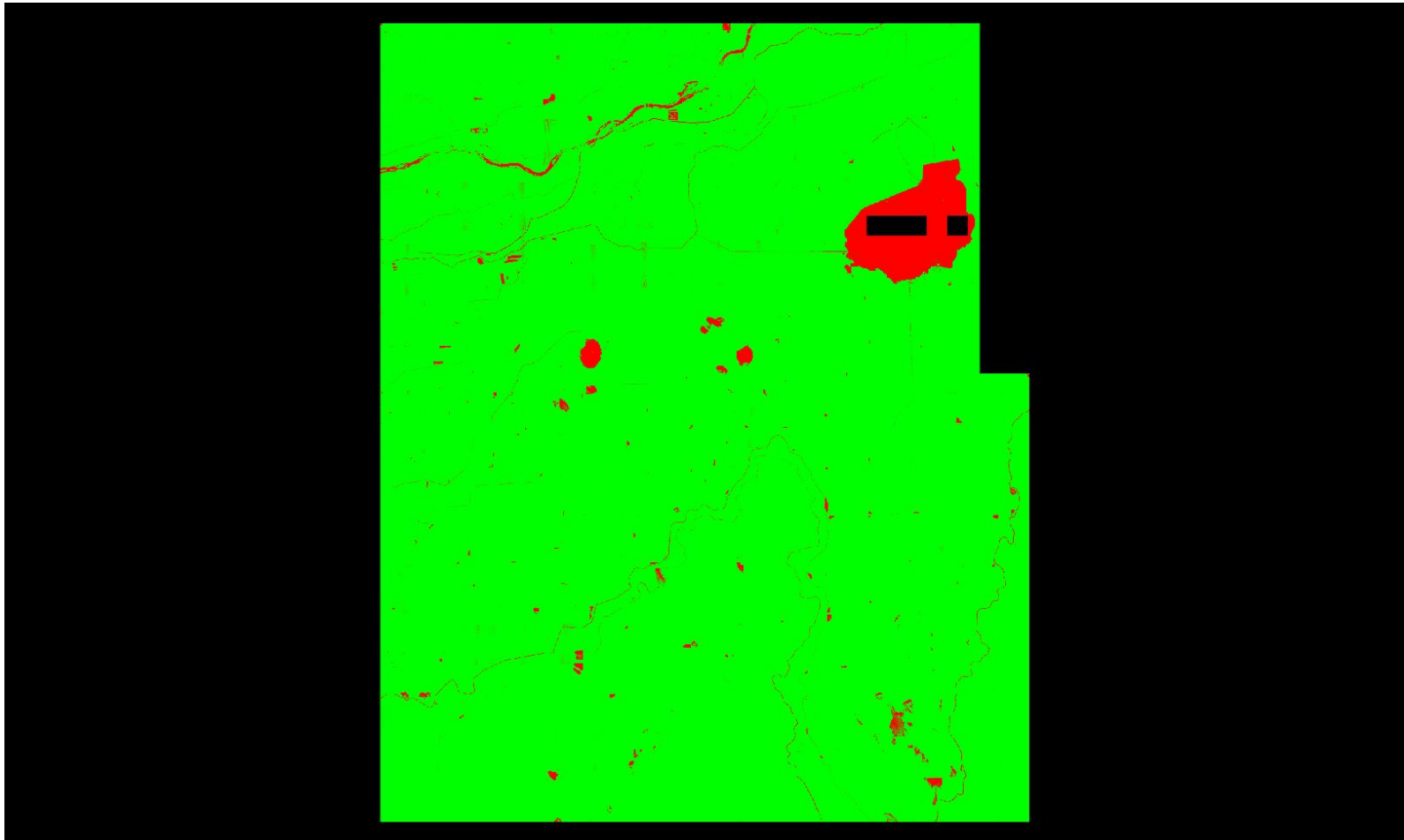
The process described in this section relates only to regular and uniform point distribution. The process does not relate to, nor can it be used for, the assessment of NPS or ANPS. The USGS-NGP may allow lower passing thresholds for this requirement in areas of substantial relief where maintaining a regular and uniform point distribution is impractical."

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\C_6\Area1\Boresighted_SpatialDistribution_SingleFile.jp2](#)

C-6.1.1 Report on Spatial Distribution and Regularity - continued



Cell size: 4.659 US Survey Feet

- Green: Cells containing at least one first return lidar point (number of cells = 80,744,094)
- Red: Cells not containing at least one first return lidar point (number of cells = 2,332,356)
- Black: Background Color: Null data

Percentage of cells in the grid that contain at least one first return lidar point = 97.19% (Requirement is typically 90%)
See JPG2000 file for full resolution results

C-6.1.2 Report on Spatial Distribution and Regularity

The USGS Lidar Base Specification Version 1.2 states: "The spatial distribution of geometrically usable points will be uniform and regular. Although lidar instruments do not produce regularly gridded points, collections shall be planned and executed to produce an aggregate 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 regularity of the point pattern and density throughout the dataset is important and will be assessed by using the following steps:

- (1) Generating a density grid from the data with cell sizes equal to twice the design ANPS and a radius equal to the design ANPS.
- (2) Ensuring at least 90 percent of the cells in the grid contain at least one lidar point.
- (3) Using individual (single) swaths, with only the first return points located within the geometrically usable center part (typically 95 percent) of each swath.
- (4) Excluding acceptable data voids previously identified in this specification.

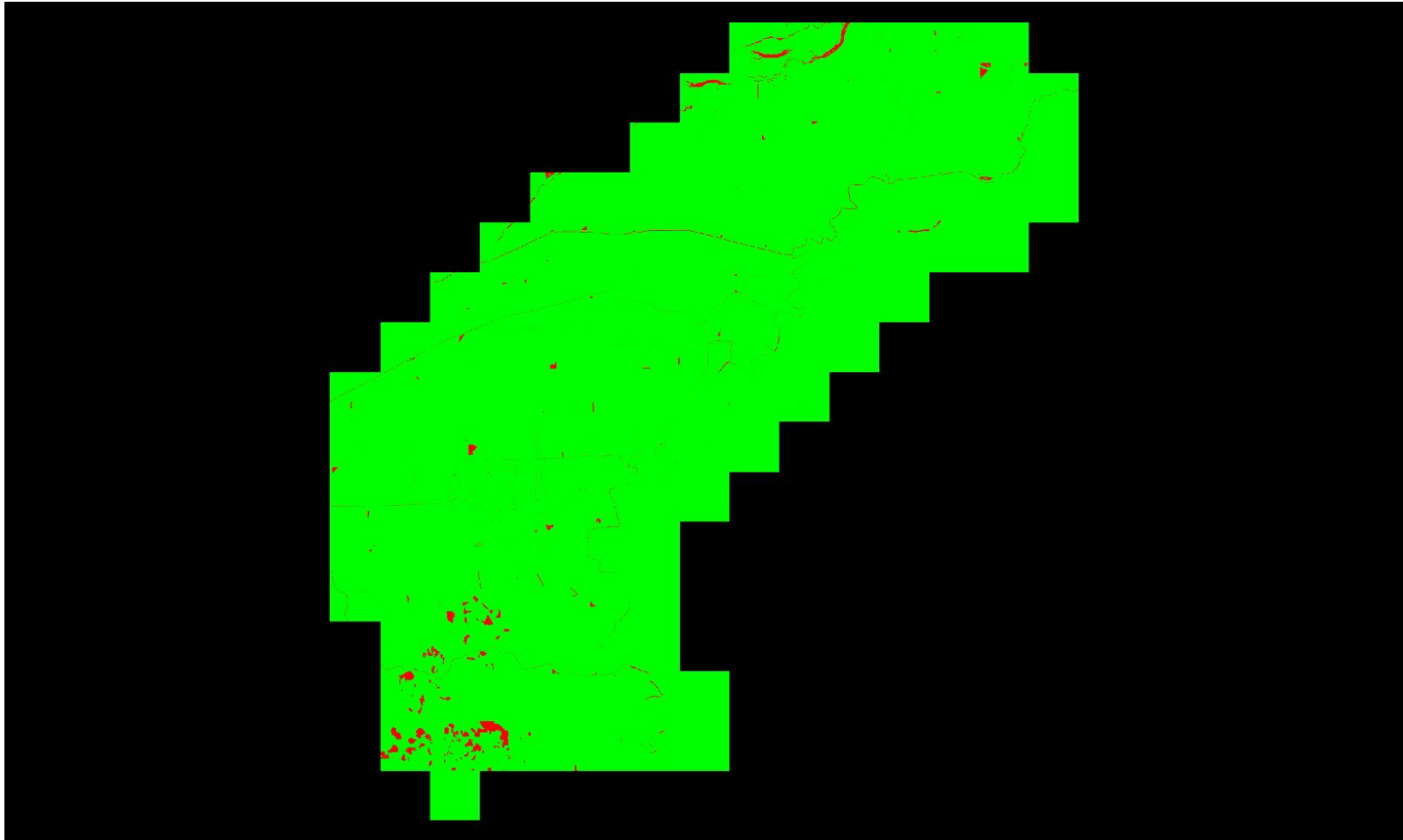
The process described in this section relates only to regular and uniform point distribution. The process does not relate to, nor can it be used for, the assessment of NPS or ANPS. The USGS–NGP may allow lower passing thresholds for this requirement in areas of substantial relief where maintaining a regular and uniform point distribution is impractical."

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\C_6\Area2\Boresighted_SpatialDistribution_SingleFile.jp2](#)

C-6.1.2 Report on Spatial Distribution and Regularity - continued



Cell size: 4.659 US Survey Feet

■ Green: Cells containing at least one first return lidar point (number of cells = 52,096,540)

■ Red: Cells not containing at least one first return lidar point (number of cells = 577,506)

■ Background Color: Null data

Percentage of cells in the grid that contain at least one first return lidar point = 98.90% (Requirement is typically 90%)

See JPG2000 file for full resolution results

C-6.1.3 Report on Spatial Distribution and Regularity

The USGS Lidar Base Specification Version 1.2 states: "The spatial distribution of geometrically usable points will be uniform and regular. Although lidar instruments do not produce regularly gridded points, collections shall be planned and executed to produce an aggregate 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 regularity of the point pattern and density throughout the dataset is important and will be assessed by using the following steps:

- (1) Generating a density grid from the data with cell sizes equal to twice the design ANPS and a radius equal to the design ANPS.
- (2) Ensuring at least 90 percent of the cells in the grid contain at least one lidar point.
- (3) Using individual (single) swaths, with only the first return points located within the geometrically usable center part (typically 95 percent) of each swath.
- (4) Excluding acceptable data voids previously identified in this specification.

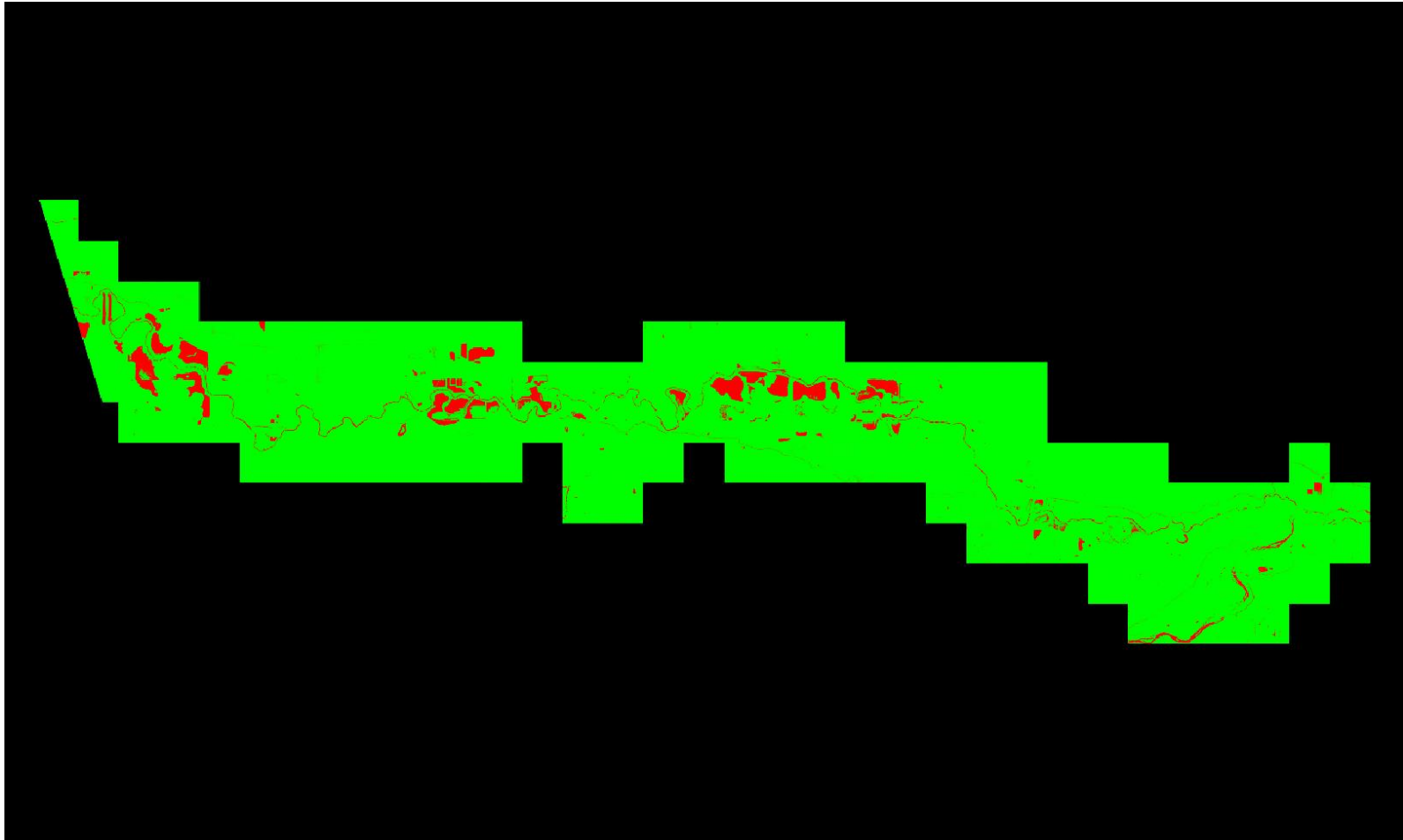
The process described in this section relates only to regular and uniform point distribution. The process does not relate to, nor can it be used for, the assessment of NPS or ANPS. The USGS-NGP may allow lower passing thresholds for this requirement in areas of substantial relief where maintaining a regular and uniform point distribution is impractical."

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\C_6\Area3\Boresighted_SpatialDistribution_SingleFile.jp2](#)

C-6.1.3 Report on Spatial Distribution and Regularity - continued



Cell size: 4.659 US Survey Feet

- Green: Cells containing at least one first return lidar point (number of cells = 48,446,153)
- Red: Cells not containing at least one first return lidar point (number of cells = 2,534,666)
- Black Background Color: Null data

Percentage of cells in the grid that contain at least one first return lidar point = 95.03% (Requirement is typically 90%)
See JPG2000 file for full resolution results

C-6.1.4 Report on Spatial Distribution and Regularity

The USGS Lidar Base Specification Version 1.2 states: "The spatial distribution of geometrically usable points will be uniform and regular. Although lidar instruments do not produce regularly gridded points, collections shall be planned and executed to produce an aggregate 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 regularity of the point pattern and density throughout the dataset is important and will be assessed by using the following steps:

- (1) Generating a density grid from the data with cell sizes equal to twice the design ANPS and a radius equal to the design ANPS.
- (2) Ensuring at least 90 percent of the cells in the grid contain at least one lidar point.
- (3) Using individual (single) swaths, with only the first return points located within the geometrically usable center part (typically 95 percent) of each swath.
- (4) Excluding acceptable data voids previously identified in this specification.

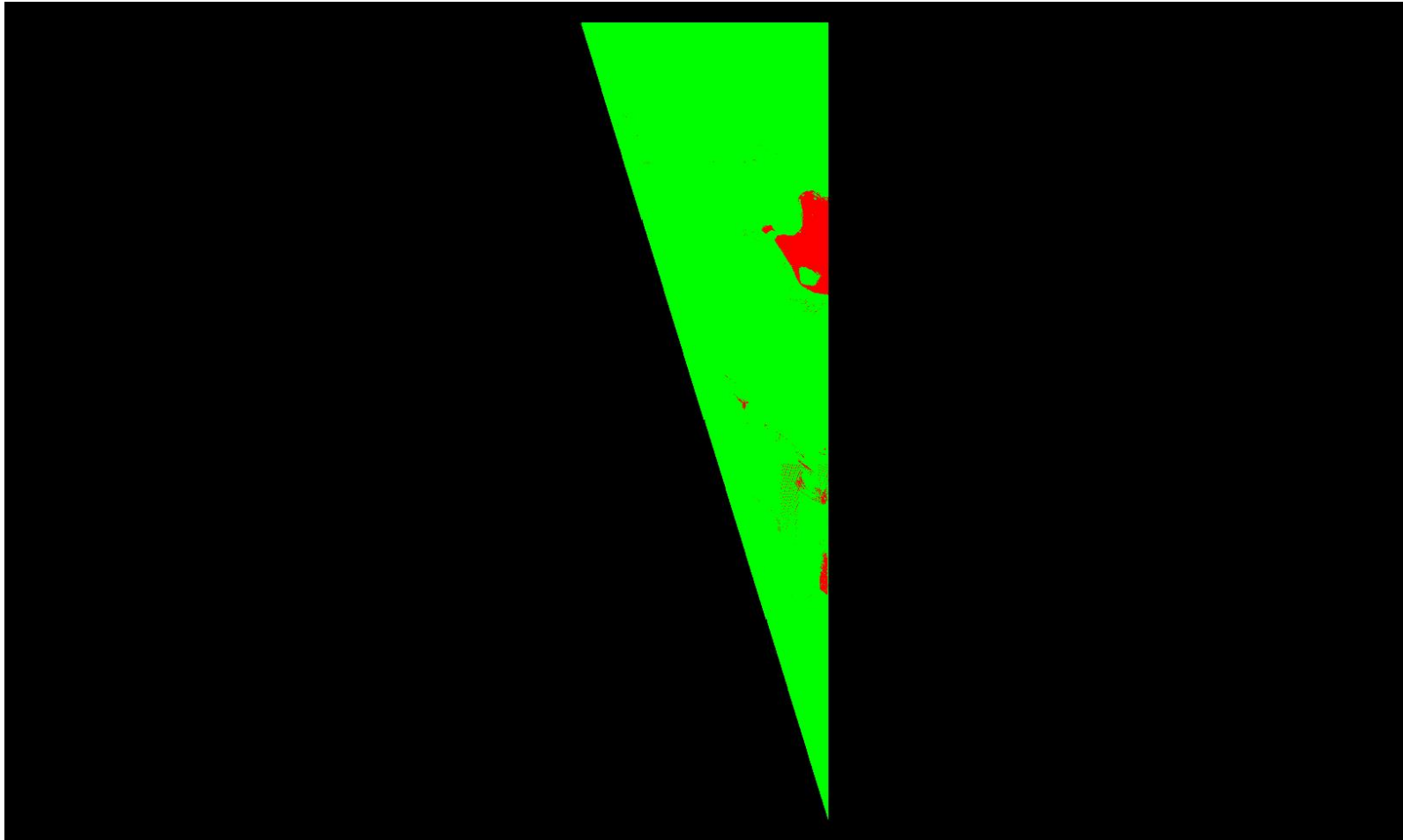
The process described in this section relates only to regular and uniform point distribution. The process does not relate to, nor can it be used for, the assessment of NPS or ANPS. The USGS-NGP may allow lower passing thresholds for this requirement in areas of substantial relief where maintaining a regular and uniform point distribution is impractical."

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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\C_6\Area4\Boresighted_SpatialDistribution_SingleFile.jp2](#)

C-6.1.4 Report on Spatial Distribution and Regularity - continued



Cell size: 4.659 US Survey Feet

- Green: Cells containing at least one first return lidar point (number of cells = 499,632)
- Red: Cells not containing at least one first return lidar point (number of cells = 19,785)
- Black: Background Color: Null data

Percentage of cells in the grid that contain at least one first return lidar point = 96.19% (Requirement is typically 90%)

See JPG2000 file for full resolution results

C-6.2 Report on Spatial Distribution and Regularity of Individual Swaths

Swath	Percentage of Cells that Contain ≥ 1
1158	84.23%
1197	88.87%
1004	98.33%
1007	98.17%
1015	96.67%
1017	93.40%
1020	93.92%
1044	99.17%
1045	98.61%
1046	94.31%
1047	99.11%
1048	95.31%
1049	99.09%
1050	97.36%
1051	99.26%
1052	98.80%
1053	98.49%
1054	97.31%
1055	96.31%
1056	97.22%
1057	94.65%
1081	98.71%
1082	92.64%
1083	97.67%
1084	97.85%
1159	91.77%
1160	97.05%
1177	93.38%
1178	96.26%
1218	98.90%
1219	98.07%
1220	99.21%
1221	99.27%
1222	99.01%
1223	98.90%
1224	98.56%
1225	98.66%
1226	98.37%
1227	98.67%
1229	94.92%
1236	97.68%
1237	98.15%
1238	97.18%
2002	97.68%
2012	99.17%
2041	97.69%

C-6.2 Report on Spatial Distribution and Regularity of Individual Swath

Swath	Percentage of Cells that Contain ≥ 1
2048	97.43%
2049	97.19%
2103	92.23%
2104	96.29%

C-7 Report on Collection Conditions

The USGS Lidar Base Specification Version 1.2 states: "Conditions for collection of lidar data will follow these guidelines: (1) Atmospheric conditions shall be cloud and fog free between the aircraft and ground during all collection operations. (2) Ground conditions shall be snow free. Very light, undrifted snow may be acceptable in special cases, with prior approval. (3) Ground conditions shall be free of extensive flooding or any other type of inundation

Note: Other collection condition requirements are also listed but are unable to be automatically derived with this reporting tool.

The purpose of this section is to provide a hyperlink to a NOAA website that shows the snow depth map for the extent of the lidar at the time of collection.

Ground Conditions:

Flight Date: 05/07/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=5&dd=7&dh=0&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 05/15/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=5&dd=15&dh=17&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 05/16/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=5&dd=16&dh=17&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 05/21/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=5&dd=21&dh=23&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

C-7 Report on Collection Conditions - Continued

Ground Conditions:

Flight Date: 05/22/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=5&dd=22&dh=1&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 06/07/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=6&dd=7&dh=16&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 06/12/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=6&dd=12&dh=12&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 06/13/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=6&dd=13&dh=3&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

C-7 Report on Collection Conditions - Continued

Ground Conditions:

Flight Date: 06/14/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=6&dd=14&dh=12&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 06/15/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=6&dd=15&dh=9&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 06/17/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=6&dd=17&dh=5&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

Flight Date: 06/23/2018

http://www.nohrsc.noaa.gov/interactive/html/map.html?mode=pan&extents=us&zoom=&loc=40.3642747009026+N%2C+104.228391164744+W&ql=station&var=ssm_depth&dy=2018&dm=6&dd=23&dh=14&snap=1&o5=1&o6=1&o11=1&o9=1&o13=1&lbl=m&o7=1&min_x=-104.972914405124&min_y=40.2130033367758&max_x=-103.483867924363&max_y=40.5155460650295&coord_x=-104.228391164744&coord_y=40.3642747009026&zbox_n=&zbox_s=&zbox_e=&zbox_w=&metric=0&bgvar=dem&shdvar=shading&width=800&height=450&nw=800&nh=450&h_o=0&font=0&js=1&uc=0

DPH-1.1 Report on ASPRS LAS File Format (Swath Data) - Compliance

The USGS Lidar Base Specification Version 1.2 states: "All processing will be carried out with the understanding that all point deliverables are required to be fully compliant with ASPRS LAS Specification, version 1.4, using Point Data Record Format 6, 7, 8, 9 or 10. Data producers are encouraged to review the LAS Specification version 1.4 in detail (American Society for Photogrammetry and Remote Sensing, 2011)."

The purpose of this section is to show a table of LAS 1.4 compliance test results for each swath file.

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	PSID/FSID Match	Global Encoding	VLRs / EVLRs	WKT*	Intensity	Point Count with Bad Return Info
1004.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1087	PASS	Dataset PASS	0
1007.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1195	PASS	Dataset PASS	0
1015.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 990	PASS	Dataset PASS	0
1017.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 293	PASS	Dataset PASS	0
1020.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1210	PASS	Dataset PASS	0
1044.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 57	PASS	Dataset PASS	0
1045.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 294	PASS	Dataset PASS	0
1046.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 238	PASS	Dataset PASS	0
1047.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 303	PASS	Dataset PASS	0
1048.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 263	PASS	Dataset PASS	0
1049.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1099	PASS	Dataset PASS	0
1050.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 689	PASS	Dataset PASS	0
1051.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1122	PASS	Dataset PASS	0
1052.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1026	PASS	Dataset PASS	0
1053.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1096	PASS	Dataset PASS	0
1054.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1091	PASS	Dataset PASS	0
1055.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1014	PASS	Dataset PASS	0
1056.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1073	PASS	Dataset PASS	0
1057.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 284	PASS	Dataset PASS	0
1081.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 896	PASS	Dataset PASS	0
1082.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 195	PASS	Dataset PASS	0
1083.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1110	PASS	Dataset PASS	0
1084.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 876	PASS	Dataset PASS	0
1158.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 289	PASS	Dataset PASS	0
1159.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 224	PASS	Dataset PASS	0
1160.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 280	PASS	Dataset PASS	0
1177.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1270	PASS	Dataset PASS	0
1178.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 807	PASS	Dataset PASS	0
1197.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 257	PASS	Dataset PASS	0
1218.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1102	PASS	Dataset PASS	0
1219.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1100	PASS	Dataset PASS	0
1220.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1110	PASS	Dataset PASS	0
1221.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1116	PASS	Dataset PASS	0
1222.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1093	PASS	Dataset PASS	0
1223.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1133	PASS	Dataset PASS	0
1224.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1102	PASS	Dataset PASS	0
1225.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1111	PASS	Dataset PASS	0
1226.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1106	PASS	Dataset PASS	0
1227.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1058	PASS	Dataset PASS	0
1229.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1111	PASS	Dataset PASS	0
1236.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 20	PASS	Dataset PASS	0
1237.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

* WKT FAIL codes: 1 – WKT tag missing, 2 – incorrect format (e.g., GeoTIFF tag), 3 – incorrect dialect (e.g., Esri or ISO), 4 – more than one valid record, 5 – incorrect format for superseded record(s), 6 – zero length, 7 – missing 'PROJCS', 8 – missing 'AXIS' 9 – 'HEIGHT_MODEL' element present, 10 – 'UNCLOSED BRACKETING' issue present, 11 – missing Vertical Datum and/or EPSG code, 12 – missing Vertical Units and/or EPSG code, 13 – missing Vertical CS name and/or EPSG code

DPH-1.1 Report on ASPRS LAS File Format (Swath Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	PSID/FSID Match	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
1238.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 228	PASS	Dataset PASS	0
2002.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1110	PASS	Dataset PASS	0
2012.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1111	PASS	Dataset PASS	0
2041.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1099	PASS	Dataset PASS	0
2048.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1076	PASS	Dataset PASS	0
2049.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1150	PASS	Dataset PASS	0
2103.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1151	PASS	Dataset PASS	0
2104.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 1071	PASS	Dataset PASS	0

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance

The USGS Lidar Base Specification Version 1.2 states: "All processing will be carried out with the understanding that all point deliverables are required to be fully compliant with ASPRS LAS Specification, version 1.4, using Point Data Record Format 6, 7, 8, 9 or 10. Data producers are encouraged to review the LAS Specification version 1.4 in detail (American Society for Photogrammetry and Remote Sensing, 2011)."

The purpose of this section is to show a table of LAS 1.4 compliance test results for each tiled file.

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT*	Intensity	Point Count with Bad Return Info
LD31531420.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 8	PASS	Dataset PASS	0
LD31531423.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 18	PASS	Dataset PASS	0
LD31531426.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 61	PASS	Dataset PASS	0
LD31561408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 5	PASS	Dataset PASS	0
LD31561411.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 16	PASS	Dataset PASS	0
LD31561414.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 19	PASS	Dataset PASS	0
LD31561417.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 63	PASS	Dataset PASS	0
LD31591405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 59	PASS	Dataset PASS	0
LD31591408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 63	PASS	Dataset PASS	0
LD31591411.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31591414.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31621402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31621405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD31621408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 65	PASS	Dataset PASS	0
LD31621411.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31651402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31651405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31651408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 66	PASS	Dataset PASS	0
LD31651411.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31681402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD31681405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31681408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31711399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31711402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31711405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31711408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31741399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31741402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31741405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31741408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31771399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31771402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31771405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31771408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31801399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31801402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31801405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31801408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31831399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31831402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD31831405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD31831408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

* WKT FAIL codes: 1 – WKT tag missing, 2 – incorrect format (e.g., GeoTIFF tag), 3 – incorrect dialect (e.g., Esri or ISO), 4 – more than one valid record, 5 – incorrect format for superseded record(s), 6 – zero length, 7 – missing 'PROJCS', 8 – missing 'AXIS', 9 – 'HEIGHT_MODEL' element present, 10 – 'UNCLOSED BRACKETING' issue present, 11 – missing Vertical Datum and/or EPSG code, 12 – missing Vertical Units and/or EPSG code, 13 – missing Vertical CS name and/or EPSG code

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD31861399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31861402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31861405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31861408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD31891399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31891402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31891405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31891408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31921402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31921405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD31951396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31951399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31951402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31951405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31981396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31981399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31981402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD31981405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32011399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32011402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32011405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD32011408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32041402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32041405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD32041408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32071405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 64	PASS	Dataset PASS	0
LD32071408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD32101345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32101405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 66	PASS	Dataset PASS	0
LD32101408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32131405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD32131408.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD32161372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32161405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32191405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32221405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD32251345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32251405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281402.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32281405.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD32311366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32311399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 16	PASS	Dataset PASS	0
LD32341369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 62	PASS	Dataset PASS	0
LD32341372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341390.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32341399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 66	PASS	Dataset PASS	0
LD32371366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 5	PASS	Dataset PASS	0
LD32371369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 20	PASS	Dataset PASS	0
LD32371372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 67	PASS	Dataset PASS	0
LD32371375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371387.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371390.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32371399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD32401333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 16	PASS	Dataset PASS	0
LD32401369.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 18	PASS	Dataset PASS	0
LD32401372.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 64	PASS	Dataset PASS	0
LD32401375.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401378.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401387.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401390.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32401396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431387.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431390.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32431396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32461387.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32461390.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32461393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32461396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32491390.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32491393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32491396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32491399.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32521393.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD32521396.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35101333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35101336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35101339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35101342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35101345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35131324.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

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File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD35131327.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35131330.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35131333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35131336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35131339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35131342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35131345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35131348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161321.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161324.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161327.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161330.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35161351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191324.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191327.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191330.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35191354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221324.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221327.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221330.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35221357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251324.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251327.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251330.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD35251345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35251357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281324.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281327.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281330.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281333.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281336.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35281360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311324.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311327.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311339.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35311363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341342.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35341366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35371345.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35371348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35371351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35371354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35371357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35371360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35371363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35371366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35401348.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35401351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35401354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

DPH-1.1 Report on ASPRS LAS File Format (Tiled Data) - Compliance - continued

File	LAS Version/PDRF	System ID	Legacy Point Count	Legacy Return Counts	File Source ID	Global Encoding	VLRs / EVLRs	WKT	Intensity	Point Count with Bad Return Info
LD35401357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35401360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35401363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35401366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35431351.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35431354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35431357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35431360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35431363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35431366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35461354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35461357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35461360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35461363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35461366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35491354.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35491357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35491360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35491363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35491366.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35521357.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35521360.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0
LD35521363.las	LAS 1.4, PDRF 6	PASS	0	0	PASS	PASS	0 / 68	PASS	Dataset PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Swath Data) - File Integrity

The purpose of this section is to show a table of LAS 1.4 file integrity test results for each swath file.

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
1004.las	0	PASS	PASS	PASS	PASS	0
1007.las	0	PASS	PASS	PASS	PASS	0
1015.las	0	PASS	PASS	PASS	PASS	0
1017.las	0	PASS	PASS	PASS	PASS	0
1020.las	0	PASS	PASS	PASS	PASS	0
1044.las	0	PASS	PASS	PASS	PASS	0
1045.las	0	PASS	PASS	PASS	PASS	0
1046.las	0	PASS	PASS	PASS	PASS	0
1047.las	0	PASS	PASS	PASS	PASS	0
1048.las	0	PASS	PASS	PASS	PASS	0
1049.las	0	PASS	PASS	PASS	PASS	0
1050.las	0	PASS	PASS	PASS	PASS	0
1051.las	0	PASS	PASS	PASS	PASS	0
1052.las	0	PASS	PASS	PASS	PASS	0
1053.las	0	PASS	PASS	PASS	PASS	0
1054.las	0	PASS	PASS	PASS	PASS	0
1055.las	0	PASS	PASS	PASS	PASS	0
1056.las	0	PASS	PASS	PASS	PASS	0
1057.las	0	PASS	PASS	PASS	PASS	0
1081.las	0	PASS	PASS	PASS	PASS	0
1082.las	0	PASS	PASS	PASS	PASS	0
1083.las	0	PASS	PASS	PASS	PASS	0
1084.las	0	PASS	PASS	PASS	PASS	0
1158.las	0	PASS	PASS	PASS	PASS	0
1159.las	0	PASS	PASS	PASS	PASS	0
1160.las	0	PASS	PASS	PASS	PASS	0
1177.las	0	PASS	PASS	PASS	PASS	0
1178.las	0	PASS	PASS	PASS	PASS	0
1197.las	0	PASS	PASS	PASS	PASS	0
1218.las	0	PASS	PASS	PASS	PASS	0
1219.las	0	PASS	PASS	PASS	PASS	0
1220.las	0	PASS	PASS	PASS	PASS	0
1221.las	0	PASS	PASS	PASS	PASS	0
1222.las	0	PASS	PASS	PASS	PASS	0
1223.las	0	PASS	PASS	PASS	PASS	0
1224.las	0	PASS	PASS	PASS	PASS	0
1225.las	0	PASS	PASS	PASS	PASS	0
1226.las	0	PASS	PASS	PASS	PASS	0
1227.las	0	PASS	PASS	PASS	PASS	0
1229.las	0	PASS	PASS	PASS	PASS	0
1236.las	0	PASS	PASS	PASS	PASS	0
1237.las	0	PASS	PASS	PASS	PASS	0
1238.las	0	PASS	PASS	PASS	PASS	0
2002.las	0	PASS	PASS	PASS	PASS	0
2012.las	0	PASS	PASS	PASS	PASS	0
2041.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Swath Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
2048.las	0	PASS	PASS	PASS	PASS	0
2049.las	0	PASS	PASS	PASS	PASS	0
2103.las	0	PASS	PASS	PASS	PASS	0
2104.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity

The purpose of this section is to show a table of LAS 1.4 file integrity test results for each tiled file.

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD31531420.las	0	PASS	PASS	PASS	PASS	0
LD31531423.las	0	PASS	PASS	PASS	PASS	0
LD31531426.las	0	PASS	PASS	PASS	PASS	0
LD31561408.las	0	PASS	PASS	PASS	PASS	0
LD31561411.las	0	PASS	PASS	PASS	PASS	0
LD31561414.las	0	PASS	PASS	PASS	PASS	0
LD31561417.las	0	PASS	PASS	PASS	PASS	0
LD31591405.las	0	PASS	PASS	PASS	PASS	0
LD31591408.las	0	PASS	PASS	PASS	PASS	0
LD31591411.las	0	PASS	PASS	PASS	PASS	0
LD31591414.las	0	PASS	PASS	PASS	PASS	0
LD31621402.las	0	PASS	PASS	PASS	PASS	0
LD31621405.las	0	PASS	PASS	PASS	PASS	0
LD31621408.las	0	PASS	PASS	PASS	PASS	0
LD31621411.las	0	PASS	PASS	PASS	PASS	0
LD31651402.las	0	PASS	PASS	PASS	PASS	0
LD31651405.las	0	PASS	PASS	PASS	PASS	0
LD31651408.las	0	PASS	PASS	PASS	PASS	0
LD31651411.las	0	PASS	PASS	PASS	PASS	0
LD31681402.las	0	PASS	PASS	PASS	PASS	0
LD31681405.las	0	PASS	PASS	PASS	PASS	0
LD31681408.las	0	PASS	PASS	PASS	PASS	0
LD31711399.las	0	PASS	PASS	PASS	PASS	0
LD31711402.las	0	PASS	PASS	PASS	PASS	0
LD31711405.las	0	PASS	PASS	PASS	PASS	0
LD31711408.las	0	PASS	PASS	PASS	PASS	0
LD31741399.las	0	PASS	PASS	PASS	PASS	0
LD31741402.las	0	PASS	PASS	PASS	PASS	0
LD31741405.las	0	PASS	PASS	PASS	PASS	0
LD31741408.las	0	PASS	PASS	PASS	PASS	0
LD31771399.las	0	PASS	PASS	PASS	PASS	0
LD31771402.las	0	PASS	PASS	PASS	PASS	0
LD31771405.las	0	PASS	PASS	PASS	PASS	0
LD31771408.las	0	PASS	PASS	PASS	PASS	0
LD31801399.las	0	PASS	PASS	PASS	PASS	0
LD31801402.las	0	PASS	PASS	PASS	PASS	0
LD31801405.las	0	PASS	PASS	PASS	PASS	0
LD31801408.las	0	PASS	PASS	PASS	PASS	0
LD31831399.las	0	PASS	PASS	PASS	PASS	0
LD31831402.las	0	PASS	PASS	PASS	PASS	0
LD31831405.las	0	PASS	PASS	PASS	PASS	0
LD31831408.las	0	PASS	PASS	PASS	PASS	0
LD31861399.las	0	PASS	PASS	PASS	PASS	0
LD31861402.las	0	PASS	PASS	PASS	PASS	0
LD31861405.las	0	PASS	PASS	PASS	PASS	0
LD31861408.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD31891399.las	0	PASS	PASS	PASS	PASS	0
LD31891402.las	0	PASS	PASS	PASS	PASS	0
LD31891405.las	0	PASS	PASS	PASS	PASS	0
LD31891408.las	0	PASS	PASS	PASS	PASS	0
LD31921402.las	0	PASS	PASS	PASS	PASS	0
LD31921405.las	0	PASS	PASS	PASS	PASS	0
LD31951396.las	0	PASS	PASS	PASS	PASS	0
LD31951399.las	0	PASS	PASS	PASS	PASS	0
LD31951402.las	0	PASS	PASS	PASS	PASS	0
LD31951405.las	0	PASS	PASS	PASS	PASS	0
LD31981396.las	0	PASS	PASS	PASS	PASS	0
LD31981399.las	0	PASS	PASS	PASS	PASS	0
LD31981402.las	0	PASS	PASS	PASS	PASS	0
LD31981405.las	0	PASS	PASS	PASS	PASS	0
LD32011399.las	0	PASS	PASS	PASS	PASS	0
LD32011402.las	0	PASS	PASS	PASS	PASS	0
LD32011405.las	0	PASS	PASS	PASS	PASS	0
LD32011408.las	0	PASS	PASS	PASS	PASS	0
LD32041402.las	0	PASS	PASS	PASS	PASS	0
LD32041405.las	0	PASS	PASS	PASS	PASS	0
LD32041408.las	0	PASS	PASS	PASS	PASS	0
LD32071333.las	0	PASS	PASS	PASS	PASS	0
LD32071336.las	0	PASS	PASS	PASS	PASS	0
LD32071339.las	0	PASS	PASS	PASS	PASS	0
LD32071342.las	0	PASS	PASS	PASS	PASS	0
LD32071345.las	0	PASS	PASS	PASS	PASS	0
LD32071348.las	0	PASS	PASS	PASS	PASS	0
LD32071351.las	0	PASS	PASS	PASS	PASS	0
LD32071354.las	0	PASS	PASS	PASS	PASS	0
LD32071357.las	0	PASS	PASS	PASS	PASS	0
LD32071360.las	0	PASS	PASS	PASS	PASS	0
LD32071363.las	0	PASS	PASS	PASS	PASS	0
LD32071366.las	0	PASS	PASS	PASS	PASS	0
LD32071369.las	0	PASS	PASS	PASS	PASS	0
LD32071372.las	0	PASS	PASS	PASS	PASS	0
LD32071375.las	0	PASS	PASS	PASS	PASS	0
LD32071378.las	0	PASS	PASS	PASS	PASS	0
LD32071399.las	0	PASS	PASS	PASS	PASS	0
LD32071402.las	0	PASS	PASS	PASS	PASS	0
LD32071405.las	0	PASS	PASS	PASS	PASS	0
LD32071408.las	0	PASS	PASS	PASS	PASS	0
LD32101333.las	0	PASS	PASS	PASS	PASS	0
LD32101336.las	0	PASS	PASS	PASS	PASS	0
LD32101339.las	0	PASS	PASS	PASS	PASS	0
LD32101342.las	0	PASS	PASS	PASS	PASS	0
LD32101345.las	0	PASS	PASS	PASS	PASS	0
LD32101348.las	0	PASS	PASS	PASS	PASS	0
LD32101351.las	0	PASS	PASS	PASS	PASS	0
LD32101354.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD32101357.las	0	PASS	PASS	PASS	PASS	0
LD32101360.las	0	PASS	PASS	PASS	PASS	0
LD32101363.las	0	PASS	PASS	PASS	PASS	0
LD32101366.las	0	PASS	PASS	PASS	PASS	0
LD32101369.las	0	PASS	PASS	PASS	PASS	0
LD32101372.las	0	PASS	PASS	PASS	PASS	0
LD32101375.las	0	PASS	PASS	PASS	PASS	0
LD32101378.las	0	PASS	PASS	PASS	PASS	0
LD32101399.las	0	PASS	PASS	PASS	PASS	0
LD32101402.las	0	PASS	PASS	PASS	PASS	0
LD32101405.las	0	PASS	PASS	PASS	PASS	0
LD32101408.las	0	PASS	PASS	PASS	PASS	0
LD32131333.las	0	PASS	PASS	PASS	PASS	0
LD32131336.las	0	PASS	PASS	PASS	PASS	0
LD32131339.las	0	PASS	PASS	PASS	PASS	0
LD32131342.las	0	PASS	PASS	PASS	PASS	0
LD32131345.las	0	PASS	PASS	PASS	PASS	0
LD32131348.las	0	PASS	PASS	PASS	PASS	0
LD32131351.las	0	PASS	PASS	PASS	PASS	0
LD32131354.las	0	PASS	PASS	PASS	PASS	0
LD32131357.las	0	PASS	PASS	PASS	PASS	0
LD32131360.las	0	PASS	PASS	PASS	PASS	0
LD32131363.las	0	PASS	PASS	PASS	PASS	0
LD32131366.las	0	PASS	PASS	PASS	PASS	0
LD32131369.las	0	PASS	PASS	PASS	PASS	0
LD32131372.las	0	PASS	PASS	PASS	PASS	0
LD32131375.las	0	PASS	PASS	PASS	PASS	0
LD32131378.las	0	PASS	PASS	PASS	PASS	0
LD32131399.las	0	PASS	PASS	PASS	PASS	0
LD32131402.las	0	PASS	PASS	PASS	PASS	0
LD32131405.las	0	PASS	PASS	PASS	PASS	0
LD32131408.las	0	PASS	PASS	PASS	PASS	0
LD32161333.las	0	PASS	PASS	PASS	PASS	0
LD32161336.las	0	PASS	PASS	PASS	PASS	0
LD32161339.las	0	PASS	PASS	PASS	PASS	0
LD32161342.las	0	PASS	PASS	PASS	PASS	0
LD32161345.las	0	PASS	PASS	PASS	PASS	0
LD32161348.las	0	PASS	PASS	PASS	PASS	0
LD32161351.las	0	PASS	PASS	PASS	PASS	0
LD32161354.las	0	PASS	PASS	PASS	PASS	0
LD32161357.las	0	PASS	PASS	PASS	PASS	0
LD32161360.las	0	PASS	PASS	PASS	PASS	0
LD32161363.las	0	PASS	PASS	PASS	PASS	0
LD32161366.las	0	PASS	PASS	PASS	PASS	0
LD32161369.las	0	PASS	PASS	PASS	PASS	0
LD32161372.las	0	PASS	PASS	PASS	PASS	0
LD32161375.las	0	PASS	PASS	PASS	PASS	0
LD32161378.las	0	PASS	PASS	PASS	PASS	0
LD32161399.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD32161402.las	0	PASS	PASS	PASS	PASS	0
LD32161405.las	0	PASS	PASS	PASS	PASS	0
LD32191333.las	0	PASS	PASS	PASS	PASS	0
LD32191336.las	0	PASS	PASS	PASS	PASS	0
LD32191339.las	0	PASS	PASS	PASS	PASS	0
LD32191342.las	0	PASS	PASS	PASS	PASS	0
LD32191345.las	0	PASS	PASS	PASS	PASS	0
LD32191348.las	0	PASS	PASS	PASS	PASS	0
LD32191351.las	0	PASS	PASS	PASS	PASS	0
LD32191354.las	0	PASS	PASS	PASS	PASS	0
LD32191357.las	0	PASS	PASS	PASS	PASS	0
LD32191360.las	0	PASS	PASS	PASS	PASS	0
LD32191363.las	0	PASS	PASS	PASS	PASS	0
LD32191366.las	0	PASS	PASS	PASS	PASS	0
LD32191369.las	0	PASS	PASS	PASS	PASS	0
LD32191372.las	0	PASS	PASS	PASS	PASS	0
LD32191375.las	0	PASS	PASS	PASS	PASS	0
LD32191378.las	0	PASS	PASS	PASS	PASS	0
LD32191399.las	0	PASS	PASS	PASS	PASS	0
LD32191402.las	0	PASS	PASS	PASS	PASS	0
LD32191405.las	0	PASS	PASS	PASS	PASS	0
LD32221333.las	0	PASS	PASS	PASS	PASS	0
LD32221336.las	0	PASS	PASS	PASS	PASS	0
LD32221339.las	0	PASS	PASS	PASS	PASS	0
LD32221342.las	0	PASS	PASS	PASS	PASS	0
LD32221345.las	0	PASS	PASS	PASS	PASS	0
LD32221348.las	0	PASS	PASS	PASS	PASS	0
LD32221351.las	0	PASS	PASS	PASS	PASS	0
LD32221354.las	0	PASS	PASS	PASS	PASS	0
LD32221357.las	0	PASS	PASS	PASS	PASS	0
LD32221360.las	0	PASS	PASS	PASS	PASS	0
LD32221363.las	0	PASS	PASS	PASS	PASS	0
LD32221366.las	0	PASS	PASS	PASS	PASS	0
LD32221369.las	0	PASS	PASS	PASS	PASS	0
LD32221372.las	0	PASS	PASS	PASS	PASS	0
LD32221375.las	0	PASS	PASS	PASS	PASS	0
LD32221378.las	0	PASS	PASS	PASS	PASS	0
LD32221396.las	0	PASS	PASS	PASS	PASS	0
LD32221399.las	0	PASS	PASS	PASS	PASS	0
LD32221402.las	0	PASS	PASS	PASS	PASS	0
LD32221405.las	0	PASS	PASS	PASS	PASS	0
LD32251333.las	0	PASS	PASS	PASS	PASS	0
LD32251336.las	0	PASS	PASS	PASS	PASS	0
LD32251339.las	0	PASS	PASS	PASS	PASS	0
LD32251342.las	0	PASS	PASS	PASS	PASS	0
LD32251345.las	0	PASS	PASS	PASS	PASS	0
LD32251348.las	0	PASS	PASS	PASS	PASS	0
LD32251351.las	0	PASS	PASS	PASS	PASS	0
LD32251354.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD32251357.las	0	PASS	PASS	PASS	PASS	0
LD32251360.las	0	PASS	PASS	PASS	PASS	0
LD32251363.las	0	PASS	PASS	PASS	PASS	0
LD32251366.las	0	PASS	PASS	PASS	PASS	0
LD32251369.las	0	PASS	PASS	PASS	PASS	0
LD32251372.las	0	PASS	PASS	PASS	PASS	0
LD32251375.las	0	PASS	PASS	PASS	PASS	0
LD32251378.las	0	PASS	PASS	PASS	PASS	0
LD32251393.las	0	PASS	PASS	PASS	PASS	0
LD32251396.las	0	PASS	PASS	PASS	PASS	0
LD32251399.las	0	PASS	PASS	PASS	PASS	0
LD32251402.las	0	PASS	PASS	PASS	PASS	0
LD32251405.las	0	PASS	PASS	PASS	PASS	0
LD32281333.las	0	PASS	PASS	PASS	PASS	0
LD32281336.las	0	PASS	PASS	PASS	PASS	0
LD32281339.las	0	PASS	PASS	PASS	PASS	0
LD32281342.las	0	PASS	PASS	PASS	PASS	0
LD32281345.las	0	PASS	PASS	PASS	PASS	0
LD32281348.las	0	PASS	PASS	PASS	PASS	0
LD32281351.las	0	PASS	PASS	PASS	PASS	0
LD32281354.las	0	PASS	PASS	PASS	PASS	0
LD32281357.las	0	PASS	PASS	PASS	PASS	0
LD32281360.las	0	PASS	PASS	PASS	PASS	0
LD32281363.las	0	PASS	PASS	PASS	PASS	0
LD32281366.las	0	PASS	PASS	PASS	PASS	0
LD32281369.las	0	PASS	PASS	PASS	PASS	0
LD32281372.las	0	PASS	PASS	PASS	PASS	0
LD32281375.las	0	PASS	PASS	PASS	PASS	0
LD32281378.las	0	PASS	PASS	PASS	PASS	0
LD32281393.las	0	PASS	PASS	PASS	PASS	0
LD32281396.las	0	PASS	PASS	PASS	PASS	0
LD32281399.las	0	PASS	PASS	PASS	PASS	0
LD32281402.las	0	PASS	PASS	PASS	PASS	0
LD32281405.las	0	PASS	PASS	PASS	PASS	0
LD32311333.las	0	PASS	PASS	PASS	PASS	0
LD32311336.las	0	PASS	PASS	PASS	PASS	0
LD32311339.las	0	PASS	PASS	PASS	PASS	0
LD32311342.las	0	PASS	PASS	PASS	PASS	0
LD32311345.las	0	PASS	PASS	PASS	PASS	0
LD32311348.las	0	PASS	PASS	PASS	PASS	0
LD32311351.las	0	PASS	PASS	PASS	PASS	0
LD32311354.las	0	PASS	PASS	PASS	PASS	0
LD32311357.las	0	PASS	PASS	PASS	PASS	0
LD32311360.las	0	PASS	PASS	PASS	PASS	0
LD32311363.las	0	PASS	PASS	PASS	PASS	0
LD32311366.las	0	PASS	PASS	PASS	PASS	0
LD32311369.las	0	PASS	PASS	PASS	PASS	0
LD32311372.las	0	PASS	PASS	PASS	PASS	0
LD32311375.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD32311378.las	0	PASS	PASS	PASS	PASS	0
LD32311393.las	0	PASS	PASS	PASS	PASS	0
LD32311396.las	0	PASS	PASS	PASS	PASS	0
LD32311399.las	0	PASS	PASS	PASS	PASS	0
LD32341333.las	0	PASS	PASS	PASS	PASS	0
LD32341336.las	0	PASS	PASS	PASS	PASS	0
LD32341339.las	0	PASS	PASS	PASS	PASS	0
LD32341342.las	0	PASS	PASS	PASS	PASS	0
LD32341345.las	0	PASS	PASS	PASS	PASS	0
LD32341348.las	0	PASS	PASS	PASS	PASS	0
LD32341351.las	0	PASS	PASS	PASS	PASS	0
LD32341354.las	0	PASS	PASS	PASS	PASS	0
LD32341357.las	0	PASS	PASS	PASS	PASS	0
LD32341360.las	0	PASS	PASS	PASS	PASS	0
LD32341363.las	0	PASS	PASS	PASS	PASS	0
LD32341366.las	0	PASS	PASS	PASS	PASS	0
LD32341369.las	0	PASS	PASS	PASS	PASS	0
LD32341372.las	0	PASS	PASS	PASS	PASS	0
LD32341375.las	0	PASS	PASS	PASS	PASS	0
LD32341378.las	0	PASS	PASS	PASS	PASS	0
LD32341390.las	0	PASS	PASS	PASS	PASS	0
LD32341393.las	0	PASS	PASS	PASS	PASS	0
LD32341396.las	0	PASS	PASS	PASS	PASS	0
LD32341399.las	0	PASS	PASS	PASS	PASS	0
LD32371333.las	0	PASS	PASS	PASS	PASS	0
LD32371336.las	0	PASS	PASS	PASS	PASS	0
LD32371339.las	0	PASS	PASS	PASS	PASS	0
LD32371342.las	0	PASS	PASS	PASS	PASS	0
LD32371345.las	0	PASS	PASS	PASS	PASS	0
LD32371348.las	0	PASS	PASS	PASS	PASS	0
LD32371351.las	0	PASS	PASS	PASS	PASS	0
LD32371354.las	0	PASS	PASS	PASS	PASS	0
LD32371357.las	0	PASS	PASS	PASS	PASS	0
LD32371360.las	0	PASS	PASS	PASS	PASS	0
LD32371363.las	0	PASS	PASS	PASS	PASS	0
LD32371366.las	0	PASS	PASS	PASS	PASS	0
LD32371369.las	0	PASS	PASS	PASS	PASS	0
LD32371372.las	0	PASS	PASS	PASS	PASS	0
LD32371375.las	0	PASS	PASS	PASS	PASS	0
LD32371378.las	0	PASS	PASS	PASS	PASS	0
LD32371387.las	0	PASS	PASS	PASS	PASS	0
LD32371390.las	0	PASS	PASS	PASS	PASS	0
LD32371393.las	0	PASS	PASS	PASS	PASS	0
LD32371396.las	0	PASS	PASS	PASS	PASS	0
LD32371399.las	0	PASS	PASS	PASS	PASS	0
LD32401333.las	0	PASS	PASS	PASS	PASS	0
LD32401336.las	0	PASS	PASS	PASS	PASS	0
LD32401339.las	0	PASS	PASS	PASS	PASS	0
LD32401342.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD32401345.las	0	PASS	PASS	PASS	PASS	0
LD32401348.las	0	PASS	PASS	PASS	PASS	0
LD32401351.las	0	PASS	PASS	PASS	PASS	0
LD32401354.las	0	PASS	PASS	PASS	PASS	0
LD32401357.las	0	PASS	PASS	PASS	PASS	0
LD32401360.las	0	PASS	PASS	PASS	PASS	0
LD32401363.las	0	PASS	PASS	PASS	PASS	0
LD32401366.las	0	PASS	PASS	PASS	PASS	0
LD32401369.las	0	PASS	PASS	PASS	PASS	0
LD32401372.las	0	PASS	PASS	PASS	PASS	0
LD32401375.las	0	PASS	PASS	PASS	PASS	0
LD32401378.las	0	PASS	PASS	PASS	PASS	0
LD32401387.las	0	PASS	PASS	PASS	PASS	0
LD32401390.las	0	PASS	PASS	PASS	PASS	0
LD32401393.las	0	PASS	PASS	PASS	PASS	0
LD32401396.las	0	PASS	PASS	PASS	PASS	0
LD32431333.las	0	PASS	PASS	PASS	PASS	0
LD32431336.las	0	PASS	PASS	PASS	PASS	0
LD32431339.las	0	PASS	PASS	PASS	PASS	0
LD32431342.las	0	PASS	PASS	PASS	PASS	0
LD32431345.las	0	PASS	PASS	PASS	PASS	0
LD32431348.las	0	PASS	PASS	PASS	PASS	0
LD32431351.las	0	PASS	PASS	PASS	PASS	0
LD32431354.las	0	PASS	PASS	PASS	PASS	0
LD32431357.las	0	PASS	PASS	PASS	PASS	0
LD32431387.las	0	PASS	PASS	PASS	PASS	0
LD32431390.las	0	PASS	PASS	PASS	PASS	0
LD32431393.las	0	PASS	PASS	PASS	PASS	0
LD32431396.las	0	PASS	PASS	PASS	PASS	0
LD32461387.las	0	PASS	PASS	PASS	PASS	0
LD32461390.las	0	PASS	PASS	PASS	PASS	0
LD32461393.las	0	PASS	PASS	PASS	PASS	0
LD32461396.las	0	PASS	PASS	PASS	PASS	0
LD32491390.las	0	PASS	PASS	PASS	PASS	0
LD32491393.las	0	PASS	PASS	PASS	PASS	0
LD32491396.las	0	PASS	PASS	PASS	PASS	0
LD32491399.las	0	PASS	PASS	PASS	PASS	0
LD32521393.las	0	PASS	PASS	PASS	PASS	0
LD32521396.las	0	PASS	PASS	PASS	PASS	0
LD35101333.las	0	PASS	PASS	PASS	PASS	0
LD35101336.las	0	PASS	PASS	PASS	PASS	0
LD35101339.las	0	PASS	PASS	PASS	PASS	0
LD35101342.las	0	PASS	PASS	PASS	PASS	0
LD35101345.las	0	PASS	PASS	PASS	PASS	0
LD35131324.las	0	PASS	PASS	PASS	PASS	0
LD35131327.las	0	PASS	PASS	PASS	PASS	0
LD35131330.las	0	PASS	PASS	PASS	PASS	0
LD35131333.las	0	PASS	PASS	PASS	PASS	0
LD35131336.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD35131339.las	0	PASS	PASS	PASS	PASS	0
LD35131342.las	0	PASS	PASS	PASS	PASS	0
LD35131345.las	0	PASS	PASS	PASS	PASS	0
LD35131348.las	0	PASS	PASS	PASS	PASS	0
LD35161321.las	0	PASS	PASS	PASS	PASS	0
LD35161324.las	0	PASS	PASS	PASS	PASS	0
LD35161327.las	0	PASS	PASS	PASS	PASS	0
LD35161330.las	0	PASS	PASS	PASS	PASS	0
LD35161333.las	0	PASS	PASS	PASS	PASS	0
LD35161336.las	0	PASS	PASS	PASS	PASS	0
LD35161339.las	0	PASS	PASS	PASS	PASS	0
LD35161342.las	0	PASS	PASS	PASS	PASS	0
LD35161345.las	0	PASS	PASS	PASS	PASS	0
LD35161348.las	0	PASS	PASS	PASS	PASS	0
LD35161351.las	0	PASS	PASS	PASS	PASS	0
LD35191324.las	0	PASS	PASS	PASS	PASS	0
LD35191327.las	0	PASS	PASS	PASS	PASS	0
LD35191330.las	0	PASS	PASS	PASS	PASS	0
LD35191333.las	0	PASS	PASS	PASS	PASS	0
LD35191336.las	0	PASS	PASS	PASS	PASS	0
LD35191339.las	0	PASS	PASS	PASS	PASS	0
LD35191342.las	0	PASS	PASS	PASS	PASS	0
LD35191345.las	0	PASS	PASS	PASS	PASS	0
LD35191348.las	0	PASS	PASS	PASS	PASS	0
LD35191351.las	0	PASS	PASS	PASS	PASS	0
LD35191354.las	0	PASS	PASS	PASS	PASS	0
LD35221324.las	0	PASS	PASS	PASS	PASS	0
LD35221327.las	0	PASS	PASS	PASS	PASS	0
LD35221330.las	0	PASS	PASS	PASS	PASS	0
LD35221333.las	0	PASS	PASS	PASS	PASS	0
LD35221336.las	0	PASS	PASS	PASS	PASS	0
LD35221339.las	0	PASS	PASS	PASS	PASS	0
LD35221342.las	0	PASS	PASS	PASS	PASS	0
LD35221345.las	0	PASS	PASS	PASS	PASS	0
LD35221348.las	0	PASS	PASS	PASS	PASS	0
LD35221351.las	0	PASS	PASS	PASS	PASS	0
LD35221354.las	0	PASS	PASS	PASS	PASS	0
LD35221357.las	0	PASS	PASS	PASS	PASS	0
LD35251324.las	0	PASS	PASS	PASS	PASS	0
LD35251327.las	0	PASS	PASS	PASS	PASS	0
LD35251330.las	0	PASS	PASS	PASS	PASS	0
LD35251333.las	0	PASS	PASS	PASS	PASS	0
LD35251336.las	0	PASS	PASS	PASS	PASS	0
LD35251339.las	0	PASS	PASS	PASS	PASS	0
LD35251342.las	0	PASS	PASS	PASS	PASS	0
LD35251345.las	0	PASS	PASS	PASS	PASS	0
LD35251348.las	0	PASS	PASS	PASS	PASS	0
LD35251351.las	0	PASS	PASS	PASS	PASS	0
LD35251354.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD35251357.las	0	PASS	PASS	PASS	PASS	0
LD35281324.las	0	PASS	PASS	PASS	PASS	0
LD35281327.las	0	PASS	PASS	PASS	PASS	0
LD35281330.las	0	PASS	PASS	PASS	PASS	0
LD35281333.las	0	PASS	PASS	PASS	PASS	0
LD35281336.las	0	PASS	PASS	PASS	PASS	0
LD35281339.las	0	PASS	PASS	PASS	PASS	0
LD35281342.las	0	PASS	PASS	PASS	PASS	0
LD35281345.las	0	PASS	PASS	PASS	PASS	0
LD35281348.las	0	PASS	PASS	PASS	PASS	0
LD35281351.las	0	PASS	PASS	PASS	PASS	0
LD35281354.las	0	PASS	PASS	PASS	PASS	0
LD35281357.las	0	PASS	PASS	PASS	PASS	0
LD35281360.las	0	PASS	PASS	PASS	PASS	0
LD35311324.las	0	PASS	PASS	PASS	PASS	0
LD35311327.las	0	PASS	PASS	PASS	PASS	0
LD35311339.las	0	PASS	PASS	PASS	PASS	0
LD35311342.las	0	PASS	PASS	PASS	PASS	0
LD35311345.las	0	PASS	PASS	PASS	PASS	0
LD35311348.las	0	PASS	PASS	PASS	PASS	0
LD35311351.las	0	PASS	PASS	PASS	PASS	0
LD35311354.las	0	PASS	PASS	PASS	PASS	0
LD35311357.las	0	PASS	PASS	PASS	PASS	0
LD35311360.las	0	PASS	PASS	PASS	PASS	0
LD35311363.las	0	PASS	PASS	PASS	PASS	0
LD35341342.las	0	PASS	PASS	PASS	PASS	0
LD35341345.las	0	PASS	PASS	PASS	PASS	0
LD35341348.las	0	PASS	PASS	PASS	PASS	0
LD35341351.las	0	PASS	PASS	PASS	PASS	0
LD35341354.las	0	PASS	PASS	PASS	PASS	0
LD35341357.las	0	PASS	PASS	PASS	PASS	0
LD35341360.las	0	PASS	PASS	PASS	PASS	0
LD35341363.las	0	PASS	PASS	PASS	PASS	0
LD35341366.las	0	PASS	PASS	PASS	PASS	0
LD35371345.las	0	PASS	PASS	PASS	PASS	0
LD35371348.las	0	PASS	PASS	PASS	PASS	0
LD35371351.las	0	PASS	PASS	PASS	PASS	0
LD35371354.las	0	PASS	PASS	PASS	PASS	0
LD35371357.las	0	PASS	PASS	PASS	PASS	0
LD35371360.las	0	PASS	PASS	PASS	PASS	0
LD35371363.las	0	PASS	PASS	PASS	PASS	0
LD35371366.las	0	PASS	PASS	PASS	PASS	0
LD35401348.las	0	PASS	PASS	PASS	PASS	0
LD35401351.las	0	PASS	PASS	PASS	PASS	0
LD35401354.las	0	PASS	PASS	PASS	PASS	0
LD35401357.las	0	PASS	PASS	PASS	PASS	0
LD35401360.las	0	PASS	PASS	PASS	PASS	0
LD35401363.las	0	PASS	PASS	PASS	PASS	0
LD35401366.las	0	PASS	PASS	PASS	PASS	0

DPH-1.2 Report on ASPRS LAS File Format (Tiled Data) - File Integrity - continued

File	Number of Points Outside Extent	Offset To Point Data	Offset To EVLR	Number Of Points	Number of Points by Return	Number of Duplicate Points
LD35431351.las	0	PASS	PASS	PASS	PASS	0
LD35431354.las	0	PASS	PASS	PASS	PASS	0
LD35431357.las	0	PASS	PASS	PASS	PASS	0
LD35431360.las	0	PASS	PASS	PASS	PASS	0
LD35431363.las	0	PASS	PASS	PASS	PASS	0
LD35431366.las	0	PASS	PASS	PASS	PASS	0
LD35461354.las	0	PASS	PASS	PASS	PASS	0
LD35461357.las	0	PASS	PASS	PASS	PASS	0
LD35461360.las	0	PASS	PASS	PASS	PASS	0
LD35461363.las	0	PASS	PASS	PASS	PASS	0
LD35461366.las	0	PASS	PASS	PASS	PASS	0
LD35491354.las	0	PASS	PASS	PASS	PASS	0
LD35491357.las	0	PASS	PASS	PASS	PASS	0
LD35491360.las	0	PASS	PASS	PASS	PASS	0
LD35491363.las	0	PASS	PASS	PASS	PASS	0
LD35491366.las	0	PASS	PASS	PASS	PASS	0
LD35521357.las	0	PASS	PASS	PASS	PASS	0
LD35521360.las	0	PASS	PASS	PASS	PASS	0
LD35521363.las	0	PASS	PASS	PASS	PASS	0

DPH-1.3 Report on ASPRS LAS File Format (Swath Data) - Informational

The purpose of this section is to show a table of LAS 1.4 file informational test results for each swath file.

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
1004.las	(3521710.524,1320954.122,3660.623)	(3527534.359,1365275.474,10886.622)	[-3331, 3307]	[-19.986, 19.842]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	15614395
1007.las	(3205931.230,1376227.567,4031.645)	(3250262.892,1381569.329,5438.142)	[-3482, 3457]	[-20.892, 20.742]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	15885236
1015.las	(3168902.844,1395133.578,3846.137)	(3257539.142,1400776.503,11004.738)	[-3477, 3521]	[-20.862, 21.126]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	172448	24816984
1017.las	(3150666.756,1413696.168,3944.152)	(3176206.976,1418929.899,11274.482)	[-3431, 3391]	[-20.586, 20.346]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	5728611
1020.las	(3156830.620,1402522.879,4135.116)	(3204816.325,1407598.509,11161.756)	[-3498, 3459]	[-20.988, 20.754]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	80324	16860846
1044.las	(3559859.022,1355620.778,4156.393)	(3560508.203,1370388.145,4377.137)	[2524, 3348]	[15.144, 20.088]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2267021
1045.las	(3556050.522,1355599.334,3465.177)	(3560508.317,1370387.941,4464.299)	[-3361, 2691]	[-20.166, 16.146]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2886491
1046.las	(3552202.534,1350656.591,4155.684)	(3557384.783,1370369.078,4538.603)	[-3360, 3342]	[-20.16, 20.052]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	5710178
1047.las	(3548372.049,1350634.958,3606.666)	(3553574.671,1370347.559,4884.856)	[-3360, 3324]	[-20.16, 19.944]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	6618351
1048.las	(3544575.359,1345692.166,3658.976)	(3549860.690,1370326.110,4615.234)	[-3360, 3328]	[-20.16, 19.968]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	7252279
1049.las	(3540741.169,1345670.592,3519.727)	(3546009.446,1370304.507,5054.613)	[-3371, 3304]	[-20.226, 19.824]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	8709320
1050.las	(3536848.254,1321040.859,3415.318)	(3542318.544,1370282.690,4638.947)	[-3360, 3429]	[-20.16, 20.574]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	12157283
1051.las	(3533051.271,1321019.072,3531.620)	(3538553.504,1370261.304,5069.954)	[-3447, 3322]	[-20.682, 19.932]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	15178016
1052.las	(3529363.390,1320997.524,3424.931)	(3535344.423,1370240.221,5060.571)	[-3417, 3381]	[-20.502, 20.286]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	15634744
1053.las	(3525566.024,1320976.435,3415.804)	(3531397.966,1365297.232,4988.399)	[-3362, 3324]	[-20.172, 19.944]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	16714352
1054.las	(3517917.356,1320934.169,3703.201)	(3523759.865,1365253.757,10887.908)	[-3363, 3326]	[-20.178, 19.956]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	15570800
1055.las	(3514270.697,1320911.458,3522.729)	(3519913.235,1365232.728,4900.961)	[-3347, 3321]	[-20.082, 19.926]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	13376369
1056.las	(3510472.244,1320889.345,3795.629)	(3516089.052,1355367.946,10774.030)	[-3360, 3326]	[-20.16, 19.956]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	11728202
1057.las	(3508827.206,1320876.851,4201.934)	(3512251.256,1355344.769,4596.231)	[-3363, 1126]	[-20.178, 6.756]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	5515114
1081.las	(3205919.505,1379982.870,4113.063)	(3250241.386,1385355.692,10532.466)	[-3414, 3465]	[-20.484, 20.79]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	10576480
1082.las	(3228040.954,1384165.918,4092.003)	(3257581.837,1389295.287,5001.414)	[-3397, 3381]	[-20.382, 20.286]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	7520957
1083.las	(3228019.339,1387958.686,3896.364)	(3257581.730,1393114.737,4887.621)	[-3399, 3350]	[-20.394, 20.1]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	8436421
1084.las	(3191077.256,1391701.067,3933.453)	(3257560.763,1396878.784,10969.617)	[-3415, 3480]	[-20.49, 20.88]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	13974128
1158.las	(3151192.768,1417545.732,3961.436)	(3168800.948,1422665.038,11375.725)	[-3444, 3409]	[-20.664, 20.454]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	5113060
1159.las	(3147202.843,1421256.755,3997.935)	(3168779.302,1426425.731,11125.516)	[-3714, 3396]	[-22.284, 20.376]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	4546901
1160.las	(3149370.874,1425197.000,4015.523)	(3161373.661,1430284.309,11253.055)	[-3442, 3408]	[-20.652, 20.448]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	4084385
1177.las	(3155147.061,1406097.941,3932.591)	(3217661.110,1411585.276,11053.262)	[-3508, 3483]	[-21.048, 20.898]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	29022822
1178.las	(3153834.041,1409867.216,4126.225)	(3235302.063,1415015.564,5158.582)	[-3504, 3458]	[-21.024, 20.748]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	33014	16839231
1197.las	(3213601.914,1329054.784,3972.679)	(3250530.270,1330934.252,5991.786)	[459, 2674]	[2.754, 16.044]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	4203974
1218.las	(3216559.837,1361818.820,3695.718)	(3250344.018,1366639.583,11995.813)	[-2663, 2623]	[-15.978, 15.738]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	17878283
1219.las	(3206034.299,1358513.637,3741.869)	(3250361.854,1363406.845,12057.013)	[-2629, 2605]	[-15.774, 15.63]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	14367753
1220.las	(3206052.617,1355257.170,3740.691)	(3250379.918,1360189.589,11879.881)	[-2648, 2629]	[-15.888, 15.774]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	12386452
1221.las	(3206070.755,1352094.046,3723.506)	(3250398.137,1356935.734,11963.660)	[-2659, 2612]	[-15.954, 15.672]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	12270346
1222.las	(3206089.183,1348781.881,3767.955)	(3250416.643,1353795.393,11952.128)	[-2647, 2613]	[-15.882, 15.678]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	12376136
1223.las	(3206106.806,1345620.816,3782.191)	(3250434.610,1350449.706,12094.001)	[-2667, 2626]	[-16.002, 15.756]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	12299453
1224.las	(3206125.709,1342255.881,3780.206)	(3250452.696,1347200.374,12004.310)	[-2665, 2627]	[-15.99, 15.762]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	12408920
1225.las	(3206143.593,1339170.405,3801.032)	(3250470.450,1344098.314,12015.301)	[-2660, 2625]	[-15.96, 15.75]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	12428408
1226.las	(3206162.130,1335884.729,3801.229)	(3250489.006,1340854.538,12083.050)	[-2662, 2624]	[-15.972, 15.744]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	12599819
1227.las	(3206179.947,1332897.213,3886.262)	(3250507.355,1337621.993,5891.921)	[-2687, 2647]	[-16.122, 15.882]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	11837511
1229.las	(3213582.490,1329626.492,3969.828)	(3250525.432,1334207.579,10867.249)	[-2702, 2661]	[-16.212, 15.966]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	9396415
1236.las	(3147879.032,1436585.066,4846.962)	(3153923.371,1437026.052,4979.747)	[2854, 3395]	[17.124, 20.37]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	586066
1237.las	(3149831.686,1432807.658,4833.015)	(3153946.892,1437026.222,5143.864)	[-3443, 2517]	[-20.658, 15.102]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	646460
1238.las	(3150185.368,1428915.145,4749.646)	(3161351.653,1433881.784,5330.567)	[-3447, 3418]	[-20.682, 20.508]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	3030904
2002.las	(3206019.048,1360875.283,4222.649)	(3250348.619,1366577.717,5392.889)	[-3575, 3429]	[-21.45, 20.574]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	27554505
2012.las	(3158920.542,1398587.293,4138.870)	(3257518.306,1404190.807,6652.319)	[-3496, 3447]	[-20.976, 20.682]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	27910190
2041.las	(3205999.254,1364797.651,4155.366)	(3250327.121,1370104.804,6092.166)	[-3499, 3435]	[-20.994, 20.61]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	15108310

DPH-1.3 Report on ASPRS LAS File Format (Swath Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
2048.las	(3205973.894,1368679.597,4587.402)	(3250304.526,1374093.958,5409.235)	[-3516, 3441]	[-21.096, 20.646]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	13405880
2049.las	(3205953.242,1372358.878,3929.625)	(3250281.864,1377831.823,5600.278)	[-3461, 3423]	[-20.766, 20.538]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	16016992
2103.las	(3195128.494,1402738.192,3903.329)	(3235344.834,1408154.732,6659.613)	[-3498, 3444]	[-20.988, 20.664]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	17846263
2104.las	(3206106.616,1406619.858,4375.890)	(3235321.856,1411903.633,6695.223)	[-3413, 3366]	[-20.478, 20.196]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	10297053

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational

The purpose of this section is to show a table of LAS 1.4 file informational test results for each tiled file.

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD31531420.las	(3156222.598,1421488.496,4176.179)	(3156999.999,1423999.991,4868.350)	[-3427, 145]	[-20.562, 0.87]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	56926
LD31531423.las	(3155289.714,1424000.012,4166.340)	(3156999.999,1426999.998,4985.367)	[115, 3396]	[0.69, 20.376]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	465035
LD31531426.las	(3154360.020,1427000.002,4116.947)	(3156999.999,1429999.999,11102.117)	[-3394, 3412]	[-20.364, 20.472]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	738661
LD31561408.las	(3159977.964,1411987.669,4764.466)	(3159999.948,1411999.872,4767.563)	[-666, -648]	[-3.996, -3.888]	[0, 0]	[0, 1]	[0, 0]	[0, 0]	0	0	0	0
LD31561411.las	(3159013.762,1412000.067,4226.822)	(3159999.999,1414999.988,4899.577)	[-3408, 3393]	[-20.448, 20.358]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	259209
LD31561414.las	(3158082.628,1415000.002,4172.127)	(3159999.999,1417999.998,11061.293)	[-3394, 3397]	[-20.364, 20.382]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	227503
LD31561417.las	(3157153.389,1418000.004,4052.909)	(3159999.999,1420999.999,11056.280)	[-3404, 3378]	[-20.424, 20.268]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	428248
LD31591405.las	(3160875.611,1406000.003,4640.844)	(3163000.000,1409000.000,4983.898)	[-542, 3455]	[-3.252, 20.73]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	510789
LD31591408.las	(3160000.010,1409000.001,4192.849)	(3162999.998,1411999.997,4881.030)	[-3461, -500]	[-20.766, -3]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	913572
LD31591411.las	(3160000.000,1412000.004,4058.151)	(3163000.000,1414999.999,5109.347)	[-3417, 3386]	[-20.502, 20.316]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	944331
LD31591414.las	(3160000.000,1415000.000,3945.058)	(3163000.000,1417999.997,11227.146)	[-3394, 3409]	[-20.364, 20.454]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	394675
LD31621402.las	(3163000.002,1403000.001,4569.732)	(3166000.000,1405999.999,4976.985)	[-2905, 3411]	[-17.43, 20.466]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	492007
LD31621405.las	(3163000.001,1406000.003,4621.070)	(3165999.999,1408999.993,4999.547)	[-512, 3452]	[-3.072, 20.712]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1025417
LD31621408.las	(3163000.001,1409000.001,4263.476)	(3166000.000,1411999.998,5123.215)	[-3426, -463]	[-20.556, -2.778]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	945941
LD31621411.las	(3163000.002,1412000.007,4213.417)	(3166000.000,1414999.993,5158.582)	[-3427, 3350]	[-20.562, 20.1]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1068920
LD31651402.las	(3166000.002,1403000.001,4288.758)	(3169000.000,1406000.000,4899.564)	[-2867, 3420]	[-17.202, 20.52]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	551902
LD31651405.las	(3166000.002,1406000.001,4258.187)	(3168999.996,1409000.000,11053.262)	[-499, 3374]	[-2.994, 20.244]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1017188
LD31651408.las	(3166000.004,1409000.008,4442.950)	(3169000.000,1411999.998,4832.822)	[-3395, -465]	[-20.37, -2.79]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	930069
LD31651411.las	(3166000.002,1412000.003,4126.225)	(3169000.000,1414999.999,5090.466)	[-3424, 3359]	[-20.544, 20.154]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1071580
LD31681402.las	(3169000.001,1403000.002,4320.365)	(3171999.999,1406000.000,4850.866)	[-2843, 3402]	[-17.058, 20.412]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	490180
LD31681405.las	(3169000.004,1406000.001,4471.110)	(3171999.999,1409000.000,4837.595)	[-485, 3374]	[-2.91, 20.244]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1051660
LD31681408.las	(3169000.001,1409000.002,4724.115)	(3171999.999,1412000.000,4836.467)	[-3412, -426]	[-20.472, -2.556]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1241628
LD31711399.las	(3172000.000,1400000.001,4709.974)	(3174999.999,1402999.999,4919.610)	[-3393, 2658]	[-20.358, 15.948]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	453927
LD31711402.las	(3172000.000,1403000.000,4727.566)	(3174999.998,1406000.000,5055.708)	[-2887, 3409]	[-17.322, 20.454]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	550687
LD31711405.las	(3172000.000,1406000.001,4211.826)	(3174999.999,1408999.999,4868.304)	[-425, 3382]	[-2.55, 20.292]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1156914
LD31711408.las	(3172000.000,1409000.002,4693.475)	(3174999.999,1411999.999,4872.175)	[-3427, -355]	[-20.562, -2.13]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1129806
LD31741399.las	(3175000.001,1400000.000,4674.735)	(3177999.999,1402999.998,5213.051)	[-3375, 2677]	[-20.25, 16.062]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	421423
LD31741402.las	(3175000.000,1403000.000,4191.763)	(3177999.998,1406000.000,4956.230)	[-2946, 3441]	[-17.676, 20.646]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	539758
LD31741405.las	(3175000.001,1406000.001,4558.200)	(3177999.998,1408999.999,4950.341)	[-385, 3393]	[-2.31, 20.358]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1165279
LD31741408.las	(3175000.000,1409000.001,4596.769)	(3177999.997,1412000.000,4946.293)	[-3429, -348]	[-20.574, -2.088]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1094919
LD31771399.las	(3178000.001,1400000.000,4565.007)	(3181000.000,1402999.999,5515.068)	[-3374, 2670]	[-20.244, 16.02]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	375359
LD31771402.las	(3178000.000,1403000.000,4715.538)	(3180999.999,1406000.000,4904.367)	[-2979, 3442]	[-17.874, 20.652]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	559430
LD31771405.las	(3178000.000,1406000.002,4592.507)	(3181000.000,1408999.997,4875.118)	[-362, 3401]	[-2.172, 20.406]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1142073
LD31771408.las	(3178000.004,1409000.001,4209.926)	(3181000.000,1411999.990,4927.569)	[-3426, -336]	[-20.556, -2.016]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1093920
LD31801399.las	(3181000.002,1400000.000,4574.869)	(3184000.000,1402999.998,5422.282)	[-3375, 2686]	[-20.25, 16.116]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	387397
LD31801402.las	(3181000.001,1403000.000,4611.782)	(3183999.999,1405999.997,4896.722)	[-2975, 3393]	[-17.85, 20.358]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	528347
LD31801405.las	(3181000.002,1406000.001,4508.065)	(3183999.999,1409000.000,11007.156)	[-337, 3383]	[-2.022, 20.298]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1206211
LD31801408.las	(3181000.001,1409000.001,4184.854)	(3184000.000,1412000.000,4888.438)	[-3411, -228]	[-20.466, -1.368]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1158170
LD31831399.las	(3184000.003,1400000.000,4702.018)	(3186999.999,1402999.999,4908.698)	[-3374, 2562]	[-20.244, 15.372]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	367807
LD31831402.las	(3184000.002,1403000.000,4671.513)	(3186999.993,1406000.000,4800.194)	[-2989, 3402]	[-17.934, 20.412]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	569167
LD31831405.las	(3184000.001,1406000.003,4446.494)	(3186999.997,1408999.998,4880.341)	[-230, 3376]	[-1.38, 20.256]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	966753
LD31831408.las	(3184000.001,1409000.001,4663.573)	(3187000.000,1411999.998,4855.492)	[-3412, -191]	[-20.472, -1.146]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1119428
LD31861399.las	(3187000.002,1400000.000,4573.436)	(3189999.996,1402999.997,4874.695)	[-3371, 2545]	[-20.226, 15.27]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	338564
LD31861402.las	(3187000.001,1403000.000,4135.116)	(3189999.997,1405999.975,4797.005)	[-3056, 3374]	[-18.336, 20.244]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	580559
LD31861405.las	(3187000.004,1406000.013,4509.843)	(3189999.999,1409000.000,4979.806)	[-195, 3359]	[-1.17, 20.154]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	812937
LD31861408.las	(3187000.001,1409000.001,4635.004)	(3189999.999,1411999.999,4813.432)	[-3392, -164]	[-20.352, -0.984]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1096127

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD31891399.las	(3190000.002,1400000.000,4724.902)	(3192999.998,1402999.999,4905.312)	[-3377, 3455]	[-20.262, 20.73]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	397753
LD31891402.las	(3190000.002,1403000.000,4694.453)	(3192999.999,1405999.997,4817.139)	[-3124, 3387]	[-18.744, 20.322]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	626117
LD31891405.las	(3190000.001,1406000.003,4572.255)	(3192999.999,1408999.997,5076.791)	[-178, 3355]	[-1.068, 20.13]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1122553
LD31891408.las	(3190000.001,1409000.002,4066.675)	(3192999.999,1412000.000,4857.241)	[-3392, -81]	[-20.352, -0.486]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1192349
LD31921402.las	(3193000.002,1403000.001,4307.993)	(3196000.000,1405999.999,6608.924)	[-3136, 3392]	[-18.816, 20.352]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1094408
LD31921405.las	(3193000.000,1406000.002,4667.599)	(3196000.000,1408999.999,4814.232)	[-3410, 3360]	[-20.46, 20.16]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1301325
LD31951396.las	(3196000.003,1397000.000,4559.482)	(3199000.000,1399999.999,11004.738)	[-3444, 3401]	[-20.664, 20.406]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	912049
LD31951399.las	(3196000.001,1400000.000,4653.354)	(3198999.998,1402999.999,4873.360)	[-3374, 3423]	[-20.244, 20.538]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	786107
LD31951402.las	(3196000.002,1403000.000,4564.548)	(3198999.998,1405999.999,11007.767)	[-3091, 3400]	[-18.546, 20.4]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2495434
LD31951405.las	(3196000.001,1406000.001,4129.828)	(3198999.999,1408999.997,6614.649)	[-3414, 3343]	[-20.484, 20.058]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2274629
LD31981396.las	(3199000.004,1397000.002,4630.965)	(3202000.000,1399999.998,4987.733)	[-3412, 3339]	[-20.472, 20.034]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	842258
LD31981399.las	(3199000.005,1400000.000,4656.884)	(3202000.000,1402999.999,5065.108)	[-3374, 3452]	[-20.244, 20.712]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	899329
LD31981402.las	(3199000.001,1403000.001,4447.668)	(3202000.000,1405999.998,6610.958)	[-3023, 3352]	[-18.138, 20.112]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2287152
LD31981405.las	(3199000.004,1406000.004,4485.171)	(3201999.998,1408999.997,6602.871)	[-3400, 3341]	[-20.4, 20.046]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2282025
LD32011399.las	(3202000.002,1400000.001,4666.864)	(3204999.997,1402999.999,5352.417)	[-3356, 3454]	[-20.136, 20.724]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	674460
LD32011402.las	(3202000.001,1403000.001,4642.691)	(3204999.997,1406000.000,11084.991)	[-3334, 3375]	[-20.004, 20.25]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2206828
LD32011405.las	(3202000.001,1406000.001,3932.591)	(3204999.999,1409000.000,6626.775)	[-3398, 3340]	[-20.388, 20.04]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1843601
LD32011408.las	(3202000.002,1409000.002,4515.011)	(3204999.999,1411999.999,4895.076)	[-3392, 41]	[-20.352, 0.246]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	28002	1041407
LD32041402.las	(3205000.000,1403000.000,4634.102)	(3207999.999,1406000.000,6640.010)	[-1069, 3342]	[-6.414, 20.052]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	996726
LD32041405.las	(3205000.000,1406000.003,4629.971)	(3207999.999,1409000.000,6659.613)	[-3406, 3333]	[-20.436, 19.998]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1780788
LD32041408.las	(3205000.001,1409000.001,4168.463)	(3207999.999,1412000.000,10954.407)	[-3378, 3335]	[-20.268, 20.01]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2038158
LD32071333.las	(3208000.002,1334000.001,3925.163)	(3210999.999,1337000.000,5717.856)	[-2627, 1242]	[-15.762, 7.452]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	906961
LD32071336.las	(3208000.000,1337000.002,3981.436)	(3210999.999,1340000.000,5704.165)	[-2627, 2575]	[-15.762, 15.45]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	633975
LD32071339.las	(3208000.000,1340000.001,3916.895)	(3210999.999,1343000.000,12015.301)	[-2618, 2561]	[-15.708, 15.366]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	732036
LD32071342.las	(3208000.003,1343000.002,3873.949)	(3210999.999,1345999.999,11922.965)	[-2612, 2590]	[-15.672, 15.54]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	692010
LD32071345.las	(3208000.000,1346000.001,3852.696)	(3210999.999,1348999.999,11781.423)	[-2601, 2577]	[-15.606, 15.462]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	506675
LD32071348.las	(3208000.000,1349000.000,3961.114)	(3210999.999,1351999.999,5391.131)	[-2629, 1214]	[-15.774, 7.284]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	837090
LD32071351.las	(3208000.001,1352000.001,3907.499)	(3210999.999,1355000.000,5628.499)	[-943, 2581]	[-5.658, 15.486]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	841731
LD32071354.las	(3208000.000,1355000.003,3795.448)	(3210999.996,1358000.000,4802.966)	[-2613, 640]	[-15.678, 3.84]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	838725
LD32071357.las	(3208000.003,1358000.001,3773.175)	(3210999.999,1361000.000,12057.013)	[-2583, 3380]	[-15.498, 20.28]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	930064
LD32071360.las	(3208000.000,1361000.001,3900.333)	(3210999.997,1363999.997,4757.632)	[-2608, 3351]	[-15.648, 20.106]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1340629
LD32071363.las	(3208000.013,1364000.000,4689.144)	(3210999.999,1366999.999,4742.333)	[-3435, -341]	[-20.61, -2.046]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	947459
LD32071366.las	(3208000.000,1367000.002,4658.045)	(3210999.999,1369999.999,4774.872)	[-370, 3370]	[-2.22, 20.22]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	927495
LD32071369.las	(3208000.000,1370000.005,4657.189)	(3210999.999,1373000.000,4752.244)	[-3447, 1645]	[-20.682, 9.87]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	653988
LD32071372.las	(3208000.000,1373000.004,4647.481)	(3210999.999,1375999.999,4840.079)	[-3446, 1716]	[-20.676, 10.296]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	455557
LD32071375.las	(3208000.000,1376000.003,4195.717)	(3210999.999,1379000.000,4844.784)	[-3482, 3380]	[-20.892, 20.28]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1157292
LD32071378.las	(3208000.001,1379000.001,4314.306)	(3210999.999,1381999.997,4873.025)	[337, 3465]	[2.022, 20.79]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1140177
LD32071399.las	(3208000.002,1400000.001,4138.870)	(3210999.998,1402999.999,4829.029)	[-2159, 3439]	[-12.954, 20.634]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	451878
LD32071402.las	(3208000.000,1403000.000,3903.329)	(3210999.999,1405999.999,6654.488)	[-1063, 3333]	[-6.378, 19.998]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	937827
LD32071405.las	(3208000.001,1406000.001,4294.414)	(3210999.998,1409000.000,6637.493)	[-3413, 3333]	[-20.478, 19.998]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1364923
LD32071408.las	(3208000.002,1409000.003,4632.107)	(3210999.999,1411999.997,6671.676)	[-3377, 3353]	[-20.262, 20.118]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2832434
LD32101333.las	(3211000.001,1334000.000,4137.902)	(3213999.999,1337000.000,5891.921)	[-2606, 1246]	[-15.636, 7.476]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	785160
LD32101336.las	(3211000.000,1337000.001,3902.325)	(3213999.999,1340000.000,5680.576)	[-2652, 2592]	[-15.912, 15.552]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	659116
LD32101339.las	(3211000.000,1340000.001,3845.110)	(3214000.000,1343000.000,5807.108)	[-2616, 2571]	[-15.696, 15.426]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	742547
LD32101342.las	(3211000.001,1343000.001,3900.415)	(3213999.999,1345999.999,11952.614)	[-2629, 2596]	[-15.774, 15.576]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	688409
LD32101345.las	(3211000.001,1346000.000,3823.234)	(3214000.000,1348999.998,11782.837)	[-2604, 2597]	[-15.624, 15.582]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	527595
LD32101348.las	(3211000.000,1349000.003,3858.109)	(3213999.999,1351999.999,5414.520)	[-2627, 1143]	[-15.762, 6.858]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	845964
LD32101351.las	(3211000.000,1352000.000,3845.124)	(3213999.999,1354999.997,11963.660)	[-2587, 2576]	[-15.522, 15.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	828638
LD32101354.las	(3211000.000,1355000.001,3806.892)	(3213999.999,1357999.999,11879.881)	[-2614, 585]	[-15.684, 3.51]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	836122

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD32101357.las	(3211000.000,1358000.006,3783.821)	(3214000.000,1360999.996,11899.523)	[-2597, 2593]	[-15.582, 15.558]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	838683
LD32101360.las	(3211000.001,1361000.001,3913.339)	(3214000.000,1363999.997,5392.889)	[-2609, 3351]	[-15.654, 20.106]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1346063
LD32101363.las	(3211000.000,1364000.001,4687.530)	(3214000.000,1366999.998,4752.090)	[-3400, -320]	[-20.4, -1.92]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1151982
LD32101366.las	(3211000.000,1367000.000,4657.517)	(3214000.000,1369999.999,4749.735)	[-360, 3364]	[-2.16, 20.184]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	935351
LD32101369.las	(3211000.000,1370000.000,4653.823)	(3214000.000,1373000.000,4749.876)	[-3424, 1671]	[-20.544, 10.026]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	567221
LD32101372.las	(3211000.002,1373000.001,4638.147)	(3213999.998,1376000.000,4796.388)	[-3434, 1625]	[-20.604, 9.75]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	558558
LD32101375.las	(3211000.000,1376000.001,4241.780)	(3213999.998,1378999.997,4988.084)	[-3467, 3362]	[-20.802, 20.172]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1105237
LD32101378.las	(3211000.000,1379000.004,4619.233)	(3213999.999,1381999.996,5540.199)	[411, 3461]	[2.466, 20.766]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1085319
LD32101399.las	(3211000.001,1400000.000,4410.493)	(3213999.998,1402999.999,4892.631)	[-2043, 3422]	[-12.258, 20.532]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	772814
LD32101402.las	(3211000.000,1403000.000,4595.109)	(3214000.000,1406000.000,6652.319)	[-1197, 3319]	[-7.182, 19.914]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	708407
LD32101405.las	(3211000.000,1406000.001,4119.916)	(3214000.000,1409000.000,6602.251)	[-3387, 3329]	[-20.322, 19.974]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1257998
LD32101408.las	(3211000.000,1409000.003,4592.481)	(3213999.999,1411999.998,6657.674)	[-3392, 3349]	[-20.352, 20.094]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2852924
LD32131333.las	(3214000.003,1334000.001,3939.156)	(3217000.000,1337000.000,5840.064)	[-2615, 1288]	[-15.69, 7.728]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	799085
LD32131336.las	(3214000.001,1337000.001,3935.264)	(3216999.999,1340000.000,4988.209)	[-2644, 2606]	[-15.864, 15.636]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	642363
LD32131339.las	(3214000.001,1340000.003,3906.567)	(3216999.999,1343000.000,11922.227)	[-2633, 2593]	[-15.798, 15.558]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	723220
LD32131342.las	(3214000.002,1343000.002,3817.709)	(3217000.000,1345999.999,11925.570)	[-2648, 2591]	[-15.888, 15.546]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	676736
LD32131345.las	(3214000.003,1346000.000,3953.329)	(3217000.000,1348999.998,5479.812)	[-2559, 2608]	[-15.354, 15.648]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	625727
LD32131348.las	(3214000.001,1349000.001,3902.548)	(3216999.998,1351999.996,5650.297)	[-2630, 1123]	[-15.78, 6.738]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	855480
LD32131351.las	(3214000.004,1352000.000,3767.437)	(3217000.000,1355000.000,4784.810)	[-840, 2573]	[-5.04, 15.438]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	829879
LD32131354.las	(3214000.003,1355000.005,3802.968)	(3217000.000,1358000.000,4892.736)	[-2625, 576]	[-15.75, 3.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	844816
LD32131357.las	(3214000.003,1358000.002,3801.538)	(3217000.000,1360999.999,4787.123)	[-265, 2587]	[-1.59, 15.522]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	808504
LD32131360.las	(3214000.001,1361000.001,3865.524)	(3217000.000,1363999.998,4747.031)	[-2609, 3385]	[-15.654, 20.31]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1335086
LD32131363.las	(3214000.001,1364000.000,4679.813)	(3217000.000,1366999.999,4759.095)	[-3442, 2571]	[-20.652, 15.426]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1259707
LD32131366.las	(3214000.002,1367000.002,4645.046)	(3217000.000,1369999.999,4795.341)	[-335, 3398]	[-2.01, 20.388]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	900176
LD32131369.las	(3214000.001,1370000.000,4650.575)	(3216999.998,1373000.000,4742.901)	[-3428, 1615]	[-20.568, 9.69]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	572078
LD32131372.las	(3214000.002,1373000.002,4624.932)	(3217000.000,1376000.000,4816.076)	[-3435, 1627]	[-20.61, 9.762]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	393330
LD32131375.las	(3214000.001,1376000.006,4657.681)	(3216999.996,1378999.999,5421.885)	[-3466, 3393]	[-20.796, 20.358]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1139390
LD32131378.las	(3214000.001,1379000.002,4710.844)	(3216999.999,1381999.992,4855.177)	[422, 3445]	[2.532, 20.67]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1089522
LD32131399.las	(3214000.006,1400000.002,4625.982)	(3217000.000,1402999.999,4786.106)	[-2158, 3411]	[-12.948, 20.466]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	746603
LD32131402.las	(3214000.001,1403000.000,4594.673)	(3217000.000,1406000.000,6636.847)	[-1210, 3328]	[-7.26, 19.968]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	775504
LD32131405.las	(3214000.002,1406000.003,4563.993)	(3216999.999,1409000.000,6616.588)	[-3363, 3326]	[-20.178, 19.956]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1858567
LD32131408.las	(3214000.001,1409000.001,4580.549)	(3217000.000,1411999.998,6683.048)	[-3391, 3363]	[-20.346, 20.178]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2801151
LD32161333.las	(3217000.001,1334000.000,4124.736)	(3219999.999,1337000.000,5599.854)	[-2635, 1370]	[-15.81, 8.22]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	685718
LD32161336.las	(3217000.002,1337000.001,3995.396)	(3219999.996,1340000.000,12083.050)	[-2652, 2611]	[-15.912, 15.666]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	660983
LD32161339.las	(3217000.002,1340000.001,3860.537)	(3219999.997,1343000.000,5808.811)	[-2661, 2599]	[-15.966, 15.594]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	648355
LD32161342.las	(3217000.002,1343000.001,3831.068)	(3219999.993,1345999.999,11893.588)	[-2646, 2577]	[-15.876, 15.462]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	574517
LD32161345.las	(3217000.002,1346000.000,3862.384)	(3219999.998,1348999.999,11948.060)	[-2578, 2622]	[-15.468, 15.732]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	584837
LD32161348.las	(3217000.002,1349000.000,3862.778)	(3219999.995,1351999.999,11927.752)	[-2610, 2564]	[-15.66, 15.384]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	881121
LD32161351.las	(3217000.001,1352000.002,3808.719)	(3220000.000,1355000.000,11870.931)	[-823, 2573]	[-4.938, 15.438]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	827380
LD32161354.las	(3217000.001,1355000.001,3800.314)	(3220000.000,1358000.000,4758.258)	[-2631, 470]	[-15.786, 2.82]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	827836
LD32161357.las	(3217000.003,1358000.001,3847.837)	(3220000.000,1361000.000,11546.315)	[-215, 2591]	[-1.29, 15.546]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	762720
LD32161360.las	(3217000.001,1361000.001,3717.512)	(3220000.000,1363999.997,4786.631)	[-2609, 3429]	[-15.654, 20.574]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2270724
LD32161363.las	(3217000.001,1364000.000,3784.717)	(3219999.998,1366999.999,11952.952)	[-3575, 2575]	[-21.45, 15.45]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2519179
LD32161366.las	(3217000.001,1367000.001,4663.449)	(3220000.000,1369999.998,4804.000)	[-496, 3393]	[-2.976, 20.358]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1007135
LD32161369.las	(3217000.001,1370000.001,4649.197)	(3219999.999,1373000.000,4753.514)	[-3461, 1598]	[-20.766, 9.588]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	458182
LD32161372.las	(3217000.001,1373000.001,4647.074)	(3219999.999,1375999.996,4754.154)	[-3425, 1577]	[-20.55, 9.462]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	516732
LD32161375.las	(3217000.002,1376000.002,4647.937)	(3219999.993,1378999.998,4766.450)	[-3465, 3423]	[-20.79, 20.538]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1065773
LD32161378.las	(3217000.002,1379000.001,4680.270)	(3220000.000,1381999.998,4799.931)	[332, 3429]	[1.992, 20.574]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1103395
LD32161399.las	(3217000.001,1400000.000,4640.857)	(3220000.000,1402999.999,4790.263)	[-2276, 3391]	[-13.656, 20.346]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	443101

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD32161402.las	(3217000.001,1403000.000,4453.672)	(3220000.000,1406000.000,4754.754)	[-1024, 3346]	[-6.144, 20.076]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1022951
LD32161405.las	(3217000.001,1406000.001,4547.721)	(3219999.992,1409000.000,6239.571)	[-3361, 3319]	[-20.166, 19.914]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	966396
LD32191333.las	(3220000.002,1334000.000,4103.712)	(3222999.999,1336999.999,5916.015)	[-2662, 1399]	[-15.972, 8.394]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	659381
LD32191336.las	(3220000.001,1337000.001,3992.446)	(3222999.999,1340000.000,5924.476)	[-2687, 2612]	[-16.122, 15.672]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	714039
LD32191339.las	(3220000.002,1340000.002,4019.100)	(3222999.998,1343000.000,5882.826)	[-2656, 2611]	[-15.936, 15.666]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	692397
LD32191342.las	(3220000.006,1343000.002,3876.790)	(3222999.999,1345999.999,5827.688)	[-2645, 2591]	[-15.87, 15.546]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	606864
LD32191345.las	(3220000.009,1346000.000,3791.137)	(3222999.999,1348999.997,5557.410)	[-2584, 2627]	[-15.504, 15.762]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	693130
LD32191348.las	(3220000.002,1349000.001,3953.165)	(3222999.999,1351999.999,4929.931)	[-2634, 1080]	[-15.804, 6.48]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	883161
LD32191351.las	(3220000.001,1352000.002,3866.534)	(3222999.996,1355000.000,11885.593)	[-777, 2576]	[-4.662, 15.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	825020
LD32191354.las	(3220000.006,1355000.002,3812.699)	(3222999.998,1358000.000,4808.521)	[-2625, 462]	[-15.75, 2.772]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	832238
LD32191357.las	(3220000.004,1358000.009,3756.659)	(3222999.996,1361000.000,11986.561)	[-2573, 2594]	[-15.438, 15.564]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	843056
LD32191360.las	(3220000.001,1361000.001,3741.928)	(3222999.998,1363999.998,4847.812)	[-2608, 3420]	[-15.648, 20.52]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1517662
LD32191363.las	(3220000.001,1364000.000,3787.886)	(3222999.999,1366999.999,5647.371)	[-3517, 2575]	[-21.102, 15.45]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2239759
LD32191366.las	(3220000.001,1367000.000,4665.270)	(3222999.999,1369999.998,4782.789)	[-547, 3388]	[-3.282, 20.328]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1069890
LD32191369.las	(3220000.002,1370000.000,4648.396)	(3222999.998,1373000.000,4802.205)	[-3433, 1719]	[-20.598, 10.314]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	549963
LD32191372.las	(3220000.005,1373000.002,4642.212)	(3222999.999,1375999.997,4824.062)	[-3422, 1491]	[-20.532, 8.946]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	631270
LD32191375.las	(3220000.001,1376000.001,4130.513)	(3222999.999,1378999.999,4754.994)	[-3430, 3389]	[-20.58, 20.334]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1195159
LD32191378.las	(3220000.003,1379000.001,4109.854)	(3222999.999,1381999.999,4800.440)	[248, 3394]	[1.488, 20.364]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1198516
LD32191399.las	(3220000.001,1400000.000,4559.748)	(3222999.999,1402999.997,5083.855)	[-2403, 3375]	[-14.418, 20.25]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	431285
LD32191402.las	(3220000.002,1403000.002,4613.849)	(3222999.999,1405999.998,6212.455)	[-829, 3329]	[-4.974, 19.974]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1039951
LD32191405.las	(3220000.001,1406000.001,4602.307)	(3222999.999,1408999.999,6270.827)	[-3364, -247]	[-20.184, -1.482]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	930005
LD32221333.las	(3223000.003,1334000.000,4082.902)	(3225999.999,1337000.000,5880.654)	[-2660, 1474]	[-15.96, 8.844]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	633283
LD32221336.las	(3223000.000,1337000.002,3976.842)	(3225999.999,1340000.000,11763.408)	[-2678, 2607]	[-16.068, 15.642]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	721121
LD32221339.las	(3223000.002,1340000.002,3934.549)	(3225999.999,1343000.000,12013.303)	[-2665, 2624]	[-15.99, 15.744]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	716987
LD32221342.las	(3223000.001,1343000.002,3928.171)	(3225999.999,1345999.999,11914.619)	[-2648, 2593]	[-15.888, 15.558]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	634417
LD32221345.las	(3223000.000,1346000.000,3847.601)	(3225999.998,1348999.998,5654.093)	[-1430, 2622]	[-8.58, 15.732]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	724618
LD32221348.las	(3223000.000,1349000.000,3860.708)	(3225999.998,1351999.997,4860.440)	[-2625, 1000]	[-15.75, 6]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	818079
LD32221351.las	(3223000.003,1352000.000,3813.532)	(3225999.999,1354999.998,11703.356)	[-727, 2607]	[-4.362, 15.642]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	828649
LD32221354.las	(3223000.007,1355000.008,3820.258)	(3225999.998,1358000.000,11844.255)	[-2631, 402]	[-15.786, 2.412]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	823230
LD32221357.las	(3223000.000,1358000.001,3740.691)	(3225999.998,1360999.997,5692.679)	[-179, 2607]	[-1.074, 15.642]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	852017
LD32221360.las	(3223000.000,1361000.001,3698.267)	(3225999.999,1363999.998,5493.227)	[-2593, 3357]	[-15.558, 20.142]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2537130
LD32221363.las	(3223000.000,1364000.000,3755.580)	(3225999.999,1366999.997,11842.060)	[-3452, 2578]	[-20.712, 15.468]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2491526
LD32221366.las	(3223000.000,1367000.001,4587.402)	(3225999.998,1369999.999,4747.605)	[-599, 3375]	[-3.594, 20.25]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	966199
LD32221369.las	(3223000.005,1370000.001,4658.468)	(3225999.998,1373000.000,4756.782)	[-3433, 1799]	[-20.598, 10.794]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	467996
LD32221372.las	(3223000.001,1373000.001,3929.625)	(3225999.999,1376000.000,4831.001)	[-3428, 1446]	[-20.568, 8.676]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	588894
LD32221375.las	(3223000.002,1376000.004,4357.206)	(3225999.999,1379000.000,4735.634)	[-3397, 3386]	[-20.382, 20.316]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1005863
LD32221378.las	(3223000.001,1379000.002,4626.933)	(3225999.999,1381999.999,4757.779)	[212, 3381]	[1.272, 20.286]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1221366
LD32221396.las	(3223000.000,1397000.002,4414.561)	(3225999.999,1399999.999,4794.462)	[-3392, 2852]	[-20.352, 17.112]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	643418
LD32221399.las	(3223000.000,1400000.000,4610.834)	(3225999.999,1402999.999,4778.767)	[-2524, 3436]	[-15.144, 20.616]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	446745
LD32221402.las	(3223000.000,1403000.000,4626.634)	(3225999.999,1405999.999,4830.696)	[-767, 3412]	[-4.602, 20.472]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1074943
LD32221405.las	(3223000.001,1406000.004,4527.665)	(3225999.999,1409000.000,4836.463)	[-3480, -231]	[-20.88, -1.386]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1135902
LD32251333.las	(3226000.002,1334000.000,3931.728)	(3228999.999,1337000.000,5858.676)	[-2630, 1487]	[-15.78, 8.922]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	597560
LD32251336.las	(3226000.002,1337000.001,3933.135)	(3228999.999,1339999.999,5886.366)	[-2664, 2625]	[-15.984, 15.75]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	763965
LD32251339.las	(3226000.000,1340000.002,3937.095)	(3228999.999,1343000.000,10813.584)	[-2660, 2603]	[-15.96, 15.618]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	756722
LD32251342.las	(3226000.001,1343000.001,3931.203)	(3228999.999,1345999.999,11788.720)	[-2660, 2606]	[-15.96, 15.636]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	550365
LD32251345.las	(3226000.001,1346000.000,3886.859)	(3228999.999,1348999.998,5834.496)	[-2595, 2625]	[-15.57, 15.75]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	808528
LD32251348.las	(3226000.001,1349000.000,3870.671)	(3228999.998,1351999.999,4894.656)	[-2647, 976]	[-15.882, 5.856]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	855870
LD32251351.las	(3226000.000,1352000.000,3851.547)	(3228999.999,1354999.997,5629.972)	[-702, 2606]	[-4.212, 15.636]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	825007
LD32251354.las	(3226000.000,1355000.002,3800.580)	(3228999.999,1358000.000,4827.543)	[-2648, 387]	[-15.888, 2.322]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	849163

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD32251357.las	(3226000.001,1358000.003,3875.186)	(3228999.996,1360999.999,11911.387)	[-147, 2629]	[-0.882, 15.774]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	860340
LD32251360.las	(3226000.000,1361000.001,3771.508)	(3228999.998,1363999.999,4919.783)	[-2610, 3374]	[-15.66, 20.244]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2533627
LD32251363.las	(3226000.000,1364000.000,3756.246)	(3228999.999,1366999.999,11770.642)	[-3433, 2594]	[-20.598, 15.564]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2413638
LD32251366.las	(3226000.000,1367000.000,4666.946)	(3228999.999,1369999.999,4747.523)	[-636, 3441]	[-3.816, 20.646]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	973013
LD32251369.las	(3226000.000,1370000.004,4657.058)	(3228999.999,1373000.000,4740.545)	[-3409, 1925]	[-20.454, 11.55]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	495239
LD32251372.las	(3226000.004,1373000.001,4636.920)	(3228999.998,1376000.000,4745.660)	[-3512, 1475]	[-21.072, 8.85]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	680161
LD32251375.las	(3226000.000,1376000.003,4057.400)	(3228999.999,1379000.000,5600.278)	[-3398, 3355]	[-20.388, 20.13]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1067583
LD32251378.las	(3226000.002,1379000.001,4620.985)	(3228999.999,1381999.999,4741.759)	[167, 3382]	[1.002, 20.292]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1151470
LD32251393.las	(3226000.000,1394000.002,4544.686)	(3228999.993,1396999.999,4762.435)	[-3405, 3375]	[-20.43, 20.25]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1036319
LD32251396.las	(3226000.001,1397000.001,4619.666)	(3228999.999,1399999.999,4777.543)	[-3388, 2859]	[-20.328, 17.154]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	612805
LD32251399.las	(3226000.000,1400000.000,4613.705)	(3228999.998,1402999.999,4744.006)	[-2520, 3444]	[-15.12, 20.664]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	527247
LD32251402.las	(3226000.000,1403000.000,4623.445)	(3228999.998,1406000.000,5327.043)	[-777, 3437]	[-4.662, 20.622]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1069344
LD32251405.las	(3226000.004,1406000.002,4648.675)	(3228999.998,1408999.994,4803.803)	[-3481, -261]	[-20.886, -1.566]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1147474
LD32281333.las	(3229000.001,1334000.001,3995.963)	(3231999.998,1337000.000,5854.332)	[-2636, 2577]	[-15.816, 15.462]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	601800
LD32281336.las	(3229000.001,1337000.001,3896.541)	(3231999.999,1340000.000,12001.587)	[-2639, 2623]	[-15.834, 15.738]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	730381
LD32281339.las	(3229000.001,1340000.001,3937.738)	(3232000.000,1343000.000,5053.520)	[-2627, 2594]	[-15.762, 15.564]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	707615
LD32281342.las	(3229000.000,1343000.001,3873.312)	(3232000.000,1345999.999,11902.309)	[-2644, 2607]	[-15.864, 15.642]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	581670
LD32281345.las	(3229000.002,1346000.000,3973.716)	(3231999.999,1348999.999,11924.241)	[-1227, 2626]	[-7.362, 15.756]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	809822
LD32281348.las	(3229000.000,1349000.000,3886.833)	(3231999.999,1351999.999,5506.935)	[-2662, 987]	[-15.972, 5.922]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	832300
LD32281351.las	(3229000.001,1352000.000,3920.517)	(3231999.998,1354999.999,5785.399)	[-659, 2613]	[-3.954, 15.678]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	798833
LD32281354.las	(3229000.000,1355000.005,3909.398)	(3231999.999,1357999.999,5682.653)	[-2643, 364]	[-15.858, 2.184]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	804148
LD32281357.las	(3229000.003,1358000.002,3842.017)	(3231999.999,1361000.000,5766.875)	[-86, 2624]	[-0.516, 15.744]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	788533
LD32281360.las	(3229000.000,1361000.001,3726.052)	(3231999.999,1363999.999,5614.825)	[-2631, 3372]	[-15.786, 20.232]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2411211
LD32281363.las	(3229000.001,1364000.001,3725.114)	(3232000.000,1366999.996,11799.104)	[-3433, 2592]	[-20.598, 15.552]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2505065
LD32281366.las	(3229000.001,1367000.000,4663.685)	(3232000.000,1369999.998,4738.901)	[-714, 3440]	[-4.284, 20.64]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	951018
LD32281369.las	(3229000.002,1370000.005,4647.871)	(3231999.999,1372999.999,4735.276)	[-3392, 2009]	[-20.352, 12.054]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	467051
LD32281372.las	(3229000.002,1373000.001,4638.482)	(3232000.000,1376000.000,5409.235)	[-3516, 1389]	[-21.096, 8.334]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	660165
LD32281375.las	(3229000.003,1376000.002,4637.022)	(3231999.998,1378999.999,4720.712)	[-3403, 3342]	[-20.418, 20.052]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1063778
LD32281378.las	(3229000.000,1379000.001,4231.232)	(3232000.000,1381999.998,4730.433)	[120, 3394]	[0.72, 20.364]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	923254
LD32281393.las	(3229000.001,1394000.002,4177.751)	(3232000.000,1396999.998,4812.090)	[-3390, 3347]	[-20.34, 20.082]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	936429
LD32281396.las	(3229000.003,1397000.002,4547.655)	(3232000.000,1399999.999,4715.122)	[-3373, 2865]	[-20.238, 17.19]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	632406
LD32281399.las	(3229000.007,1400000.001,4525.260)	(3232000.000,1402999.999,6607.920)	[-3317, 3441]	[-19.902, 20.646]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	393335
LD32281402.las	(3229000.000,1403000.001,4114.172)	(3231999.998,1406000.000,5126.177)	[-745, 3443]	[-4.47, 20.658]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1057790
LD32281405.las	(3229000.000,1406000.001,4422.905)	(3231999.999,1408999.992,4810.453)	[-3497, -458]	[-20.982, -2.748]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1099584
LD32311333.las	(3232000.001,1334000.000,4115.536)	(3234999.998,1337000.000,5674.851)	[-2633, 2574]	[-15.798, 15.444]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	668943
LD32311336.las	(3232000.001,1337000.002,3877.345)	(3234999.995,1340000.000,11943.467)	[-2627, 2592]	[-15.762, 15.552]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	721290
LD32311339.las	(3232000.001,1340000.001,3900.261)	(3234999.999,1343000.000,11933.752)	[-2611, 2577]	[-15.666, 15.462]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	683841
LD32311342.las	(3232000.001,1343000.001,3876.567)	(3234999.999,1345999.995,11989.641)	[-2629, 2579]	[-15.774, 15.474]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	622353
LD32311345.las	(3232000.001,1346000.000,3864.038)	(3234999.996,1348999.999,11932.201)	[-2603, 2608]	[-15.618, 15.648]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	788834
LD32311348.las	(3232000.001,1349000.001,3870.498)	(3234999.999,1351999.999,11952.128)	[-2667, 2576]	[-16.002, 15.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	890198
LD32311351.las	(3232000.003,1352000.001,3872.945)	(3234999.999,1355000.000,11894.271)	[-2629, 2612]	[-15.774, 15.672]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	775135
LD32311354.las	(3232000.003,1355000.009,3976.042)	(3235000.000,1358000.000,5602.049)	[-2659, 309]	[-15.954, 1.854]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	877103
LD32311357.las	(3232000.001,1358000.004,3892.748)	(3235000.000,1361000.000,5731.015)	[-27, 2611]	[-0.162, 15.666]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	853672
LD32311360.las	(3232000.001,1361000.001,3820.360)	(3235000.000,1363999.999,11878.267)	[-2627, 3380]	[-15.762, 20.28]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2449014
LD32311363.las	(3232000.001,1364000.000,3722.909)	(3235000.000,1366999.999,11662.113)	[-3450, 2593]	[-20.7, 15.558]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2365942
LD32311366.las	(3232000.001,1367000.001,4533.433)	(3234999.999,1369999.999,4715.824)	[-762, 3390]	[-4.572, 20.34]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	944941
LD32311369.las	(3232000.001,1370000.001,4648.495)	(3234999.999,1372999.998,4790.542)	[-3411, 2034]	[-20.466, 12.204]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	376286
LD32311372.las	(3232000.002,1373000.001,4635.581)	(3234999.999,1376000.000,4722.189)	[-3449, 1340]	[-20.694, 8.04]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	697526
LD32311375.las	(3232000.002,1376000.002,4614.131)	(3235000.000,1378999.998,5189.809)	[-3396, 3360]	[-20.376, 20.16]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1030634

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD32311378.las	(3232000.001,1379000.002,4624.807)	(3235000.000,1381999.999,5282.073)	[59, 3382]	[0.354, 20.292]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1055686
LD32311393.las	(3232000.001,1394000.006,4024.300)	(3235000.000,1396999.996,4763.865)	[-3391, 3353]	[-20.346, 20.118]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	942102
LD32311396.las	(3232000.001,1397000.000,4551.569)	(3235000.000,1399999.999,4731.693)	[-3358, 2827]	[-20.148, 16.962]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	619878
LD32311399.las	(3232000.001,1400000.000,4617.694)	(3235000.000,1402999.999,4923.576)	[-2468, 3355]	[-14.808, 20.13]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	438673
LD32341333.las	(3235000.001,1334000.000,3937.909)	(3237999.999,1336999.999,5723.837)	[-2614, 2577]	[-15.684, 15.462]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	694904
LD32341336.las	(3235000.003,1337000.001,3805.448)	(3237999.999,1340000.000,11967.542)	[-2629, 2588]	[-15.774, 15.528]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	722115
LD32341339.las	(3235000.001,1340000.001,3805.173)	(3237999.999,1343000.000,11985.196)	[-2603, 2577]	[-15.618, 15.462]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	712416
LD32341342.las	(3235000.001,1343000.002,3876.754)	(3237999.993,1345999.999,5642.607)	[-2614, 2539]	[-15.684, 15.234]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	612680
LD32341345.las	(3235000.001,1346000.000,3780.206)	(3238000.000,1348999.993,11935.170)	[-2568, 2608]	[-15.408, 15.648]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	849443
LD32341348.las	(3235000.001,1349000.001,3844.175)	(3237999.999,1351999.996,11765.541)	[-2615, 865]	[-15.69, 5.19]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	873527
LD32341351.las	(3235000.002,1352000.000,3864.087)	(3238000.000,1355000.000,11936.154)	[-2613, 2608]	[-15.678, 15.648]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	816114
LD32341354.las	(3235000.008,1355000.002,3801.866)	(3237999.999,1358000.000,4806.503)	[-2646, 260]	[-15.876, 1.56]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	884071
LD32341357.las	(3235000.001,1358000.001,3767.732)	(3238000.000,1361000.000,5575.967)	[2, 2605]	[0.012, 15.63]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	849978
LD32341360.las	(3235000.001,1361000.002,3811.029)	(3238000.000,1363999.999,5664.890)	[-2627, 3361]	[-15.762, 20.166]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2538455
LD32341363.las	(3235000.001,1364000.000,3700.025)	(3238000.000,1366999.999,11844.356)	[-3476, 2580]	[-20.856, 15.48]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2630870
LD32341366.las	(3235000.001,1367000.000,4659.879)	(3237999.975,1369999.997,4704.138)	[-762, 3402]	[-4.572, 20.412]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	292072
LD32341369.las	(3235000.005,1370000.003,4646.100)	(3238000.000,1373000.000,4705.158)	[-3406, 2038]	[-20.436, 12.228]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	400526
LD32341372.las	(3235000.002,1373000.002,4637.087)	(3238000.000,1376000.000,4701.585)	[-3431, 1247]	[-20.586, 7.482]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	688161
LD32341375.las	(3235000.001,1376000.001,4643.370)	(3237999.998,1378999.999,4710.627)	[-3398, 3346]	[-20.388, 20.076]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1113745
LD32341378.las	(3235000.001,1379000.001,4185.310)	(3238000.000,1381999.998,4710.906)	[7, 3382]	[0.042, 20.292]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1071928
LD32341390.las	(3235000.001,1391000.001,4162.377)	(3238000.000,1394000.000,4722.300)	[-3386, -296]	[-20.316, -1.776]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1030748
LD32341393.las	(3235000.005,1394000.003,4197.702)	(3238000.000,1396999.997,4706.418)	[-3402, 3351]	[-20.412, 20.106]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	912194
LD32341396.las	(3235000.003,1397000.001,4579.089)	(3237999.999,1399999.999,4950.341)	[-3332, 2724]	[-19.992, 16.344]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	583703
LD32341399.las	(3235000.001,1400000.000,4630.109)	(3237999.999,1402999.999,5034.974)	[-2575, 3371]	[-15.45, 20.226]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	485966
LD32371333.las	(3238000.001,1334000.000,3837.725)	(3240999.996,1337000.000,5517.889)	[-2612, 2573]	[-15.672, 15.438]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	644433
LD32371336.las	(3238000.001,1337000.001,3931.173)	(3240999.999,1339999.998,5761.498)	[-2630, 2574]	[-15.78, 15.444]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	641496
LD32371339.las	(3238000.002,1340000.001,3801.032)	(3240999.998,1342999.999,5216.577)	[-2606, 2583]	[-15.636, 15.498]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	649632
LD32371342.las	(3238000.001,1343000.001,3989.631)	(3240999.996,1345999.999,4842.087)	[-2611, 2535]	[-15.666, 15.21]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	638575
LD32371345.las	(3238000.001,1346000.001,3851.777)	(3240999.999,1348999.998,5471.502)	[-1101, 2576]	[-6.606, 15.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	820716
LD32371348.las	(3238000.001,1349000.000,3819.897)	(3240999.999,1351999.995,4768.170)	[-2614, 781]	[-15.684, 4.686]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	858608
LD32371351.las	(3238000.002,1352000.001,3805.993)	(3240999.999,1354999.998,5708.273)	[-505, 2575]	[-3.03, 15.45]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	824781
LD32371354.las	(3238000.002,1355000.001,3794.668)	(3240999.998,1357999.998,4773.038)	[-2627, 243]	[-15.762, 1.458]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	896004
LD32371357.las	(3238000.001,1358000.003,3741.869)	(3240999.993,1360999.999,11874.225)	[32, 2593]	[0.192, 15.558]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	842020
LD32371360.las	(3238000.001,1361000.007,3811.344)	(3240999.999,1363999.999,5084.888)	[-2611, 3383]	[-15.666, 20.298]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2385020
LD32371363.las	(3238000.001,1364000.001,3695.718)	(3240999.998,1366999.997,11845.363)	[-3478, 2576]	[-20.868, 15.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2207654
LD32371366.las	(3238000.021,1367000.006,4670.060)	(3240999.992,1369113.184,4691.090)	[-881, 2324]	[-5.286, 13.944]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	0
LD32371369.las	(3238000.001,1370511.793,4633.901)	(3240919.123,1373000.000,4781.470)	[-3391, 1221]	[-20.346, 7.326]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	286692
LD32371372.las	(3238000.001,1373000.001,4628.810)	(3240999.999,1375999.999,4714.505)	[-3420, 1266]	[-20.52, 7.596]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	658091
LD32371375.las	(3238000.001,1376000.004,4631.326)	(3240999.994,1379000.000,4719.951)	[-3416, 3358]	[-20.496, 20.148]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1008286
LD32371378.las	(3238000.001,1379000.001,4628.911)	(3240999.998,1381999.999,4973.514)	[-41, 3383]	[-0.246, 20.298]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1033865
LD32371387.las	(3238000.001,1388000.004,4571.051)	(3240999.999,1390999.997,4707.888)	[-825, 3346]	[-4.95, 20.076]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	877982
LD32371390.las	(3238000.001,1391000.002,4296.481)	(3240999.999,1394000.000,4709.636)	[-3368, -317]	[-20.208, -1.902]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1142260
LD32371393.las	(3238000.001,1394000.001,3933.453)	(3240999.999,1396999.997,4705.263)	[-3390, 3325]	[-20.34, 19.95]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	903797
LD32371396.las	(3238000.002,1397000.003,4602.054)	(3240999.998,1399999.999,4734.548)	[-3329, 2641]	[-19.974, 15.846]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	555246
LD32371399.las	(3238000.001,1400000.000,4632.304)	(3240999.998,1402999.996,4719.941)	[-2645, 3371]	[-15.87, 20.226]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	531769
LD32401333.las	(3241000.000,1334000.000,4046.150)	(3243999.997,1337000.000,5097.329)	[-2631, 2593]	[-15.786, 15.558]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	550961
LD32401336.las	(3241000.000,1337000.002,3801.229)	(3243999.997,1339999.999,5754.713)	[-2596, 2573]	[-15.576, 15.438]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	671677
LD32401339.las	(3241000.000,1340000.003,3915.186)	(3243999.998,1343000.000,11988.237)	[-2594, 2589]	[-15.564, 15.534]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	683975
LD32401342.las	(3241000.000,1343000.001,3944.779)	(3243999.997,1345999.995,11979.517)	[-2577, 2541]	[-15.462, 15.246]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	685620

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD32401345.las	(3241000.002,1346000.000,3871.885)	(3243999.997,1348999.999,12094.001)	[-2559, 2576]	[-15.354, 15.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	829303
LD32401348.las	(3241000.002,1349000.001,3917.591)	(3243999.999,1351999.999,11934.819)	[-2613, 740]	[-15.678, 4.44]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	852736
LD32401351.las	(3241000.000,1352000.000,3767.955)	(3243999.999,1354999.996,4748.006)	[-479, 2576]	[-2.874, 15.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	845348
LD32401354.las	(3241000.000,1355000.001,3861.108)	(3243999.999,1358000.000,4753.639)	[-2610, 140]	[-15.66, 0.84]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	836844
LD32401357.las	(3241000.000,1358000.003,3851.564)	(3243999.999,1360999.997,4762.756)	[105, 2576]	[0.63, 15.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	807758
LD32401360.las	(3241000.000,1361000.007,3805.590)	(3243999.999,1363999.999,5657.436)	[-2629, 3372]	[-15.774, 20.232]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2579624
LD32401363.las	(3241000.000,1364000.001,3722.703)	(3243999.999,1366999.999,11873.871)	[-3496, 2589]	[-20.976, 15.534]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	2428570
LD32401366.las	(3241000.051,1367000.000,4665.611)	(3243999.999,1369999.986,6092.166)	[-900, 3390]	[-5.4, 20.34]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	137096
LD32401369.las	(3241020.930,1370000.001,4670.210)	(3243999.999,1372999.998,4713.485)	[-3403, 2166]	[-20.418, 12.996]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	120653
LD32401372.las	(3241000.000,1373000.002,4643.970)	(3243999.999,1375999.999,5175.104)	[-3481, 1185]	[-20.886, 7.11]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	433913
LD32401375.las	(3241000.000,1376000.002,4626.657)	(3243999.998,1378999.999,4713.580)	[-3395, 3369]	[-20.37, 20.214]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1079326
LD32401378.las	(3241000.000,1379000.007,4635.562)	(3243999.999,1381999.998,4705.214)	[-118, 3381]	[-0.708, 20.286]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1057456
LD32401387.las	(3241000.003,1388000.001,4525.470)	(3243999.998,1390999.995,4697.953)	[-777, 3361]	[-4.662, 20.166]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	875065
LD32401390.las	(3241000.001,1391000.007,4605.716)	(3243999.999,1394000.000,4697.523)	[-3385, -440]	[-20.31, -2.64]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1019511
LD32401393.las	(3241000.000,1394000.001,4336.058)	(3243999.999,1396999.999,10969.617)	[-3374, 3330]	[-20.244, 19.98]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1044858
LD32401396.las	(3241000.000,1397000.000,4598.446)	(3243999.998,1399999.999,5329.373)	[-3346, 2674]	[-20.076, 16.044]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	521932
LD32431333.las	(3244000.002,1334000.001,3960.812)	(3246999.999,1337000.000,4865.781)	[-2646, 2594]	[-15.876, 15.564]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	679525
LD32431336.las	(3244000.001,1337000.001,3874.221)	(3246999.999,1339999.999,5338.021)	[-2610, 2574]	[-15.66, 15.444]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	714890
LD32431339.las	(3244000.000,1340000.002,3843.112)	(3246999.998,1342999.999,5619.995)	[-2627, 2606]	[-15.762, 15.636]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	672521
LD32431342.las	(3244000.000,1343000.001,3887.368)	(3246999.998,1345999.997,4850.843)	[-2609, 1270]	[-15.654, 7.62]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	716149
LD32431345.las	(3244000.000,1346000.002,3959.162)	(3246999.998,1348999.998,4831.034)	[-991, 2573]	[-5.946, 15.438]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	859692
LD32431348.las	(3244000.005,1349000.003,3831.820)	(3246999.999,1351999.999,11892.197)	[-2627, 2571]	[-15.762, 15.426]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	849872
LD32431351.las	(3244000.003,1352000.000,3871.416)	(3246999.997,1354999.999,11888.047)	[-2566, 2604]	[-15.396, 15.624]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	804186
LD32431354.las	(3244000.000,1355000.003,3723.506)	(3246999.999,1357999.991,4843.652)	[-2624, 105]	[-15.744, 0.63]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	856751
LD32431357.las	(3244000.000,1358000.001,3813.293)	(3246999.999,1360999.998,4817.973)	[46, 2590]	[0.276, 15.54]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	838089
LD32431387.las	(3244000.000,1388000.006,4175.969)	(3246999.999,1390999.998,5001.414)	[-740, 3358]	[-4.44, 20.148]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1012560
LD32431390.las	(3244000.000,1391000.001,4593.898)	(3246999.998,1394000.000,4785.387)	[-3382, -435]	[-20.292, -2.61]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1018206
LD32431393.las	(3244000.000,1394000.002,4588.541)	(3246999.998,1396999.999,4683.964)	[-3374, 3346]	[-20.244, 20.076]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1030401
LD32431396.las	(3244000.001,1397000.002,4223.364)	(3246999.998,1399999.999,4825.345)	[-3346, 2691]	[-20.076, 16.146]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	479092
LD32461387.las	(3247000.001,1388000.008,4609.272)	(3249999.999,1390999.999,4709.623)	[-682, 3360]	[-4.092, 20.16]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	998971
LD32461390.las	(3247000.001,1391000.001,3995.530)	(3249999.996,1393999.997,4755.322)	[-3387, -502]	[-20.322, -3.012]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1036831
LD32461393.las	(3247000.000,1394000.002,4368.505)	(3249999.999,1396999.998,10679.539)	[-3360, 3348]	[-20.16, 20.088]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1027101
LD32461396.las	(3247000.000,1397000.000,4585.814)	(3249999.999,1399999.999,4689.462)	[-3334, 2665]	[-20.004, 15.99]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	446325
LD32491390.las	(3250000.003,1391000.002,4299.653)	(3253000.000,1394000.000,4733.006)	[-3415, -576]	[-20.49, -3.456]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1022021
LD32491393.las	(3250000.001,1394000.002,4577.711)	(3253000.000,1396999.999,4844.436)	[-3374, 3365]	[-20.244, 20.19]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1063219
LD32491396.las	(3250000.002,1397000.000,4576.431)	(3252999.998,1399999.999,4689.239)	[-3326, 2549]	[-19.956, 15.294]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	363038
LD32491399.las	(3250000.002,1400000.004,4592.947)	(3252999.999,1402999.999,6222.451)	[-3307, 3340]	[-19.842, 20.04]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	561846
LD32521393.las	(3253000.001,1394000.001,4453.282)	(3255999.997,1396999.998,4687.924)	[-3374, 3382]	[-20.244, 20.292]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	992523
LD32521396.las	(3253000.001,1397000.001,4552.317)	(3255999.998,1399999.999,4676.894)	[-3357, 2457]	[-20.142, 14.742]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	422839
LD35101333.las	(3511000.001,1334000.001,4249.056)	(3513999.999,1337000.000,4314.004)	[-3320, 963]	[-19.92, 5.778]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	867140
LD35101336.las	(3511000.001,1337000.001,4241.517)	(3513999.999,1340000.000,4306.382)	[-3329, 1067]	[-19.974, 6.402]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	781317
LD35101339.las	(3511000.001,1340000.001,4234.644)	(3513999.998,1343000.000,4328.318)	[-3310, 1157]	[-19.86, 6.942]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	746581
LD35101342.las	(3511000.001,1343000.001,4230.205)	(3513999.999,1345999.998,4561.897)	[-3328, 1245]	[-19.968, 7.47]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	676751
LD35101345.las	(3511000.001,1346000.000,4227.459)	(3513999.999,1348999.999,4314.676)	[-3326, 1339]	[-19.956, 8.034]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	618040
LD35131324.las	(3514000.000,1325000.001,4273.751)	(3516999.999,1327999.999,4808.662)	[432, 3306]	[2.592, 19.836]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	870640
LD35131327.las	(3514000.001,1328000.000,4246.373)	(3516999.999,1330999.998,4543.311)	[274, 3303]	[1.644, 19.818]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	973876
LD35131330.las	(3514000.001,1331000.001,4247.081)	(3516999.998,1333999.996,4900.961)	[229, 3297]	[1.374, 19.782]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1089741
LD35131333.las	(3514000.000,1334000.000,4239.519)	(3516999.997,1336999.997,4483.626)	[155, 3294]	[0.93, 19.764]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1074102
LD35131336.las	(3514000.000,1337000.001,4240.352)	(3516999.995,1340000.000,4539.755)	[48, 3298]	[0.288, 19.788]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1053106

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD35131339.las	(3514000.002,1340000.002,4226.616)	(3516999.997,1343000.000,4457.324)	[-55, 3294]	[-0.33, 19.764]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1061438
LD35131342.las	(3514000.000,1343000.001,4224.624)	(3516999.998,1345999.999,4330.985)	[-135, 3294]	[-0.81, 19.764]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1134312
LD35131345.las	(3514000.000,1346000.000,4223.430)	(3516999.999,1348999.999,4366.874)	[-218, 3297]	[-1.308, 19.782]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1034655
LD35131348.las	(3514000.000,1349000.000,4225.352)	(3516999.999,1351999.999,4299.293)	[-310, 3292]	[-1.86, 19.752]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1051857
LD35161321.las	(3517000.000,1322000.002,4277.905)	(3519999.997,1325000.000,4446.172)	[-3361, 627]	[-20.166, 3.762]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1017645
LD35161324.las	(3517000.000,1325000.001,4265.300)	(3519999.996,1327999.998,4496.497)	[-3347, 521]	[-20.082, 3.126]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	867327
LD35161327.las	(3517000.000,1328000.000,4250.500)	(3519999.997,1330999.999,4342.262)	[-3329, 431]	[-19.974, 2.586]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1023109
LD35161330.las	(3517000.002,1331000.000,4240.723)	(3519999.998,1333999.999,4325.191)	[-3330, 273]	[-19.98, 1.638]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	997430
LD35161333.las	(3517000.001,1334000.000,4236.734)	(3519999.998,1337000.000,4443.128)	[-3328, 228]	[-19.968, 1.368]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1030191
LD35161336.las	(3517000.002,1337000.001,4229.883)	(3519999.999,1339999.999,4313.892)	[-3332, 154]	[-19.992, 0.924]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1032686
LD35161339.las	(3517000.011,1340000.001,4223.125)	(3519999.998,1342999.999,4335.687)	[-3332, 47]	[-19.992, 0.282]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1066439
LD35161342.las	(3517000.000,1343000.001,4222.150)	(3519999.998,1345999.997,4321.592)	[-3331, -56]	[-19.986, -0.336]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1028813
LD35161345.las	(3517000.000,1346000.000,4217.971)	(3519999.998,1348999.999,4429.404)	[-3330, -136]	[-19.98, -0.816]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1045424
LD35161348.las	(3517000.002,1349000.001,4218.187)	(3519999.999,1351999.998,4286.547)	[-3331, -219]	[-19.986, -1.314]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1028707
LD35161351.las	(3517000.001,1352000.001,4197.682)	(3519999.998,1355000.000,4291.015)	[-3327, -312]	[-19.962, -1.872]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1040064
LD35191324.las	(3520000.001,1325000.003,3781.676)	(3523000.000,1327999.999,4294.624)	[-1773, 3292]	[-10.638, 19.752]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	436407
LD35191327.las	(3520000.003,1328000.003,4249.887)	(3523000.000,1330999.999,4769.466)	[-1674, 3293]	[-10.044, 19.758]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	496754
LD35191330.las	(3520000.002,1331000.000,3998.640)	(3523000.000,1333999.999,4538.022)	[-1578, 3300]	[-9.468, 19.8]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	543995
LD35191333.las	(3520000.002,1334000.000,4236.888)	(3523000.000,1337000.000,4332.058)	[-1464, 3291]	[-8.784, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	582077
LD35191336.las	(3520000.006,1337000.002,4225.740)	(3523000.000,1340000.000,4966.073)	[-1375, 3292]	[-8.25, 19.752]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	699832
LD35191339.las	(3520000.000,1340000.001,4221.589)	(3523000.000,1343000.000,4332.291)	[-1302, 3292]	[-7.812, 19.752]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	705029
LD35191342.las	(3520000.002,1343000.001,4118.063)	(3523000.000,1345999.999,4428.341)	[-1207, 3293]	[-7.242, 19.758]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	821811
LD35191345.las	(3520000.002,1346000.000,4218.774)	(3523000.000,1348999.999,4306.389)	[-1085, 3293]	[-6.51, 19.758]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	792957
LD35191348.las	(3520000.000,1349000.000,3749.743)	(3523000.000,1351999.997,4238.646)	[-980, 3295]	[-5.88, 19.77]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	876230
LD35191351.las	(3520000.000,1352000.000,3703.201)	(3522999.999,1354999.999,4414.975)	[-895, 3275]	[-5.37, 19.65]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	973741
LD35191354.las	(3520000.007,1355000.001,4181.622)	(3522999.998,1358000.000,10716.842)	[-3242, 3290]	[-19.452, 19.74]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1068006
LD35221324.las	(3523000.001,1325000.001,4248.305)	(3525999.999,1327999.998,4327.088)	[-1423, 3313]	[-8.538, 19.878]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	615522
LD35221327.las	(3523000.001,1328000.000,4243.253)	(3525999.994,1330999.999,4329.785)	[-1522, 3304]	[-9.132, 19.824]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	582295
LD35221330.las	(3523000.001,1331000.000,4242.272)	(3526000.000,1333999.999,10886.622)	[-1624, 3300]	[-9.744, 19.8]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	499807
LD35221333.las	(3523000.001,1334000.000,4228.807)	(3525999.995,1336999.998,4439.876)	[-1709, 3294]	[-10.254, 19.764]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	507889
LD35221336.las	(3523000.002,1337000.001,4229.414)	(3526000.000,1340000.000,4428.895)	[-1804, 3291]	[-10.824, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	435419
LD35221339.las	(3523000.001,1340000.001,4221.744)	(3526000.000,1342999.997,4407.534)	[-1903, 3297]	[-11.418, 19.782]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	423643
LD35221342.las	(3523000.001,1343000.001,4220.028)	(3526000.000,1345999.999,4326.336)	[-3329, 3293]	[-19.974, 19.758]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	410931
LD35221345.las	(3523000.001,1346000.000,4218.479)	(3526000.000,1348999.999,4305.096)	[-3327, 3274]	[-19.962, 19.644]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	414616
LD35221348.las	(3523000.001,1349000.001,4207.698)	(3526000.000,1351999.998,4313.659)	[-3328, 3276]	[-19.968, 19.656]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	443416
LD35221351.las	(3523000.001,1352000.001,3979.756)	(3526000.000,1355000.000,4282.856)	[-3327, 3277]	[-19.962, 19.662]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	419900
LD35221354.las	(3523000.001,1355000.001,4188.558)	(3526000.000,1358000.000,4270.992)	[-3326, 1889]	[-19.956, 11.334]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	394094
LD35221357.las	(3523000.001,1358000.002,4182.137)	(3526000.000,1361000.000,4258.689)	[-3329, 1778]	[-19.974, 10.668]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	465916
LD35251324.las	(3526000.001,1325000.002,4250.671)	(3529000.000,1327999.995,4327.091)	[-3345, 249]	[-20.07, 1.494]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1085624
LD35251327.las	(3526000.003,1328000.000,3765.685)	(3529000.000,1330999.994,4350.041)	[-3344, 364]	[-20.064, 2.184]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1072941
LD35251330.las	(3526000.001,1331000.001,4236.625)	(3528999.999,1333999.998,4311.848)	[-3330, 464]	[-19.98, 2.784]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1104640
LD35251333.las	(3526000.003,1334000.000,4229.424)	(3528999.998,1336999.999,4308.341)	[-3333, 523]	[-19.998, 3.138]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1092180
LD35251336.las	(3526000.001,1337000.001,4227.081)	(3528999.999,1339999.999,4326.445)	[-3330, 562]	[-19.98, 3.372]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1138241
LD35251339.las	(3526000.002,1340000.001,3592.854)	(3528999.999,1343000.000,4315.667)	[-3343, 735]	[-20.058, 4.41]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1039888
LD35251342.las	(3526000.001,1343000.001,4221.773)	(3529000.000,1345999.998,4329.329)	[-3328, 838]	[-19.968, 5.028]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1081120
LD35251345.las	(3526000.001,1346000.000,3660.623)	(3529000.000,1348999.998,4291.796)	[-3328, 932]	[-19.968, 5.592]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	910813
LD35251348.las	(3526000.001,1349000.000,4121.750)	(3529000.000,1351999.999,4292.236)	[-3327, 1018]	[-19.962, 6.108]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	830066
LD35251351.las	(3526000.001,1352000.003,4073.781)	(3529000.000,1355000.000,4269.211)	[-3324, 1113]	[-19.944, 6.678]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	761723
LD35251354.las	(3526000.002,1355000.001,4069.749)	(3529000.000,1358000.000,4988.399)	[-3311, 1199]	[-19.866, 7.194]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	695115

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD35251357.las	(3526000.001,1358000.001,4183.017)	(3528999.996,1361000.000,4357.347)	[-3320, 1299]	[-19.92, 7.794]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	641370
LD35281324.las	(3529000.004,1325000.001,4241.107)	(3531999.999,1327999.996,4344.565)	[141, 3357]	[0.846, 20.142]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1040901
LD35281327.las	(3529000.001,1328000.000,3696.016)	(3531999.999,1330999.999,4335.168)	[250, 3379]	[1.5, 20.274]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1018191
LD35281330.las	(3529000.002,1331000.000,3624.947)	(3531999.998,1333999.999,4406.704)	[365, 3381]	[2.19, 20.286]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1067000
LD35281333.las	(3529000.003,1334000.000,4140.625)	(3531999.997,1337000.000,4422.688)	[464, 3353]	[2.784, 20.118]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1107159
LD35281336.las	(3529000.002,1337000.001,3541.614)	(3531999.994,1339999.997,4443.331)	[514, 3329]	[3.084, 19.974]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1121964
LD35281339.las	(3529000.001,1340000.001,3595.488)	(3531999.995,1343000.000,4960.075)	[416, 3317]	[2.496, 19.902]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1104051
LD35281342.las	(3529000.001,1343000.001,3453.071)	(3531999.998,1345999.998,4314.375)	[301, 3307]	[1.806, 19.842]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1122393
LD35281345.las	(3529000.002,1346000.001,3940.261)	(3531999.996,1348999.999,4304.440)	[207, 3291]	[1.242, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1049807
LD35281348.las	(3529000.002,1349000.004,3530.813)	(3531999.995,1351999.999,4874.528)	[121, 3291]	[0.726, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1049050
LD35281351.las	(3529000.002,1352000.000,4201.022)	(3531999.996,1355000.000,4283.774)	[26, 3291]	[0.156, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1082853
LD35281354.las	(3529000.002,1355000.001,4200.697)	(3531999.998,1358000.000,4572.950)	[-62, 3289]	[-0.372, 19.734]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1070428
LD35281357.las	(3529000.003,1358000.001,3415.804)	(3531999.999,1361000.000,4256.481)	[-158, 3291]	[-0.948, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1089100
LD35281360.las	(3529000.001,1361000.001,3914.008)	(3531999.997,1363999.996,4247.344)	[-274, 3298]	[-1.644, 19.788]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1042190
LD35311324.las	(3532000.000,1325000.001,4140.415)	(3534999.999,1327999.999,4814.541)	[-3446, 1006]	[-20.676, 6.036]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	913249
LD35311327.las	(3532000.005,1328000.001,4271.136)	(3534999.999,1330999.998,4494.797)	[-3447, 910]	[-20.682, 5.46]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	986048
LD35311339.las	(3532000.001,1340000.001,3915.153)	(3534999.995,1342999.999,4459.335)	[-3376, 522]	[-20.256, 3.132]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1057492
LD35311342.las	(3532000.002,1343000.004,3951.987)	(3534999.999,1345999.998,4348.836)	[-3344, 415]	[-20.064, 2.49]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1095622
LD35311345.las	(3532000.000,1346000.000,4209.194)	(3534999.998,1348999.999,5060.571)	[-3360, 300]	[-20.16, 1.8]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1041659
LD35311348.las	(3532000.000,1349000.001,3782.355)	(3534999.998,1351999.998,4862.635)	[-3327, 206]	[-19.962, 1.236]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1027637
LD35311351.las	(3532000.004,1352000.000,3531.620)	(3534999.997,1355000.000,4909.308)	[-3327, 120]	[-19.962, 0.72]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1067008
LD35311354.las	(3532000.002,1355000.001,4195.090)	(3534999.999,1358000.000,4313.955)	[-3329, 26]	[-19.974, 0.156]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1067675
LD35311357.las	(3532000.000,1358000.006,3451.010)	(3534999.998,1361000.000,4251.045)	[-3328, -63]	[-19.968, -0.378]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1067717
LD35311360.las	(3532000.000,1361000.001,3424.931)	(3534999.999,1363999.997,4369.916)	[-3310, -159]	[-19.86, -0.954]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1056079
LD35311363.las	(3532000.001,1364000.000,4167.557)	(3534999.998,1366999.998,4249.371)	[-3293, -274]	[-19.758, -1.644]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1069605
LD35341342.las	(3535000.000,1343000.001,4258.942)	(3538000.000,1345999.996,4336.376)	[-1611, 3342]	[-9.666, 20.052]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	493054
LD35341345.las	(3535000.001,1346000.002,4210.795)	(3538000.000,1348999.999,4443.032)	[-1521, 3323]	[-9.126, 19.938]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	545487
LD35341348.las	(3535000.000,1349000.000,3897.128)	(3537999.999,1351999.998,4795.095)	[-1415, 3292]	[-8.49, 19.752]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	572125
LD35341351.las	(3535000.000,1352000.000,3581.915)	(3538000.000,1354999.999,4259.699)	[-1331, 3289]	[-7.986, 19.734]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	656573
LD35341354.las	(3535000.001,1355000.001,4192.725)	(3537999.999,1358000.000,4260.178)	[-1219, 3291]	[-7.314, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	686886
LD35341357.las	(3535000.002,1358000.001,3635.088)	(3538000.000,1361000.000,4278.230)	[-1107, 3291]	[-6.642, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	759547
LD35341360.las	(3535000.000,1361000.002,3829.891)	(3538000.000,1363999.999,4213.026)	[-1020, 3289]	[-6.12, 19.734]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	823867
LD35341363.las	(3535000.000,1364000.000,3850.028)	(3538000.000,1366999.999,4233.794)	[-941, 3270]	[-5.646, 19.62]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	953561
LD35341366.las	(3535000.000,1367000.002,4159.985)	(3538000.000,1369999.999,4463.259)	[-821, 3276]	[-4.926, 19.656]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	993352
LD35371345.las	(3538000.001,1346000.001,4265.067)	(3541000.000,1348999.997,4314.427)	[-1665, 3319]	[-9.99, 19.914]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	506363
LD35371348.las	(3538000.001,1349000.000,4206.183)	(3541000.000,1351999.997,4319.739)	[-1778, 3290]	[-10.668, 19.74]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	454661
LD35371351.las	(3538000.001,1352000.000,4197.019)	(3540999.999,1355000.000,4638.947)	[-1885, 3292]	[-11.31, 19.752]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	413929
LD35371354.las	(3538000.001,1355000.001,3777.522)	(3540999.995,1358000.000,4618.180)	[-1951, 3291]	[-11.706, 19.746]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	365481
LD35371357.las	(3538000.002,1358000.001,4186.265)	(3541000.000,1361000.000,4256.182)	[-3327, 3274]	[-19.962, 19.644]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	389580
LD35371360.las	(3538000.003,1361000.001,4184.335)	(3541000.000,1363999.998,4228.551)	[-3328, 3276]	[-19.968, 19.656]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	439656
LD35371363.las	(3538000.002,1364000.003,4164.713)	(3541000.000,1366999.996,4252.439)	[-3327, 3273]	[-19.962, 19.638]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	373997
LD35371366.las	(3538000.001,1367000.000,4158.168)	(3541000.000,1369999.999,4617.652)	[-3294, 3282]	[-19.764, 19.692]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	350571
LD35401348.las	(3541000.001,1349000.000,3519.727)	(3543999.995,1351999.998,4331.041)	[-3361, 579]	[-20.166, 3.474]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1087118
LD35401351.las	(3541000.004,1352000.000,4201.812)	(3543999.999,1355000.000,4394.847)	[-3326, 662]	[-19.956, 3.972]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1063383
LD35401354.las	(3541000.004,1355000.003,4191.416)	(3543999.996,1358000.000,4281.839)	[-3327, 781]	[-19.962, 4.686]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1093716
LD35401357.las	(3541000.001,1358000.001,4185.494)	(3544000.000,1360999.999,4276.684)	[-3328, 877]	[-19.968, 5.262]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	966873
LD35401360.las	(3541000.002,1361000.001,4173.036)	(3544000.000,1363999.996,4255.697)	[-3323, 962]	[-19.938, 5.772]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	862797
LD35401363.las	(3541000.001,1364000.000,4166.137)	(3543999.999,1366999.999,4241.973)	[-3294, 1028]	[-19.764, 6.168]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	785824
LD35401366.las	(3541000.001,1367000.000,4155.477)	(3544000.000,1369999.999,4236.842)	[-3293, 1139]	[-19.758, 6.834]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	675194

DPH-1.3 Report on ASPRS LAS File Format (Tiled Data) - Informational - continued

File	(Xmin, Ymin, Zmin)	(Xmax, Ymax, Zmax)	Extended Scan Angle	Scan Angle Rank	Scanner Channel	Scan Direction	Edge of Flight Line	User Data	Counts for Synthetic	Key-points	Withheld	Overlap
LD35431351.las	(3544000.002,1352000.000,4223.102)	(3546999.999,1355000.000,4353.308)	[470, 3311]	[2.82, 19.866]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1046966
LD35431354.las	(3544000.001,1355000.001,4187.141)	(3546999.996,1357999.998,4350.926)	[355, 3292]	[2.13, 19.752]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1079804
LD35431357.las	(3544000.003,1358000.001,3658.976)	(3546999.999,1361000.000,4310.858)	[253, 3290]	[1.518, 19.74]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1058906
LD35431360.las	(3544000.003,1361000.001,4167.429)	(3546999.998,1363999.998,4759.620)	[151, 3294]	[0.906, 19.764]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1052539
LD35431363.las	(3544000.002,1364000.000,3790.051)	(3546999.997,1366999.999,4600.033)	[62, 3290]	[0.372, 19.74]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1068928
LD35431366.las	(3544000.004,1367000.001,4156.550)	(3546999.999,1369999.999,4295.195)	[-31, 3258]	[-0.186, 19.548]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1110112
LD35461354.las	(3547000.002,1355000.001,4192.731)	(3549999.996,1358000.000,4305.080)	[-3359, 469]	[-20.154, 2.814]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1067503
LD35461357.las	(3547000.000,1358000.001,4179.992)	(3549999.997,1361000.000,4615.234)	[-3343, 354]	[-20.058, 2.124]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1094494
LD35461360.las	(3547000.001,1361000.002,4175.818)	(3549999.999,1363999.999,4254.519)	[-3311, 252]	[-19.866, 1.512]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1051684
LD35461363.las	(3547000.001,1364000.002,4164.017)	(3549999.999,1366999.998,4369.050)	[-3309, 150]	[-19.854, 0.9]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1086642
LD35461366.las	(3547000.000,1367000.000,4157.406)	(3549999.998,1369999.999,4508.406)	[-3294, 61]	[-19.764, 0.366]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	1105866
LD35491354.las	(3550000.008,1355000.001,3606.666)	(3552999.999,1358000.000,4538.603)	[-1674, 3322]	[-10.044, 19.932]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	485994
LD35491357.las	(3550000.000,1358000.004,4180.982)	(3552999.999,1361000.000,4884.856)	[-1579, 3307]	[-9.474, 19.842]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	514345
LD35491360.las	(3550000.000,1361000.001,4168.230)	(3552999.999,1363999.999,4258.515)	[-1432, 3292]	[-8.592, 19.752]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	542052
LD35491363.las	(3550000.001,1364000.000,4161.183)	(3552999.999,1366999.999,4245.818)	[-1335, 3272]	[-8.01, 19.632]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	658621
LD35491366.las	(3550000.001,1367000.001,4155.907)	(3552999.999,1369999.999,4255.178)	[-1227, 3277]	[-7.362, 19.662]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	689086
LD35521357.las	(3553000.000,1358000.001,4203.282)	(3556000.000,1361000.000,4279.483)	[-1635, 3309]	[-9.81, 19.854]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	567417
LD35521360.las	(3553000.000,1361000.001,4178.135)	(3556000.000,1363999.999,4266.862)	[-1740, 3279]	[-10.44, 19.674]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	471093
LD35521363.las	(3553000.001,1364000.004,4168.955)	(3556000.000,1366999.995,4249.509)	[-1817, 3274]	[-10.902, 19.644]	[0, 0]	[0, 1]	[0, 1]	[0, 0]	0	0	0	440628

DPH-1.4 Report on Elevation by Class for Tiled Data

The purpose of this section is to show a table of the Minimum and Maximum elevation (Z) values by Class for each tiled file.

File	Class	Z Min	Z Max
LD31531420.las	1	4801.178	4868.35
	2	4809.334	4825.669
	7	4176.179	4810.089
LD31531423.las	1	4808.507	4985.367
	2	4816.959	4835.893
	7	4166.34	4815.971
	9	4817.277	4818.452
	10	4817.52	4818.534
LD31531426.las	1	4818.402	5015.367
	2	4824.912	4849.2
	7	4116.947	4831.759
	9	4824.567	4827.29
	10	4824.807	4826.834
	18	11101.966	11102.117
LD31561408.las	1	4766.296	4766.296
	2	4765.873	4767.563
	9	4764.466	4765.115
	10	4764.974	4765.719
LD31561411.las	1	4764.121	4899.577
	2	4765.246	4788.258
	7	4226.822	4773.586
	9	4764.344	4775.683
	10	4764.712	4776.119
LD31561414.las	1	4769.761	5012.483
	2	4774.915	4802.681
	7	4172.127	4791.057
	9	4774.744	4777.566
	10	4774.833	4778.278
	18	11035.411	11061.293
LD31561417.las	1	4785.958	5031.069
	2	4791.221	4820.479
	7	4052.909	4800.292
	17	4807.841	4809.098
	18	5030.695	11056.28
LD31591405.las	1	4762.185	4983.898
	2	4770.358	4947.1
	7	4640.844	4925.492
LD31591408.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4753.865	4881.03
	2	4759.626	4844.967
	7	4192.849	4782.33
	9	4761.188	4768.97
	10	4761.322	4769.374
LD31591411.las	1	4756.319	5004.511
	2	4761.158	4789.488
	7	4058.151	4777.149
	9	4767.267	4774.298
	10	4767.369	4774.803
	18	4998.842	5109.347
LD31591414.las	1	4765.066	4973.92
	2	4773.206	4805.125
	7	3945.058	4793.796
	9	4774.613	4777.773
	10	4774.764	4778.386
	18	10813.82	11227.146
LD31621402.las	1	4751.296	4976.985
	2	4755.844	4925.558
	7	4569.732	4882.188
	17	4812.894	4813.635
LD31621405.las	1	4746.618	4949.245
	2	4751.122	4924.544
	7	4621.07	4843.258
	9	4753.796	4761.329
	10	4753.921	4760.433
	17	4759.849	4766.516
	18	4999.547	4999.547
LD31621408.las	1	4745.752	4993.625
	2	4750.935	4775.991
	7	4263.476	4763.084
	9	4753.973	4769.134
	10	4754	4764.872
	17	4766.073	4773.977
	18	5033.559	5123.215
LD31621411.las	1	4753.147	5010.649
	2	4755.985	4791.263
	7	4213.417	4779.653
	9	4761.637	4764.485
	10	4761.746	4773.655
	17	4772.376	4773.862
	18	5012.542	5158.582

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD31651402.las	1	4744.721	4899.564
	2	4750.194	4884.606
	7	4288.758	4828.448
	9	4749.869	4752.094
	10	4749.905	4752.028
LD31651405.las	1	4740.824	4861.07
	2	4744.685	4772.208
	7	4258.187	4753.321
	9	4749.6	4759.065
	10	4749.672	4756.221
	17	4759.908	4769.997
	18	11053.124	11053.262
LD31651408.las	1	4744.551	4832.822
	2	4749.489	4776.936
	7	4442.95	4755.932
	9	4751.487	4764.436
	10	4751.637	4764.725
	17	4762.336	4771.815
LD31651411.las	1	4757.261	5015.59
	2	4757.156	4791.618
	7	4126.225	4780.273
	18	5014.836	5090.466
LD31681402.las	1	4737.655	4850.866
	2	4737.349	4772.661
	7	4320.365	4756.565
	9	4749.761	4751.926
	10	4749.826	4752.651
LD31681405.las	1	4734.055	4837.595
	2	4738.324	4766.805
	7	4471.11	4748.307
	9	4744.846	4756.345
	10	4745.02	4756.844
	17	4752.95	4756.355
LD31681408.las	1	4743.741	4836.467
	2	4746.375	4774.236
	7	4724.115	4754.702
	9	4745.873	4757.034
	10	4746.08	4757.438
LD31711399.las	1	4725.358	4919.61
	2	4730.332	4887.92
	7	4709.974	4818.143

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD31711402.las	1	4729.79	4856.145
	2	4729.987	4855.833
	7	4727.566	4739.151
	9	4740.191	4745.84
	10	4740.217	4746.618
	18	5055.708	5055.708
LD31711405.las	1	4725.909	4868.304
	2	4733.662	4754.738
	7	4211.826	4737.392
LD31711408.las	1	4741.667	4872.175
	2	4746.437	4779.075
	7	4693.475	4755.761
	9	4762.94	4765.338
	10	4762.999	4765.67
LD31741399.las	1	4761.017	5009.186
	2	4766.067	4960.899
	7	4674.735	4882.356
	18	5213.051	5213.051
LD31741402.las	1	4724.121	4956.23
	2	4725.555	4876.985
	7	4191.763	4817.838
LD31741405.las	1	4726.831	4950.341
	2	4730.164	4780.095
	7	4558.2	4747.323
LD31741408.las	1	4740.817	4946.293
	2	4740.46	4776.24
	7	4596.769	4753.294
LD31771399.las	1	4755.801	4988.14
	2	4757.559	4939.659
	7	4565.007	4858.022
	18	5514.9	5515.068
LD31771402.las	1	4719.872	4904.367
	2	4723.806	4876.552
	7	4715.538	4848.455
LD31771405.las	1	4720.26	4875.118
	2	4729.357	4758.298
	7	4592.507	4734.662
LD31771408.las	1	4737.779	4927.569

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	2	4742.451	4767.116
	7	4209.926	4751.529
LD31801399.las	1	4737.477	4955.833
	2	4743.212	4925.633
	7	4574.869	4866.096
	18	5422.164	5422.282
LD31801402.las	1	4714.538	4896.722
	2	4718.029	4863.911
	7	4611.782	4840.893
	9	4722.494	4726.556
	10	4722.428	4726.87
	17	4735.86	4737.5
LD31801405.las	1	4715.079	4940.479
	2	4717.162	4752.825
	7	4508.065	4721.398
	18	11007.006	11007.156
LD31801408.las	1	4736.854	4888.438
	2	4739.213	4767.195
	7	4184.854	4750.542
LD31831399.las	1	4725.187	4908.698
	2	4730.568	4870.079
	7	4702.018	4751.293
LD31831402.las	1	4711.706	4800.194
	2	4713.803	4750.509
	7	4671.513	4733.504
	9	4716.46	4725.758
	10	4716.677	4726.014
	17	4726.221	4727.349
LD31831405.las	1	4706.021	4880.341
	2	4711.332	4753.268
	7	4446.494	4716.034
	9	4715.998	4725.558
	10	4715.945	4725.876
LD31831408.las	1	4716.69	4855.492
	2	4716.057	4769.026
	7	4663.573	4739.692
LD31861399.las	1	4719.905	4874.695
	2	4723.931	4837.553
	7	4573.436	4761.697

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD31861402.las	1	4704.554	4797.005
	2	4713.242	4734.853
	7	4135.116	4722.884
	9	4713.019	4719.915
	10	4713.15	4720.745
LD31861405.las	1	4703.501	4923.369
	2	4706.953	4756.808
	7	4509.843	4725.955
	9	4709.305	4719.236
	10	4709.561	4720.178
	18	4961.407	4979.806
LD31861408.las	1	4718.383	4813.432
	2	4725.102	4777.031
	7	4635.004	4734.594
	9	4724.951	4729.787
	10	4724.797	4730.24
LD31891399.las	1	4725.171	4905.312
	2	4724.902	4838.786
	7	4730.132	4773.573
LD31891402.las	1	4696.874	4817.139
	2	4703.787	4769.61
	7	4694.453	4738.734
	9	4704.981	4715.368
	10	4705.115	4716.995
	17	4717.947	4718.691
LD31891405.las	1	4699.101	4835.82
	2	4700.05	4755.227
	7	4572.255	4715.817
	9	4703.314	4716.69
	10	4703.655	4717.267
	18	5076.305	5076.791
LD31891408.las	1	4720.102	4857.241
	2	4719.594	4743.068
	7	4066.675	4727.546
	9	4724.804	4726.569
	10	4724.925	4727.746
LD31921402.las	1	4690.578	4855.591
	2	4697.543	4783.275
	7	4307.993	4768.865
	9	4703.222	4709.679
	10	4703.242	4708.36

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	17	4707.34	4708.386
	18	6543.015	6608.924
LD31921405.las	1	4681.736	4814.232
	2	4688.557	4739.16
	7	4667.599	4724.62
	9	4688.747	4710.204
	10	4688.895	4711.346
LD31951396.las	1	4742.5	4900.026
	2	4744.653	4823.803
	7	4559.482	4793.937
	18	6585.748	11004.738
LD31951399.las	1	4745.939	4873.36
	2	4743.642	4817.454
	7	4653.354	4795.138
LD31951402.las	1	4684.541	4857.871
	2	4691.483	4781.998
	7	4564.548	4758.258
	9	4698.075	4704.052
	10	4697.481	4703.842
	17	4702.179	4707.822
	18	5361.088	11007.767
LD31951405.las	1	4686.044	4930.837
	2	4693.967	4727.527
	7	4129.828	4714.902
	18	4932.372	6614.649
LD31981396.las	1	4722.107	4890.348
	2	4722.979	4846.657
	7	4630.965	4784.17
	17	4735.962	4756.362
	18	4975.098	4987.733
LD31981399.las	1	4699.669	4963.524
	2	4699.184	4790.427
	7	4656.884	4734.088
	17	4735.256	4736.611
	18	4985.072	5065.108
LD31981402.las	1	4683.278	4976.565
	2	4687.802	4761.178
	7	4447.668	4745.896
	18	4969.239	6610.958
LD31981405.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4682.54	4820.699
	2	4687.727	4722.792
	7	4485.171	4705.952
	18	4931.732	6602.871
LD32011399.las	1	4705.952	4868.173
	2	4705.407	4810.108
	7	4666.864	4780.748
	18	5183.526	5352.417
LD32011402.las	1	4674.279	4812.264
	2	4682.52	4747.343
	7	4642.691	4723.37
	9	4683.367	4688.465
	10	4683.852	4703.498
	17	4700.322	4705.739
	18	5396.79	11084.991
LD32011405.las	1	4674.669	4903.228
	2	4681.155	4715.699
	7	3932.591	4695.073
	9	4683.406	4687.632
	10	4683.331	4688.203
	17	4704.469	4711.195
	18	4937.047	6626.775
LD32011408.las	1	4695.909	4895.076
	2	4700.073	4723.659
	7	4515.011	4710.883
	119	4709.935	4818.53
LD32041402.las	1	4655.243	4799.63
	2	4664.892	4738.734
	7	4634.102	4679.781
	9	4664.371	4686.31
	10	4664.761	4688.022
	18	5050.243	6640.01
LD32041405.las	1	4649.164	6632.49
	2	4657.648	4704.82
	7	4629.971	4689.804
	9	4657.546	4687.697
	10	4657.74	4687.658
	17	4686.949	4688.839
	18	4915.761	6659.613
LD32041408.las	1	4689.197	4945.718
	2	4696.621	4723.235

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	7	4168.463	4709.039
	18	4940.656	10954.407
LD32071333.las	1	4842.927	4995.236
	2	4842.001	4910.236
	7	3925.163	4484.729
	18	5277.04	5717.856
LD32071336.las	1	4821.572	4992.26
	2	4821.208	4903.73
	7	3981.436	4789.859
	18	5080.767	5704.165
LD32071339.las	1	4784.052	4980.869
	2	4783.59	4859.006
	7	3916.895	4526.359
	9	4810.276	4816.089
	10	4810.394	4821.513
	17	4820.597	4831.995
	18	5513.752	12015.301
LD32071342.las	1	4763.455	4866.211
	2	4763.153	4806.414
	7	3873.949	4768.882
	18	5259.438	11922.965
LD32071345.las	1	4736.693	4845.676
	2	4735.515	4773.744
	7	3852.696	4521.152
	18	5121.87	11781.423
LD32071348.las	1	4722.294	4792.631
	2	4721.063	4744.157
	7	3961.114	4611.526
	18	5391.131	5391.131
LD32071351.las	1	4720.47	4811.719
	2	4720.053	4740.289
	7	3907.499	4280.224
	10	4729.157	4731.651
	17	4731.316	4731.67
	18	5628.499	5628.499
LD32071354.las	1	4720.496	4802.966
	2	4720.214	4735.21
	7	3795.448	4199.004
LD32071357.las	1	4716.687	4786.267

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	2	4715.414	4740.161
	7	3773.175	4316.674
	18	12056.777	12057.013
LD32071360.las	1	4702.277	4757.632
	2	4701.943	4731.907
	7	3900.333	4710.299
LD32071363.las	1	4690.942	4742.333
	2	4696.759	4722.261
	7	4689.144	4705.434
LD32071366.las	1	4658.045	4774.872
	2	4666.086	4714.915
	7	4661.989	4694.872
	10	4688.997	4693.367
	17	4692.996	4693.383
LD32071369.las	1	4661.336	4752.244
	2	4665.749	4679.991
	7	4657.189	4663.268
LD32071372.las	1	4655.089	4840.079
	2	4663.478	4759.347
	7	4647.481	4732.487
	9	4663.209	4671.228
	10	4663.288	4672.953
LD32071375.las	1	4690.243	4844.784
	2	4688.652	4785.345
	7	4195.717	4747.825
LD32071378.las	1	4707.884	4873.025
	2	4707.182	4798.314
	7	4314.306	4764.761
LD32071399.las	1	4680.342	4829.029
	2	4679.984	4746.47
	7	4138.87	4733.196
LD32071402.las	1	4632.478	4782.963
	2	4638.16	4726.736
	7	3903.329	4679.305
	9	4662.632	4667.691
	10	4662.668	4669.039
	18	6622.516	6654.488
LD32071405.las	1	4635.05	6637.493

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	2	4637.261	4707.563
	7	4294.414	4689.17
	9	4637.087	4679.18
	10	4637.025	4679.597
	18	4900.682	6602.638
LD32071408.las	1	4668.157	4818.688
	2	4670.099	4720.174
	7	4632.107	4707.13
	9	4677.172	4680.115
	10	4677.701	4680.778
	18	4948.123	6671.676
LD32101333.las	1	4870.167	4973.048
	2	4869.541	4940.184
	7	4137.902	4821.513
	18	5137.69	5891.921
LD32101336.las	1	4823.619	4977.871
	2	4822.271	4885.774
	7	3902.325	4847.431
	18	5326.843	5680.576
LD32101339.las	1	4798.95	4996.112
	2	4798.186	4867.572
	7	3845.11	4540.631
	10	4814.147	4817.976
	17	4817.635	4827.884
	18	5472.62	5807.108
LD32101342.las	1	4771.165	4884.938
	2	4769.567	4815.072
	7	3900.415	4753.209
	18	11952.509	11952.614
LD32101345.las	1	4742.973	4819.551
	2	4741.756	4789.301
	7	3823.234	4438.174
	18	5320.915	11782.837
LD32101348.las	1	4726.155	4830.525
	2	4723.721	4759.219
	7	3858.109	4585.44
	18	5176.686	5414.52
LD32101351.las	1	4717.067	4801.68
	2	4716.546	4734.987
	7	3845.124	4307.501

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	18	11920.747	11963.66
LD32101354.las	1	4712.671	4786.742
	2	4712.317	4728.048
	7	3806.892	4261.018
	18	5682.311	11879.881
LD32101357.las	1	4710.552	4784.37
	2	4710.086	4726.231
	7	3783.821	4289.273
	18	11899.353	11899.523
LD32101360.las	1	4706.962	4793.918
	2	4705.686	4734.239
	7	3913.339	4711.641
	9	4721.677	4722.714
	10	4721.746	4723.534
	17	4722.185	4722.789
	18	5392.804	5392.889
LD32101363.las	1	4691.7	4752.09
	2	4699.827	4716.851
	7	4687.53	4703.084
LD32101366.las	1	4657.517	4749.735
	2	4661.562	4711.365
	7	4659.781	4677.602
	9	4692.008	4692.645
	10	4686.736	4693.399
	17	4691.362	4693.268
LD32101369.las	1	4660.598	4749.876
	2	4664.125	4677.297
	7	4653.823	4657.474
LD32101372.las	1	4650.64	4796.388
	2	4659.754	4721.116
	7	4638.147	4663.432
	9	4659.459	4678.219
	10	4659.689	4678.386
	17	4677.369	4684.686
LD32101375.las	1	4674.817	4926.24
	2	4673.075	4756.267
	7	4241.78	4699.741
	17	4689.774	4694.751
	18	4945.85	4988.084
LD32101378.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4745.719	4881.447
	2	4739.315	4799.718
	7	4619.233	4771.536
	18	5540.199	5540.199
LD32101399.las	1	4667.806	4892.631
	2	4674.226	4738.409
	7	4410.493	4723.734
LD32101402.las	1	4605.289	4757.973
	2	4613.685	4712.199
	7	4595.109	4700.125
	9	4613.875	4674.229
	10	4614.115	4675.548
	17	4674.6	4674.991
	18	6645.075	6652.319
LD32101405.las	1	4615.932	6602.251
	2	4615.102	4694.895
	7	4119.916	4676.526
	9	4663.419	4672.953
	10	4663.472	4673.718
	17	4675.486	4679.184
	18	4963.176	6581.883
LD32101408.las	1	4662.159	4779.738
	2	4671.69	4719.39
	7	4592.481	4701.903
	9	4671.487	4673.918
	10	4671.585	4674.607
	18	4997.251	6657.674
LD32131333.las	1	4884.203	4966.634
	2	4883.622	4966.657
	7	3939.156	4870.066
	18	5426.508	5840.064
LD32131336.las	1	4853.114	4988.209
	2	4851.949	4930.896
	7	3935.264	4734.436
LD32131339.las	1	4813.698	5056.889
	2	4813.153	4867.877
	7	3906.567	4546.736
	18	5666.278	11922.227
LD32131342.las	1	4786.975	4896.742
	2	4786.45	4833.025

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	7	3817.709	4274.759
	18	5779.109	11925.57
LD32131345.las	1	4752.865	4808.235
	2	4752.408	4793.964
	7	3953.329	4367.121
	18	5460.002	5479.812
LD32131348.las	1	4730.201	4842.415
	2	4729.679	4762.379
	7	3902.548	4289.286
	18	5215.639	5650.297
LD32131351.las	1	4711.897	4784.81
	2	4710.151	4744.515
	7	3767.437	4310.926
LD32131354.las	1	4711.519	4892.736
	2	4710.171	4735.338
	7	3802.968	4292.058
LD32131357.las	1	4707.474	4787.123
	2	4705.719	4725.604
	7	3801.538	4257.862
LD32131360.las	1	4697.261	4747.031
	2	4697.56	4720.479
	7	3865.524	4699.479
LD32131363.las	1	4688.504	4759.095
	2	4692.336	4725.453
	7	4679.813	4695.204
	9	4692.989	4697.041
	10	4693.134	4697.333
LD32131366.las	1	4655.332	4795.341
	2	4659.817	4723.531
	7	4645.046	4685.863
	9	4681.378	4696.342
	10	4681.388	4697.153
LD32131369.las	1	4656.027	4742.901
	2	4656.283	4671.205
	7	4650.575	4654.781
LD32131372.las	1	4648.019	4816.076
	2	4656.211	4686.48
	7	4624.932	4663.337

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	9	4655.916	4661.979
	10	4656.214	4663.564
LD32131375.las	1	4657.681	4798.022
	2	4660.283	4760.699
	7	4657.989	4665.903
	18	5421.885	5421.885
LD32131378.las	1	4710.844	4855.177
	2	4712.743	4790.305
	7	4746.916	4775.492
LD32131399.las	1	4660.158	4786.106
	2	4667.373	4711.172
	7	4625.982	4693.57
LD32131402.las	1	4609.259	4891.654
	2	4614.558	4686.1
	7	4594.673	4664.676
	9	4644.167	4664.561
	10	4644.318	4664.62
	18	4898.786	6636.847
LD32131405.las	1	4616.749	4956.578
	2	4615.617	4701.067
	7	4563.993	4684.528
	9	4651.178	4669.177
	10	4651.162	4669.617
	17	4668.084	4669.213
	18	5032.441	6616.588
LD32131408.las	1	4662.674	4834.876
	2	4671.513	4722.907
	7	4580.549	4704.754
	18	5054.57	6683.048
LD32161333.las	1	4922.874	5039.659
	2	4921.939	4990.059
	7	4124.736	4742.746
	9	4933.497	4976.401
	10	4933.635	4978.018
	18	5200.278	5599.854
LD32161336.las	1	4861.864	4976.263
	2	4861.611	4960.059
	7	3995.396	4553.226
	9	4933.648	4934.957
	10	4933.599	4935.617

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	18	5152.381	12083.05
LD32161339.las	1	4826.391	5004.249
	2	4824.554	4903.583
	7	3860.537	4829.826
	9	4844.725	4845.43
	10	4844.885	4845.571
	18	5694.939	5808.811
LD32161342.las	1	4785.027	4902.159
	2	4784.403	4858.481
	7	3831.068	4761.424
	9	4832.766	4845.738
	10	4832.943	4845.87
	17	4811.247	4812.11
	18	5098.038	11893.588
LD32161345.las	1	4761.473	4835.302
	2	4760.903	4807.349
	7	3862.384	4765.978
	18	5148.382	11948.06
LD32161348.las	1	4744.692	4854.049
	2	4743.741	4786.135
	7	3862.778	4331.048
	18	5733.43	11927.752
LD32161351.las	1	4708.583	4818.468
	2	4708.048	4753.77
	7	3808.719	4296.366
	18	5390.107	11870.931
LD32161354.las	1	4702.156	4758.258
	2	4700.926	4727.868
	7	3800.314	4299.499
LD32161357.las	1	4697.389	4824.383
	2	4696.605	4715.706
	7	3847.837	4227.242
	9	4698.439	4700.043
	10	4698.511	4701.467
	18	11546.178	11546.315
LD32161360.las	1	4689.466	4786.631
	2	4691.359	4720.217
	7	3717.512	4697.028
	9	4691.388	4692.084
	10	4691.398	4692.238

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	17	4710.696	4711.848
LD32161363.las	1	4687.471	4757.999
	2	4688.294	4706.542
	7	3784.717	4686.733
	18	11952.739	11952.952
LD32161366.las	1	4668.098	4804
	2	4665.634	4723.009
	7	4663.449	4690.552
	17	4720.22	4724.233
LD32161369.las	1	4650.03	4753.514
	2	4655.178	4707.979
	7	4649.197	4649.197
	9	4655.211	4657.274
	10	4655.204	4658.941
LD32161372.las	1	4650.132	4754.154
	2	4651.605	4667.583
	7	4647.074	4652.484
	9	4652.002	4658.521
	10	4652.179	4659.577
LD32161375.las	1	4650.165	4766.45
	2	4653.298	4715.411
	7	4647.937	4657.822
	9	4671.477	4675.834
	10	4671.89	4677.028
LD32161378.las	1	4680.299	4799.931
	2	4680.27	4739.059
	7	4690.082	4710.712
LD32161399.las	1	4655.896	4790.263
	2	4658.091	4705.427
	7	4640.857	4689.498
LD32161402.las	1	4618.514	4754.754
	2	4617.94	4688.665
	7	4453.672	4651.615
	9	4645.414	4655.037
	10	4645.575	4655.637
	17	4663.511	4669.876
LD32161405.las	1	4642.264	4881.375
	2	4647.504	4709.354
	7	4547.721	4697.195

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	9	4651.762	4658.662
	10	4651.874	4660.653
	18	6210.503	6239.571
LD32191333.las	1	4950.417	5180.748
	2	4950.026	5020.4
	7	4103.712	4892.615
	9	4994.409	4995.23
	10	4994.485	4995.577
	18	5249.963	5916.015
LD32191336.las	1	4886.132	5136.289
	2	4885.249	5001.279
	7	3992.446	4890.102
	9	4975.656	4976.726
	10	4975.741	4977.69
	18	5130.423	5924.476
LD32191339.las	1	4844.938	5088.107
	2	4844.026	4930.545
	7	4019.1	4850.722
	9	4844.807	4845.568
	10	4845.033	4845.899
	18	5135.682	5882.826
LD32191342.las	1	4807.28	4980.233
	2	4807.084	4880.43
	7	3876.79	4262.836
	9	4832.887	4845.624
	10	4832.933	4845.87
	18	5082.605	5827.688
LD32191345.las	1	4782.625	4871.408
	2	4781.857	4842.953
	7	3791.137	4507.813
	9	4805.125	4809.666
	10	4805.207	4807.923
	18	5210.938	5557.41
LD32191348.las	1	4748.199	4929.931
	2	4746.342	4806.099
	7	3953.165	4273.197
LD32191351.las	1	4726.743	4834.938
	2	4725.296	4769.876
	7	3866.534	4365.073
	18	11885.508	11885.593
LD32191354.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4702.55	4808.521
	2	4702.372	4738.488
	7	3812.699	4714.18
LD32191357.las	1	4693.842	4757.202
	2	4692.422	4713.376
	7	3756.659	4268.558
	9	4694.718	4696.428
	10	4694.856	4695.863
	18	11932.952	11986.561
LD32191360.las	1	3917.833	4847.812
	2	4688.81	4708.852
	7	3741.928	4271.576
	9	4691.303	4692.93
	10	4691.316	4692.642
LD32191363.las	1	4677.619	4758.806
	2	4679.41	4701.811
	7	3787.886	4685.657
	18	5647.371	5647.371
LD32191366.las	1	4674.646	4782.789
	2	4677.491	4721.398
	7	4665.27	4677.799
	10	4682.11	4686.529
	17	4684.948	4721.398
LD32191369.las	1	4651.251	4802.205
	2	4656.382	4695.883
	7	4648.396	4665.135
LD32191372.las	1	4645.037	4824.062
	2	4645.48	4680.794
	7	4642.212	4646.841
	9	4644.863	4654.138
	10	4645.23	4659.148
	17	4655.335	4659.574
LD32191375.las	1	4640.965	4754.994
	2	4644.39	4684.515
	7	4130.513	4661.565
	9	4644.298	4648.616
	10	4644.574	4651.129
LD32191378.las	1	4665.706	4800.44
	2	4658.596	4717.415
	7	4109.854	4676.483

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD32191399.las	1	4642.727	4743.681
	2	4648.14	4670.165
	7	4559.748	4656.303
	18	4958.845	5083.855
LD32191402.las	1	4614.167	4728.803
	2	4613.849	4688.639
	7	4625.493	4639.207
	9	4643.675	4656.182
	10	4643.957	4655.847
	17	4656.641	4658.278
LD32191405.las	1	4640.401	6259.069
	2	4647.901	4715.867
	7	4602.307	4700.709
	9	4649.016	4656.27
	10	4649.341	4657.753
	18	6203.137	6270.827
LD32221333.las	1	4903.061	4991.932
	2	4902.1	4991.512
	7	4082.902	4363.164
	18	5311.18	5880.654
LD32221336.las	1	4901.434	5119.78
	2	4900.702	4995.344
	7	3976.842	4899.941
	9	4964.885	4977.119
	10	4965.01	4977.588
	18	5690.067	11763.408
LD32221339.las	1	4870.381	5165.449
	2	4867.425	4954.291
	7	3934.549	4901.864
	18	5152.67	12013.303
LD32221342.las	1	4844.006	4975.148
	2	4842.884	4926.181
	7	3928.171	4884.744
	18	5808.332	11914.619
LD32221345.las	1	4806.211	4967.93
	2	4805.046	4878.865
	7	3847.601	4367.59
	9	4822.139	4826.024
	10	4822.353	4826.503
	18	5266.689	5654.093

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD32221348.las	1	4769.534	4860.44
	2	4768.524	4841.864
	7	3860.708	4251.166
	9	4822.274	4825.683
	10	4807.805	4826.086
	17	4809.479	4810.745
LD32221351.las	1	4733.258	4862.001
	2	4731.457	4812.175
	7	3813.532	4334.483
	18	11703.166	11703.356
LD32221354.las	1	4706.201	4799.544
	2	4705.296	4758.698
	7	3820.258	4312.357
	18	11844.127	11844.255
LD32221357.las	1	4691.756	4763.662
	2	4691.556	4723.764
	7	3740.691	4264.801
	18	5692.679	5692.679
LD32221360.las	1	4684.679	4757.894
	2	4686.077	4704.938
	7	3698.267	4681.123
	18	5493.227	5493.227
LD32221363.las	1	4681.201	4759.82
	2	4681.605	4703.521
	7	3755.58	4681.027
	18	11841.938	11842.06
LD32221366.las	1	4670.942	4747.605
	2	4673.901	4694.531
	7	4587.402	4669.321
	10	4683.442	4686.628
	17	4686.454	4686.913
LD32221369.las	1	4663.091	4756.782
	2	4662.366	4688.908
	7	4658.468	4663.314
LD32221372.las	1	4647.281	4831.001
	2	4646.48	4678.813
	7	3929.625	4663.97
LD32221375.las	1	4634.791	4735.634
	2	4641.044	4664.069

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	7	4357.206	4644.797
	9	4640.66	4654.42
	10	4640.683	4654.6
	17	4652.005	4663.495
LD32221378.las	1	4641.795	4757.779
	2	4646.582	4684.318
	7	4626.933	4662.1
	17	4654.148	4654.912
LD32221396.las	1	4642.117	4794.462
	2	4649.551	4669.554
	7	4414.561	4650.729
LD32221399.las	1	4634.686	4778.767
	2	4635.578	4661.251
	7	4610.834	4647.32
LD32221402.las	1	4633.665	4830.696
	2	4635.05	4675.808
	7	4626.634	4654.59
	17	4651.812	4661.28
LD32221405.las	1	4641.149	4836.463
	2	4644.426	4719.767
	7	4527.665	4700.732
	17	4694.925	4720.374
LD32251333.las	1	4852.103	4976.788
	2	4851.47	4919.009
	7	3931.728	4815.236
	18	5274.914	5858.676
LD32251336.las	1	4851.913	5097.083
	2	4851.168	4921.427
	7	3933.135	4840.791
	18	5264.52	5886.366
LD32251339.las	1	4856.841	5003.714
	2	4855.007	4948.228
	7	3937.095	4856.486
	18	5862.2	10813.584
LD32251342.las	1	4856.358	4968.514
	2	4855.072	4926.785
	7	3931.203	4408.974
	18	5644.267	11788.72
LD32251345.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4826.736	4920.574
	2	4825.814	4920.354
	7	3886.859	4797.103
	18	5604.303	5834.496
LD32251348.las	1	4806.995	4893.409
	2	4806.349	4894.656
	7	3870.671	4298
LD32251351.las	1	4760.063	4868.452
	2	4758.517	4832.769
	7	3851.547	4423.938
	18	5629.972	5629.972
LD32251354.las	1	4724.38	4827.543
	2	4723.468	4796.69
	7	3800.58	4314.88
LD32251357.las	1	4701.884	4784.918
	2	4698.147	4752.077
	7	3875.186	4136.717
	9	4708.744	4709.042
	10	4708.757	4709.101
	18	5723.109	11911.387
LD32251360.las	1	4683.226	4799.83
	2	4683.255	4718.33
	7	3771.508	4680.292
	9	4683.144	4710.043
	10	4683.14	4710.519
	18	4919.783	4919.783
LD32251363.las	1	4676.976	4737.582
	2	4679.895	4698.298
	7	3756.246	4680.427
	9	4683.17	4686.349
	10	4683.226	4686.241
	18	11770.557	11770.642
LD32251366.las	1	4671.392	4747.523
	2	4671.126	4692.527
	7	4666.946	4672.471
LD32251369.las	1	4658.071	4740.545
	2	4660.778	4680.112
	7	4657.058	4657.058
	10	4670.627	4675.936
	17	4674.6	4676.182

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD32251372.las	1	4639.256	4745.66
	2	4645.316	4680.273
	7	4636.92	4653.609
	10	4667.648	4674.541
	17	4674.239	4675.115
LD32251375.las	1	4630.493	4750.604
	2	4638.317	4659.252
	7	4057.4	4635.224
	9	4638.245	4644.669
	10	4638.288	4645.168
	17	4651.077	4654.528
	18	4996.955	5600.278
LD32251378.las	1	4631.169	4741.759
	2	4630.719	4658.56
	7	4620.985	4642.209
	9	4636.208	4645.952
	10	4636.401	4645.854
LD32251393.las	1	4638.882	4762.435
	2	4638.203	4675.315
	7	4544.686	4646.346
LD32251396.las	1	4621.342	4777.543
	2	4625.978	4658.803
	7	4619.666	4643.6
	17	4643.442	4649.679
LD32251399.las	1	4626.536	4744.006
	2	4632.169	4670.804
	7	4613.705	4638.655
	17	4647.635	4652.543
LD32251402.las	1	4634.115	4810.394
	2	4635.69	4696.723
	7	4623.445	4671.031
	18	5326.672	5327.043
LD32251405.las	1	4653.012	4803.803
	2	4652.212	4710.824
	7	4648.675	4696.674
	17	4690	4691.411
LD32281333.las	1	4814.2	4989.662
	2	4813.698	4901.542
	7	3995.963	4660.913
	18	5264.294	5854.332

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD32281336.las	1	4821.152	5041.145
	2	4820.433	4897.687
	7	3896.541	4671.146
	18	5239.432	12001.587
LD32281339.las	1	4805.696	5053.52
	2	4805.289	4897.074
	7	3937.738	4767.048
LD32281342.las	1	4814.899	4988.415
	2	4814.433	4912.418
	7	3873.312	4335.113
	18	5276.784	11902.309
LD32281345.las	1	4841.349	5008.481
	2	4841.772	4927.093
	7	3973.716	4832.94
	10	4896.371	4899.432
	17	4899.82	4900.532
	18	5693.063	11924.241
LD32281348.las	1	4819.892	4950.679
	2	4819.613	4905.584
	7	3886.833	4316.271
	9	4894.449	4897.585
	10	4894.557	4900.243
	17	4826.821	4827.51
	18	5506.935	5506.935
LD32281351.las	1	4792.399	4919.695
	2	4791.142	4887.09
	7	3920.517	4255.267
	18	5785.399	5785.399
LD32281354.las	1	4752.999	4900.302
	2	4750.453	4860.368
	7	3909.398	4286.32
	10	4811.021	4822.54
	17	4822.359	4823.189
	18	5659.9	5682.653
LD32281357.las	1	4717.386	4819.308
	2	4710.945	4785.276
	7	3842.017	4212.009
	18	5696.34	5766.875
LD32281360.las	1	4691.513	4761.441
	2	4691.224	4743.55

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	7	3726.052	4261.589
	9	4711.437	4715.64
	10	4711.569	4713.787
	18	5614.825	5614.825
LD32281363.las	1	4675.299	4761.431
	2	4669.915	4715.499
	7	3725.114	4677.422
	18	5460.402	11799.104
LD32281366.las	1	4666.024	4738.901
	2	4669.807	4690.155
	7	4663.685	4667.048
LD32281369.las	1	4656.024	4735.276
	2	4654.902	4679.085
	7	4647.871	4652.455
LD32281372.las	1	4638.482	4715.545
	2	4644.535	4671.477
	7	4649.256	4656.707
	10	4665.352	4668.741
	17	4668.222	4668.59
	18	5409.215	5409.235
LD32281375.las	1	4637.022	4720.712
	2	4639.046	4674.466
	7	4650.306	4650.306
	17	4647.274	4647.77
LD32281378.las	1	4630.873	4730.433
	2	4633.859	4656.543
	7	4231.232	4636.1
	9	4633.688	4639.863
	10	4633.734	4647.405
	17	4646.109	4652.428
LD32281393.las	1	4558.101	4812.09
	2	4558.045	4674.607
	7	4177.751	4642.428
	9	4558.088	4614.125
	10	4558.098	4614.279
	17	4642.681	4644.636
LD32281396.las	1	4549.236	4715.122
	2	4557.589	4649.426
	7	4547.655	4634.85
	9	4557.875	4634.935

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	10	4558.013	4635.453
	17	4642.537	4644.6
LD32281399.las	1	4574.955	4785.361
	2	4581.877	4672.714
	7	4525.26	4660.063
	18	6597.917	6607.92
LD32281402.las	1	4662.202	4812.717
	2	4668.636	4697.72
	7	4114.172	4685.886
	18	5126.177	5126.177
LD32281405.las	1	4676.339	4810.453
	2	4681.296	4709.571
	7	4422.905	4697.458
LD32311333.las	1	4797.313	4884.108
	2	4796.998	4857.028
	7	4115.536	4638.813
	18	5471.206	5674.851
LD32311336.las	1	4773.924	4934.403
	2	4773.557	4846.956
	7	3877.345	4715.063
	18	5188.743	11943.467
LD32311339.las	1	4766.001	4956.804
	2	4765.351	4830.896
	7	3900.261	4787.133
	18	5043.205	11933.752
LD32311342.las	1	4773.767	4900.676
	2	4771.618	4875.374
	7	3876.567	4535.824
	17	4796.378	4816.385
	18	5211.558	11989.641
LD32311345.las	1	4771.775	4884.77
	2	4771.109	4875.781
	7	3864.038	4301.084
	9	4793.806	4796.237
	10	4793.77	4797.641
	18	5340.606	11932.201
LD32311348.las	1	4773.412	4889.675
	2	4773.389	4881.375
	7	3870.498	4301.399

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	17	4821.178	4824.505
	18	11951.987	11952.128
LD32311351.las	1	4780.735	4901.427
	2	4779.023	4885.184
	7	3872.945	4251.209
	9	4795.289	4798.288
	10	4795.394	4799.731
	18	11845.839	11894.271
LD32311354.las	1	4747.071	4897.736
	2	4745.191	4860.532
	7	3976.042	4239.696
	10	4809.8	4810.725
	17	4820.666	4821.716
	18	5602.049	5602.049
LD32311357.las	1	4707.153	4837.084
	2	4706.92	4787.422
	7	3892.748	4246.379
	18	5661.311	5731.015
LD32311360.las	1	4688.534	4775.617
	2	4687.75	4748.636
	7	3820.36	4226.678
	18	5565.999	11878.267
LD32311363.las	1	4669.607	4767.825
	2	4669.722	4706.857
	7	3722.909	4678.675
	18	5618.673	11662.113
LD32311366.las	1	4662.192	4715.824
	2	4665.375	4681.962
	7	4533.433	4662.94
LD32311369.las	1	4652.461	4790.542
	2	4654.663	4674.167
	7	4648.495	4648.495
LD32311372.las	1	4645.667	4722.189
	2	4652.681	4669.131
	7	4635.581	4652.235
LD32311375.las	1	4646.907	4703.294
	2	4643.163	4666.168
	7	4614.131	4651.054
	18	5150.219	5189.809

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD32311378.las	1	4631.999	4739.931
	2	4636.172	4671.857
	7	4624.807	4646.008
	10	4641.943	4647.113
	17	4646.664	4647.973
	18	5282.073	5282.073
LD32311393.las	1	4587.507	4763.865
	2	4590.296	4666.92
	7	4024.3	4636.405
	9	4595.555	4622.845
	10	4595.755	4625.283
LD32311396.las	1	4557.99	4731.693
	2	4558.396	4665.847
	7	4551.569	4640.201
	9	4557.901	4632.094
	10	4558.019	4632.56
LD32311399.las	1	4618.675	4753.773
	2	4618.249	4677.619
	7	4617.694	4660.972
	18	4923.576	4923.576
LD32341333.las	1	4765.033	5008.881
	2	4764.708	4844.285
	7	3937.909	4514.778
	18	5058.976	5723.837
LD32341336.las	1	4751.316	4841.706
	2	4750.683	4813.819
	7	3805.448	4609.81
	18	5422.64	11967.542
LD32341339.las	1	4745.529	4818.586
	2	4745.227	4784.147
	7	3805.173	4745.896
	9	4745.017	4746.119
	10	4745.233	4746.306
	18	5150.065	11985.196
LD32341342.las	1	4739.623	4817.428
	2	4735.302	4790.843
	7	3876.754	4753.642
	18	5153.809	5642.607
LD32341345.las	1	4734.948	4855.853
	2	4733.271	4801.654

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	7	3780.206	4307.58
	9	4793.767	4796.076
	10	4793.845	4797.113
	18	5465.101	11935.17
LD32341348.las	1	4730.04	4916.463
	2	4728.711	4797.195
	7	3844.175	4658.406
	18	4979.14	11765.541
LD32341351.las	1	4714.767	4830.131
	2	4714.177	4799.82
	7	3864.087	4213.699
	18	5744.647	11936.154
LD32341354.las	1	4691.867	4806.503
	2	4690.306	4779.075
	7	3801.866	4230.405
LD32341357.las	1	4683.147	4776.372
	2	4681.969	4752.648
	7	3767.732	4328.226
	18	5575.967	5575.967
LD32341360.las	1	4670.621	4778.901
	2	4675.729	4717.812
	7	3811.029	4183.66
	18	5600.957	5664.89
LD32341363.las	1	4667.271	4760.929
	2	4670.279	4692.766
	7	3700.025	4665.89
	9	4670.335	4670.771
	10	4670.358	4670.873
	18	4968.724	11844.356
LD32341366.las	1	4659.879	4704.138
	2	4661.674	4676.634
	9	4670.125	4671.697
	10	4670.063	4673.754
LD32341369.las	1	4654.984	4705.158
	2	4656.093	4676.526
	7	4646.1	4652.97
	9	4670.375	4671.392
	10	4670.256	4672.189
LD32341372.las	1	4640.64	4701.585

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	2	4647.756	4666.457
	7	4637.087	4645.283
LD32341375.las	1	4647.048	4710.627
	2	4649.138	4666.424
	7	4643.37	4645.716
	9	4652.058	4652.96
	10	4652.343	4653.829
LD32341378.las	1	4633.314	4710.906
	2	4636.877	4657.589
	7	4185.31	4642.025
	10	4642.156	4647.448
	17	4645.906	4647.54
LD32341390.las	1	4618.219	4722.3
	2	4617.386	4655.745
	7	4162.377	4635.168
LD32341393.las	1	4574.584	4706.418
	2	4581.651	4662.231
	7	4197.702	4627.419
	17	4627.035	4627.832
LD32341396.las	1	4584.302	4695.896
	2	4583.393	4661.533
	7	4579.089	4639.449
	17	4628.931	4629.44
	18	4950.341	4950.341
LD32341399.las	1	4638.13	4739.318
	2	4639.033	4669.997
	7	4630.109	4657.711
	18	5034.974	5034.974
LD32371333.las	1	4752.359	4876.076
	2	4751.428	4803.875
	7	3837.725	4233.804
	9	4754.653	4780.469
	10	4754.853	4781.49
	18	5507.722	5517.889
LD32371336.las	1	4740.378	4930.42
	2	4740.017	4773.681
	7	3931.173	4339.516
	9	4749.912	4754.83
	10	4750.115	4752.251
	18	5139.757	5761.498

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD32371339.las	1	4729.843	4817.254
	2	4729.485	4763.724
	7	3801.032	4720.45
	9	4742.727	4752.087
	10	4742.74	4752.192
	18	5216.577	5216.577
LD32371342.las	1	4722.376	4842.087
	2	4721.398	4749.377
	7	3989.631	4521.832
	9	4726.601	4727.139
	10	4726.857	4727.277
LD32371345.las	1	4713.898	4791.818
	2	4713.219	4740.903
	7	3851.777	4342.419
	18	5471.502	5471.502
LD32371348.las	1	4701.871	4768.17
	2	4700.427	4742.845
	7	3819.897	4348.131
LD32371351.las	1	4694.895	4800.722
	2	4694.016	4739.006
	7	3805.993	4258.167
	18	5660.855	5708.273
LD32371354.las	1	4688.668	4773.038
	2	4687.674	4717.842
	7	3794.668	4301.76
LD32371357.las	1	4677.12	4743.964
	2	4676.221	4702.491
	7	3741.869	4263.922
	18	5592.879	11874.225
LD32371360.las	1	4670.827	4711.221
	2	4672.583	4686.096
	7	3811.344	4254.516
	18	5084.888	5084.888
LD32371363.las	1	4662.563	4706.395
	2	4669.42	4678.367
	7	3695.718	4659.062
	9	4669.836	4671.224
	10	4670.069	4671.585
	18	11606.411	11845.363
LD32371366.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4670.253	4691.09
	2	4670.112	4672.222
	9	4670.06	4671.096
	10	4670.161	4671.457
LD32371369.las	1	4650.66	4781.47
	2	4650.778	4676.008
	7	4633.901	4647.989
	9	4670.227	4672.786
	10	4670.204	4675.945
LD32371372.las	1	4644.056	4714.505
	2	4646.372	4675.922
	7	4628.81	4638.879
	9	4670.263	4671.408
	10	4670.342	4672.468
	17	4652.232	4652.838
LD32371375.las	1	4641.178	4719.951
	2	4643.455	4657.379
	7	4631.326	4643.193
	10	4646.526	4653.291
	17	4652.284	4654.62
LD32371378.las	1	4638.961	4709.161
	2	4635.552	4656.89
	7	4628.911	4638.255
	10	4643.18	4646.182
	17	4649.794	4650.558
	18	4973.514	4973.514
LD32371387.las	1	4611.526	4707.888
	2	4615.722	4642.799
	7	4571.051	4613.964
	9	4616.703	4624.233
	10	4616.743	4624.079
	17	4633.029	4635.306
LD32371390.las	1	4612.002	4709.636
	2	4610.447	4646.178
	7	4296.481	4630.427
LD32371393.las	1	4589.269	4705.263
	2	4588.573	4651.592
	7	3933.453	4606.418
	9	4608.19	4615.148
	10	4608.304	4611.844
	17	4619.292	4620.552

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD32371396.las	1	4602.445	4734.548
	2	4602.054	4656.605
	7	4602.163	4642.543
	9	4608.452	4611.477
	10	4608.633	4612.373
LD32371399.las	1	4636.005	4719.941
	2	4635.119	4664.59
	7	4632.304	4652.087
LD32401333.las	1	4751.752	4919.852
	2	4751.224	4825.325
	7	4046.15	4334.516
	9	4754.653	4756.211
	10	4754.715	4756.155
	17	4766.362	4767.773
LD32401336.las	1	4742.609	4839.898
	2	4742.415	4816.447
	7	3801.229	4283.922
	9	4754.817	4756.388
	10	4754.997	4756.224
	18	5469.799	5754.713
LD32401339.las	1	4734.672	4846.831
	2	4734.344	4814.679
	7	3915.186	4550.378
	17	4762.96	4764.128
	18	5142.552	11988.237
LD32401342.las	1	4727.527	4901.749
	2	4726.431	4780.2
	7	3944.779	4616.195
	9	4726.575	4727.471
	10	4726.736	4727.622
	18	11979.303	11979.517
LD32401345.las	1	4716.09	4803.645
	2	4715.069	4763.33
	7	3871.885	4322.793
	9	4721.286	4753.97
	10	4721.342	4754.41
	18	5034.38	12094.001
LD32401348.las	1	4706.191	4803.606
	2	4705.535	4737.589
	7	3917.591	4285.815

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	9	4710.952	4721.683
	10	4711.185	4722.359
	18	5634.119	11934.819
LD32401351.las	1	4697.812	4748.006
	2	4697.441	4719.84
	7	3767.955	4267.364
LD32401354.las	1	4690.594	4753.639
	2	4691.992	4717.179
	7	3861.108	4236.77
LD32401357.las	1	4683.636	4762.756
	2	4682.392	4713.488
	7	3851.564	4265.562
LD32401360.las	1	4675.601	4880.873
	2	4675.092	4712.622
	7	3805.59	4683.281
	18	5649.933	5657.436
LD32401363.las	1	4662.12	4877.549
	2	4669.663	4714.236
	7	3722.703	4662.271
	18	5554.812	11873.871
LD32401366.las	1	4665.611	6092.166
	2	4670.119	4692.638
	9	4670.138	4672.199
	10	4670.181	4673.347
	18	5132.04	5132.04
LD32401369.las	1	4670.217	4713.485
	2	4670.322	4696.07
	9	4670.21	4672.222
	10	4670.224	4675.486
LD32401372.las	1	4646.989	4805.919
	2	4646.47	4699.827
	7	4643.97	4673.718
	9	4670.174	4672.179
	10	4670.099	4672.53
	18	5015.498	5175.104
LD32401375.las	1	4638.632	4713.58
	2	4637.694	4667.084
	7	4626.657	4637.192
LD32401378.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4636.211	4705.214
	2	4639.686	4656.91
	7	4635.562	4637.442
LD32401387.las	1	4605.24	4697.953
	2	4608.905	4629.42
	7	4525.47	4608.337
	9	4608.741	4620.578
	10	4608.829	4619.942
LD32401390.las	1	4606.103	4697.523
	2	4607.819	4625.335
	7	4605.716	4605.716
LD32401393.las	1	4597.038	4788.16
	2	4602.281	4621.195
	7	4336.058	4604.072
	9	4607.766	4611.48
	10	4607.894	4612.1
	18	10969.47	10969.617
LD32401396.las	1	4599.948	4694.229
	2	4601.29	4657.218
	7	4598.446	4635.801
	18	4879.301	5329.373
LD32431333.las	1	4792.599	4865.781
	2	4791.067	4853.858
	7	3960.812	4302.934
LD32431336.las	1	4793.202	4952.444
	2	4792.878	4851.828
	7	3874.221	4309.739
	18	5338.021	5338.021
LD32431339.las	1	4773.435	4843.999
	2	4772.54	4833.081
	7	3843.112	4691.08
	18	5247.827	5619.995
LD32431342.las	1	4750.332	4850.843
	2	4749.715	4826.824
	7	3887.368	4733.626
	17	4762.523	4764
LD32431345.las	1	4731.693	4831.034
	2	4731.303	4805.647
	7	3959.162	4340.047

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	9	4753.202	4753.704
	10	4753.304	4758.711
	17	4761.719	4762.169
LD32431348.las	1	4720.141	4927.398
	2	4719.6	4792.864
	7	3831.82	4318.302
	10	4755.043	4760.387
	17	4758.832	4760.886
	18	11891.991	11892.197
LD32431351.las	1	4713.481	4810.778
	2	4712.881	4785.666
	7	3871.416	4329.988
	9	4750.437	4752.251
	10	4750.64	4752.635
	18	5783.719	11888.047
LD32431354.las	1	4712.573	4843.652
	2	4711.592	4788.77
	7	3723.506	4294.88
	9	4760.069	4766.982
	10	4760.197	4769.075
	17	4755.663	4756.792
LD32431357.las	1	4701.995	4817.973
	2	4700.995	4767.671
	7	3813.293	4279.309
	9	4746.939	4749.731
	10	4747.1	4749.548
LD32431387.las	1	4604.072	4690.345
	2	4605.565	4642.33
	7	4175.969	4624.679
	9	4605.624	4616.749
	10	4605.762	4617.153
	18	5000.331	5001.414
LD32431390.las	1	4597.166	4785.387
	2	4601.116	4622.186
	7	4593.898	4602.871
	9	4601.756	4612.435
	10	4601.877	4612.507
	17	4619.269	4623.337
LD32431393.las	1	4593.692	4683.964
	2	4600.434	4621.871
	7	4588.541	4604

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	9	4600.237	4606.595
	10	4600.516	4607.261
	17	4621.073	4624.512
LD32431396.las	1	4590.782	4825.345
	2	4595.962	4649.617
	7	4223.364	4627.232
	17	4620.982	4627.176
LD32461387.las	1	4609.787	4709.623
	2	4609.272	4650.447
	7	4610.129	4626.91
LD32461390.las	1	4594.207	4755.322
	2	4594.121	4635.247
	7	3995.53	4615.86
	9	4594.089	4598.249
	10	4594.279	4599.299
LD32461393.las	1	4588.111	4688.573
	2	4595.211	4631.739
	7	4368.505	4597.589
	9	4594.971	4605.552
	10	4595.184	4607.497
	18	10679.411	10679.539
LD32461396.las	1	4588.193	4689.462
	2	4592.75	4654.8
	7	4585.814	4620.283
LD32491390.las	1	4602.94	4733.006
	2	4602.491	4637.025
	7	4299.653	4612.419
LD32491393.las	1	4587.159	4673.094
	2	4591.969	4627.14
	7	4577.711	4591.808
	9	4593.895	4598.997
	10	4594.213	4602.907
	18	4844.436	4844.436
LD32491396.las	1	4587.409	4689.239
	2	4590.48	4616.29
	7	4576.431	4601.014
	9	4590.165	4614.141
	10	4590.342	4614.285
LD32491399.las	1	4600.886	4687.015

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	2	4603.193	4656.533
	7	4592.947	4636.323
	9	4610.552	4631.559
	10	4613.252	4632.343
	18	6156.946	6222.451
LD32521393.las	1	4534.761	4687.924
	2	4539.089	4649.44
	7	4453.282	4588.888
	9	4590.847	4595.299
	10	4590.9	4595.696
LD32521396.las	1	4581.612	4676.894
	2	4586.9	4634.902
	7	4552.317	4609.029
	9	4586.894	4598.882
	10	4586.884	4598.934
LD35101333.las	1	4249.821	4314.004
	2	4249.056	4263.118
LD35101336.las	1	4241.517	4306.382
	2	4245.054	4261.953
LD35101339.las	1	4235.845	4328.318
	2	4242.8	4257.439
	7	4234.644	4234.644
LD35101342.las	1	4230.598	4307.058
	2	4230.205	4268.056
	17	4259.572	4262.275
	18	4561.779	4561.897
LD35101345.las	1	4231.661	4314.676
	2	4231.265	4258.919
	7	4227.459	4227.459
LD35131324.las	1	4274.89	4346.523
	2	4273.751	4310.703
	9	4276.871	4286.022
	10	4276.999	4285.254
	18	4621.3	4808.662
LD35131327.las	1	4246.373	4354.122
	2	4251.99	4287.865
	9	4252.905	4265.29
	10	4252.892	4265.808
	18	4543.311	4543.311

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD35131330.las	1	4247.081	4317.957
	2	4247.902	4265.992
	9	4247.787	4254.273
	10	4247.8	4255.047
	18	4900.961	4900.961
LD35131333.las	1	4239.768	4427.412
	2	4239.519	4264.864
	18	4483.626	4483.626
LD35131336.las	1	4240.352	4449.276
	2	4241.616	4252.163
	18	4521.11	4539.755
LD35131339.las	1	4227.101	4457.324
	2	4226.616	4252.2
	7	4234.063	4234.68
LD35131342.las	1	4226.684	4330.985
	2	4224.624	4263.328
LD35131345.las	1	4223.43	4366.874
	2	4224.765	4258.164
	7	4224.752	4224.752
LD35131348.las	1	4225.352	4299.293
	2	4228.62	4239.05
LD35161321.las	1	4278.797	4446.172
	2	4277.905	4337.147
	7	4298.384	4298.384
LD35161324.las	1	4267.029	4496.497
	2	4265.723	4305.723
	7	4265.3	4265.3
	9	4266.999	4278.203
	10	4267.026	4277.947
LD35161327.las	1	4250.638	4342.262
	2	4250.5	4279.184
	9	4250.825	4251.881
	10	4250.953	4251.743
LD35161330.las	1	4241.077	4325.191
	2	4240.723	4265.31
	9	4243.751	4251.563
	10	4243.794	4251.586
LD35161333.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4237.475	4443.128
	2	4236.734	4256.704
	9	4239.496	4247.101
	10	4239.585	4248.098
LD35161336.las	1	4231.304	4313.892
	2	4229.883	4246.642
LD35161339.las	1	4223.377	4335.687
	2	4223.125	4255.825
LD35161342.las	1	4223.371	4321.592
	2	4222.15	4264.913
	7	4222.872	4222.964
	9	4229.519	4230.631
	10	4229.604	4231.579
LD35161345.las	1	4218.587	4429.404
	2	4217.971	4259.824
	7	4218.417	4218.417
	17	4257.783	4260.251
LD35161348.las	1	4219.726	4286.547
	2	4218.187	4235.933
	10	4230.06	4232.862
	17	4232.285	4233.62
LD35161351.las	1	4198.656	4291.015
	2	4197.682	4232.537
LD35191324.las	1	4258.19	4294.624
	2	4257.767	4294.407
	7	3781.676	4257.498
	9	4267.121	4279.266
	10	4267.15	4279.25
	17	4280.835	4281.599
LD35191327.las	1	4250.95	4325.329
	2	4249.887	4270.749
	18	4545.85	4769.466
LD35191330.las	1	4241.396	4297.747
	2	4241.038	4272.449
	7	3998.64	4038.985
	9	4240.913	4247.544
	10	4240.927	4247.475
	18	4538.022	4538.022
LD35191333.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4237.265	4332.058
	2	4236.888	4254.49
	9	4240.854	4244.463
	10	4240.917	4244.87
LD35191336.las	1	4227.042	4327.957
	2	4225.74	4256.97
	18	4965.948	4966.073
LD35191339.las	1	4221.589	4332.291
	2	4224.509	4252.508
LD35191342.las	1	4227.016	4428.341
	2	4225.959	4248.564
	7	4118.063	4118.063
LD35191345.las	1	4220.031	4306.389
	2	4218.774	4245.917
LD35191348.las	1	4215.638	4238.646
	2	4216.845	4234.883
	7	3749.743	3749.743
LD35191351.las	1	4211.832	4414.975
	2	4211.438	4227.889
	7	3703.201	4207.318
	10	4221.389	4223.935
	17	4222.104	4224.109
LD35191354.las	1	4187.049	4358.633
	2	4186.773	4222.36
	7	4181.622	4181.622
	9	4189.919	4190.671
	10	4190.126	4212.882
	17	4212.232	4213.01
	18	10716.701	10716.842
LD35221324.las	1	4253.902	4327.088
	2	4253.039	4290.552
	7	4248.305	4248.305
	9	4268.692	4268.81
	10	4268.804	4269.119
LD35221327.las	1	4243.253	4329.785
	2	4245.661	4271.999
	7	4246.983	4246.983
LD35221330.las	1	4242.272	4327.38

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	2	4242.521	4260.29
	18	10886.392	10886.622
LD35221333.las	1	4228.807	4439.876
	2	4229.726	4250.11
	7	4234.234	4234.234
LD35221336.las	1	4229.414	4428.895
	2	4233.22	4245.438
	9	4239.634	4240.69
	10	4239.854	4240.815
LD35221339.las	1	4223.226	4407.534
	2	4221.744	4243.574
LD35221342.las	1	4221.009	4326.336
	2	4220.028	4247.679
LD35221345.las	1	4218.801	4305.096
	2	4218.479	4251.251
	17	4250.146	4253
LD35221348.las	1	4208.299	4313.659
	2	4207.698	4233.85
	9	4208.138	4209.48
	10	4207.718	4210.175
LD35221351.las	1	4204.417	4282.856
	2	4208.263	4222.954
	7	3979.756	3979.756
LD35221354.las	1	4188.558	4270.992
	2	4191.675	4216.205
	7	4188.614	4192.606
	10	4210.313	4214.024
	17	4212.682	4214.398
LD35221357.las	1	4182.137	4258.689
	2	4182.367	4205.238
	9	4183.318	4190.29
	10	4183.489	4185.661
LD35251324.las	1	4250.68	4327.091
	2	4250.671	4286.825
	7	4255.575	4255.575
LD35251327.las	1	4243.367	4350.041
	2	4242.551	4264.89

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	7	3765.685	3765.685
LD35251330.las	1	4237.383	4311.848
	2	4236.625	4256.301
LD35251333.las	1	4229.723	4308.341
	2	4229.424	4274.293
LD35251336.las	1	4227.393	4326.445
	2	4227.081	4275.556
	17	4239.745	4240.887
LD35251339.las	1	4221.409	4315.667
	2	4221.376	4274.965
	7	3592.854	4221.609
	17	4232.262	4242.108
LD35251342.las	1	4224.814	4329.329
	2	4221.773	4241.638
	17	4235.989	4236.816
LD35251345.las	1	4211.957	4291.796
	2	4219.709	4249.375
	7	3660.623	3869.402
LD35251348.las	1	4212.318	4292.236
	2	4211.609	4233.016
	7	4121.75	4140.602
LD35251351.las	1	4201.947	4269.211
	2	4204.162	4225.051
	7	4073.781	4073.781
LD35251354.las	1	4199.598	4404.45
	2	4197.636	4212.705
	7	4069.749	4069.749
	18	4987.812	4988.399
LD35251357.las	1	4183.715	4357.347
	2	4183.017	4206.481
LD35281324.las	1	4241.107	4344.565
	2	4249.358	4283.679
	7	4250.913	4250.913
LD35281327.las	1	4243.65	4331.044
	2	4243.384	4335.168
	7	3696.016	3696.016

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD35281330.las	1	4242.078	4406.704
	2	4241.74	4369.817
	7	3624.947	3630.482
	17	4251.619	4252.751
LD35281333.las	1	4237.836	4422.688
	2	4236.386	4370.319
	7	4140.625	4339.84
LD35281336.las	1	4269.558	4443.331
	2	4266.635	4333.489
	7	3541.614	3541.614
LD35281339.las	1	4225.083	4388.676
	2	4224.683	4298.298
	7	3595.488	3595.488
	17	4237.265	4253.61
	18	4959.905	4960.075
LD35281342.las	1	4218.01	4314.375
	2	4217.446	4268.997
	7	3453.071	4221.36
	17	4235.149	4258.381
LD35281345.las	1	4212.337	4304.44
	2	4214.493	4253.722
	7	3940.261	4207.377
	17	4249.312	4258.243
LD35281348.las	1	4211.153	4292.514
	2	4210.582	4227.646
	7	3530.813	3565.085
	18	4873.99	4874.528
LD35281351.las	1	4201.872	4283.774
	2	4201.022	4221.77
	10	4212.259	4213.289
	17	4211.061	4213.213
LD35281354.las	1	4202.859	4363.82
	2	4200.697	4212.974
	10	4205.336	4206.658
	17	4208.614	4209.483
	18	4572.471	4572.95
LD35281357.las	1	4180.658	4256.481
	2	4179.9	4205.382
	7	3415.804	3624.789

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD35281360.las	1	4175.7	4247.344
	2	4174.175	4188.049
	7	3914.008	3914.008
LD35311324.las	1	4268.322	4420.326
	2	4266.041	4395.172
	7	4140.415	4342.029
	18	4639.859	4814.541
LD35311327.las	1	4273.338	4494.797
	2	4271.136	4394.607
LD35311339.las	1	4264.722	4459.335
	2	4264.145	4375.017
	7	3915.153	3980.93
LD35311342.las	1	4217.679	4348.836
	2	4219.352	4310.339
	7	3951.987	3951.987
LD35311345.las	1	4211.018	4317.961
	2	4210.3	4277.777
	7	4209.194	4211.858
	17	4256.077	4264.834
	18	4769.006	5060.571
LD35311348.las	1	4209.171	4297.295
	2	4207.593	4231.931
	7	3782.355	3805.865
	18	4862.379	4862.635
LD35311351.las	1	4201.622	4276.855
	2	4199.719	4215.051
	7	3531.62	3614.504
	18	4665.276	4909.308
LD35311354.las	1	4197.232	4313.955
	2	4196.576	4209.873
	7	4195.09	4195.09
	10	4202.144	4207.298
	17	4206.31	4207.925
LD35311357.las	1	4184.398	4251.045
	2	4183.322	4202.954
	7	3451.01	3934.572
LD35311360.las	1	4172.265	4369.916
	2	4171.94	4196.688

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	7	3424.931	3764.989
LD35311363.las	1	4167.964	4249.371
	2	4167.711	4192.049
	9	4167.557	4174.096
	10	4167.876	4174.313
LD35341342.las	1	4259.768	4336.376
	2	4258.942	4326.822
LD35341345.las	1	4211.353	4443.032
	2	4210.795	4318.738
LD35341348.las	1	4201.819	4338.367
	2	4201.389	4299.05
	7	3897.128	3897.128
	17	4207.239	4224.663
	18	4795.095	4795.095
LD35341351.las	1	4198.217	4259.699
	2	4198.023	4214.506
	7	3581.915	3626.131
	17	4210.402	4211.461
LD35341354.las	1	4193.049	4260.178
	2	4192.725	4206.632
LD35341357.las	1	4189.673	4278.23
	2	4192.026	4201.343
	7	3635.088	4102.4
LD35341360.las	1	4172.262	4213.026
	2	4171.343	4198.706
	7	3829.891	3829.891
LD35341363.las	1	4165.008	4233.794
	2	4164.815	4189.664
	7	3850.028	3850.028
	9	4166.835	4173.135
	10	4166.829	4170.684
LD35341366.las	1	4160.133	4247.902
	2	4159.985	4175.336
	9	4162.977	4173.263
	10	4163.089	4169.916
	18	4462.416	4463.259
LD35371345.las	1	4265.293	4314.427

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	2	4265.067	4314.119
LD35371348.las	1	4207.282	4319.739
	2	4206.183	4294.64
LD35371351.las	1	4197.951	4284.772
	2	4197.019	4275.198
	17	4205.333	4210.549
	18	4638.209	4638.947
LD35371354.las	1	4192.223	4264.89
	2	4191.563	4208.863
	7	3777.522	4191.888
	10	4192.331	4201.491
	17	4200.382	4201.347
	18	4592.596	4618.18
LD35371357.las	1	4186.265	4256.182
	2	4190.533	4198.154
LD35371360.las	1	4184.657	4228.551
	2	4184.335	4193.066
LD35371363.las	1	4165.346	4252.439
	2	4164.713	4190.343
LD35371366.las	1	4158.407	4238.331
	2	4158.168	4182.741
	9	4158.768	4167.111
	10	4159.066	4168.328
	18	4617.625	4617.652
LD35401348.las	1	4249.312	4331.041
	2	4248.522	4331.008
	7	3519.727	3529.845
LD35401351.las	1	4203.269	4394.847
	2	4201.812	4288.804
LD35401354.las	1	4191.868	4281.839
	2	4191.416	4223.141
	10	4191.832	4195.487
	17	4195.353	4197.528
LD35401357.las	1	4185.494	4276.684
	2	4187.295	4199.345
	10	4192.114	4196.192
	17	4192.485	4196.366

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
LD35401360.las	1	4173.473	4255.697
	2	4173.036	4195.914
	7	4175.592	4176.917
LD35401363.las	1	4167.994	4241.973
	2	4166.137	4189.398
LD35401366.las	1	4156.307	4236.842
	2	4155.477	4182.958
	9	4156.662	4160.366
	10	4156.753	4161.537
LD35431351.las	1	4224.148	4353.308
	2	4223.102	4288.184
	7	4254.581	4254.581
LD35431354.las	1	4187.869	4350.926
	2	4187.141	4279.204
	9	4193.394	4194.47
	10	4193.41	4195.038
LD35431357.las	1	4181.973	4310.858
	2	4182.311	4197.793
	7	3658.976	3678.588
	10	4185.405	4193.607
	17	4192.662	4194.746
LD35431360.las	1	4168.519	4304.854
	2	4167.429	4194.224
	18	4759.049	4759.62
LD35431363.las	1	4162.173	4277.009
	2	4161.396	4189.499
	7	3790.051	3790.051
	17	4178.991	4182.206
	18	4416.3	4600.033
LD35431366.las	1	4157.196	4295.195
	2	4156.55	4181.219
LD35461354.las	1	4193.564	4305.008
	2	4192.731	4305.08
	9	4193.486	4194.454
	10	4193.607	4194.637
LD35461357.las	1	4181.314	4286.146
	2	4179.992	4241.36
	9	4183.459	4194.49

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	10	4183.256	4194.47
	17	4187.741	4188.637
	18	4615.086	4615.234
LD35461360.las	1	4177.846	4254.519
	2	4175.818	4190.375
	10	4185.795	4188.131
	17	4187.246	4187.958
LD35461363.las	1	4164.923	4369.05
	2	4164.017	4182.994
LD35461366.las	1	4158.227	4234.949
	2	4157.406	4175.923
	18	4508.269	4508.406
LD35491354.las	1	4241.494	4313.01
	2	4240.313	4312.934
	7	3606.666	3606.666
	18	4514.879	4538.603
LD35491357.las	1	4181.711	4283.807
	2	4180.982	4283.643
	9	4183.318	4184.89
	10	4183.377	4184.769
	17	4185.093	4239.322
	18	4861.053	4884.856
LD35491360.las	1	4171.015	4258.515
	2	4175.556	4218.955
	7	4168.23	4168.23
LD35491363.las	1	4161.881	4245.818
	2	4161.183	4183.938
	9	4168.066	4168.886
	10	4168.049	4169.572
LD35491366.las	1	4156.481	4255.178
	2	4155.907	4180.32
	9	4167.882	4168.561
	10	4167.925	4169.421
LD35521357.las	1	4205.451	4279.444
	2	4203.282	4279.483
LD35521360.las	1	4178.758	4266.862
	2	4178.135	4253.696
LD35521363.las			

DPH-1.4 Report on Elevation by Class for Tiled Data - continued

File	Class	Z Min	Z Max
	1	4169.155	4249.509
	2	4168.955	4204.962

DPH-2 Report on Full Waveform (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "If full waveform data are recorded during collection, the waveform packets shall be delivered. LAS Specification version 1.4 deliverables including waveform data shall use external auxiliary files with the extension .wdp to store waveform packet data. See the LAS Specification version 1.4 for additional information (American Society for Photogrammetry and Remote Sensing, 2011)."

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

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

No waveform data (WPD) files are included in this dataset.

DPH-2 Report on Full Waveform (Tiled Data)

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

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

No waveform data (WPD) files are included in this dataset.

DPH-3 Report on Time of Global Positioning System Data (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "The time of global positioning system (GPS) data shall 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 109. See the LAS Specification version 1.4 for additional information (American Society for Photogrammetry and Remote Sensing, 2013)."

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

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	GPS Time Type
1004.las	Adjusted GPS Time
1007.las	Adjusted GPS Time
1015.las	Adjusted GPS Time
1017.las	Adjusted GPS Time
1020.las	Adjusted GPS Time
1044.las	Adjusted GPS Time
1045.las	Adjusted GPS Time
1046.las	Adjusted GPS Time
1047.las	Adjusted GPS Time
1048.las	Adjusted GPS Time
1049.las	Adjusted GPS Time
1050.las	Adjusted GPS Time
1051.las	Adjusted GPS Time
1052.las	Adjusted GPS Time
1053.las	Adjusted GPS Time
1054.las	Adjusted GPS Time
1055.las	Adjusted GPS Time
1056.las	Adjusted GPS Time
1057.las	Adjusted GPS Time
1081.las	Adjusted GPS Time
1082.las	Adjusted GPS Time
1083.las	Adjusted GPS Time
1084.las	Adjusted GPS Time
1158.las	Adjusted GPS Time
1159.las	Adjusted GPS Time
1160.las	Adjusted GPS Time
1177.las	Adjusted GPS Time
1178.las	Adjusted GPS Time
1197.las	Adjusted GPS Time
1218.las	Adjusted GPS Time
1219.las	Adjusted GPS Time
1220.las	Adjusted GPS Time
1221.las	Adjusted GPS Time
1222.las	Adjusted GPS Time
1223.las	Adjusted GPS Time
1224.las	Adjusted GPS Time
1225.las	Adjusted GPS Time
1226.las	Adjusted GPS Time
1227.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Swath Data) - continued

<u>File</u>	<u>GPS Time Type</u>
1229.las	Adjusted GPS Time
1236.las	Adjusted GPS Time
1237.las	Adjusted GPS Time
1238.las	Adjusted GPS Time
2002.las	Adjusted GPS Time
2012.las	Adjusted GPS Time
2041.las	Adjusted GPS Time
2048.las	Adjusted GPS Time
2049.las	Adjusted GPS Time
2103.las	Adjusted GPS Time
2104.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

File	GPS Time Type
LD31531420.las	Adjusted GPS Time
LD31531423.las	Adjusted GPS Time
LD31531426.las	Adjusted GPS Time
LD31561408.las	Adjusted GPS Time
LD31561411.las	Adjusted GPS Time
LD31561414.las	Adjusted GPS Time
LD31561417.las	Adjusted GPS Time
LD31591405.las	Adjusted GPS Time
LD31591408.las	Adjusted GPS Time
LD31591411.las	Adjusted GPS Time
LD31591414.las	Adjusted GPS Time
LD31621402.las	Adjusted GPS Time
LD31621405.las	Adjusted GPS Time
LD31621408.las	Adjusted GPS Time
LD31621411.las	Adjusted GPS Time
LD31651402.las	Adjusted GPS Time
LD31651405.las	Adjusted GPS Time
LD31651408.las	Adjusted GPS Time
LD31651411.las	Adjusted GPS Time
LD31681402.las	Adjusted GPS Time
LD31681405.las	Adjusted GPS Time
LD31681408.las	Adjusted GPS Time
LD31711399.las	Adjusted GPS Time
LD31711402.las	Adjusted GPS Time
LD31711405.las	Adjusted GPS Time
LD31711408.las	Adjusted GPS Time
LD31741399.las	Adjusted GPS Time
LD31741402.las	Adjusted GPS Time
LD31741405.las	Adjusted GPS Time
LD31741408.las	Adjusted GPS Time
LD31771399.las	Adjusted GPS Time
LD31771402.las	Adjusted GPS Time
LD31771405.las	Adjusted GPS Time
LD31771408.las	Adjusted GPS Time
LD31801399.las	Adjusted GPS Time
LD31801402.las	Adjusted GPS Time
LD31801405.las	Adjusted GPS Time
LD31801408.las	Adjusted GPS Time
LD31831399.las	Adjusted GPS Time
LD31831402.las	Adjusted GPS Time
LD31831405.las	Adjusted GPS Time
LD31831408.las	Adjusted GPS Time
LD31861399.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

File	GPS Time Type
LD31861402.las	Adjusted GPS Time
LD31861405.las	Adjusted GPS Time
LD31861408.las	Adjusted GPS Time
LD31891399.las	Adjusted GPS Time
LD31891402.las	Adjusted GPS Time
LD31891405.las	Adjusted GPS Time
LD31891408.las	Adjusted GPS Time
LD31921402.las	Adjusted GPS Time
LD31921405.las	Adjusted GPS Time
LD31951396.las	Adjusted GPS Time
LD31951399.las	Adjusted GPS Time
LD31951402.las	Adjusted GPS Time
LD31951405.las	Adjusted GPS Time
LD31981396.las	Adjusted GPS Time
LD31981399.las	Adjusted GPS Time
LD31981402.las	Adjusted GPS Time
LD31981405.las	Adjusted GPS Time
LD32011399.las	Adjusted GPS Time
LD32011402.las	Adjusted GPS Time
LD32011405.las	Adjusted GPS Time
LD32011408.las	Adjusted GPS Time
LD32041402.las	Adjusted GPS Time
LD32041405.las	Adjusted GPS Time
LD32041408.las	Adjusted GPS Time
LD32071333.las	Adjusted GPS Time
LD32071336.las	Adjusted GPS Time
LD32071339.las	Adjusted GPS Time
LD32071342.las	Adjusted GPS Time
LD32071345.las	Adjusted GPS Time
LD32071348.las	Adjusted GPS Time
LD32071351.las	Adjusted GPS Time
LD32071354.las	Adjusted GPS Time
LD32071357.las	Adjusted GPS Time
LD32071360.las	Adjusted GPS Time
LD32071363.las	Adjusted GPS Time
LD32071366.las	Adjusted GPS Time
LD32071369.las	Adjusted GPS Time
LD32071372.las	Adjusted GPS Time
LD32071375.las	Adjusted GPS Time
LD32071378.las	Adjusted GPS Time
LD32071399.las	Adjusted GPS Time
LD32071402.las	Adjusted GPS Time
LD32071405.las	Adjusted GPS Time
LD32071408.las	Adjusted GPS Time
LD32101333.las	Adjusted GPS Time
LD32101336.las	Adjusted GPS Time
LD32101339.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

<u>File</u>	<u>GPS Time Type</u>
LD32101342.las	Adjusted GPS Time
LD32101345.las	Adjusted GPS Time
LD32101348.las	Adjusted GPS Time
LD32101351.las	Adjusted GPS Time
LD32101354.las	Adjusted GPS Time
LD32101357.las	Adjusted GPS Time
LD32101360.las	Adjusted GPS Time
LD32101363.las	Adjusted GPS Time
LD32101366.las	Adjusted GPS Time
LD32101369.las	Adjusted GPS Time
LD32101372.las	Adjusted GPS Time
LD32101375.las	Adjusted GPS Time
LD32101378.las	Adjusted GPS Time
LD32101399.las	Adjusted GPS Time
LD32101402.las	Adjusted GPS Time
LD32101405.las	Adjusted GPS Time
LD32101408.las	Adjusted GPS Time
LD32131333.las	Adjusted GPS Time
LD32131336.las	Adjusted GPS Time
LD32131339.las	Adjusted GPS Time
LD32131342.las	Adjusted GPS Time
LD32131345.las	Adjusted GPS Time
LD32131348.las	Adjusted GPS Time
LD32131351.las	Adjusted GPS Time
LD32131354.las	Adjusted GPS Time
LD32131357.las	Adjusted GPS Time
LD32131360.las	Adjusted GPS Time
LD32131363.las	Adjusted GPS Time
LD32131366.las	Adjusted GPS Time
LD32131369.las	Adjusted GPS Time
LD32131372.las	Adjusted GPS Time
LD32131375.las	Adjusted GPS Time
LD32131378.las	Adjusted GPS Time
LD32131399.las	Adjusted GPS Time
LD32131402.las	Adjusted GPS Time
LD32131405.las	Adjusted GPS Time
LD32131408.las	Adjusted GPS Time
LD32161333.las	Adjusted GPS Time
LD32161336.las	Adjusted GPS Time
LD32161339.las	Adjusted GPS Time
LD32161342.las	Adjusted GPS Time
LD32161345.las	Adjusted GPS Time
LD32161348.las	Adjusted GPS Time
LD32161351.las	Adjusted GPS Time
LD32161354.las	Adjusted GPS Time
LD32161357.las	Adjusted GPS Time
LD32161360.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

File	GPS Time Type
LD32161363.las	Adjusted GPS Time
LD32161366.las	Adjusted GPS Time
LD32161369.las	Adjusted GPS Time
LD32161372.las	Adjusted GPS Time
LD32161375.las	Adjusted GPS Time
LD32161378.las	Adjusted GPS Time
LD32161399.las	Adjusted GPS Time
LD32161402.las	Adjusted GPS Time
LD32161405.las	Adjusted GPS Time
LD32191333.las	Adjusted GPS Time
LD32191336.las	Adjusted GPS Time
LD32191339.las	Adjusted GPS Time
LD32191342.las	Adjusted GPS Time
LD32191345.las	Adjusted GPS Time
LD32191348.las	Adjusted GPS Time
LD32191351.las	Adjusted GPS Time
LD32191354.las	Adjusted GPS Time
LD32191357.las	Adjusted GPS Time
LD32191360.las	Adjusted GPS Time
LD32191363.las	Adjusted GPS Time
LD32191366.las	Adjusted GPS Time
LD32191369.las	Adjusted GPS Time
LD32191372.las	Adjusted GPS Time
LD32191375.las	Adjusted GPS Time
LD32191378.las	Adjusted GPS Time
LD32191399.las	Adjusted GPS Time
LD32191402.las	Adjusted GPS Time
LD32191405.las	Adjusted GPS Time
LD32221333.las	Adjusted GPS Time
LD32221336.las	Adjusted GPS Time
LD32221339.las	Adjusted GPS Time
LD32221342.las	Adjusted GPS Time
LD32221345.las	Adjusted GPS Time
LD32221348.las	Adjusted GPS Time
LD32221351.las	Adjusted GPS Time
LD32221354.las	Adjusted GPS Time
LD32221357.las	Adjusted GPS Time
LD32221360.las	Adjusted GPS Time
LD32221363.las	Adjusted GPS Time
LD32221366.las	Adjusted GPS Time
LD32221369.las	Adjusted GPS Time
LD32221372.las	Adjusted GPS Time
LD32221375.las	Adjusted GPS Time
LD32221378.las	Adjusted GPS Time
LD32221396.las	Adjusted GPS Time
LD32221399.las	Adjusted GPS Time
LD32221402.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

<u>File</u>	<u>GPS Time Type</u>
LD32221405.las	Adjusted GPS Time
LD32251333.las	Adjusted GPS Time
LD32251336.las	Adjusted GPS Time
LD32251339.las	Adjusted GPS Time
LD32251342.las	Adjusted GPS Time
LD32251345.las	Adjusted GPS Time
LD32251348.las	Adjusted GPS Time
LD32251351.las	Adjusted GPS Time
LD32251354.las	Adjusted GPS Time
LD32251357.las	Adjusted GPS Time
LD32251360.las	Adjusted GPS Time
LD32251363.las	Adjusted GPS Time
LD32251366.las	Adjusted GPS Time
LD32251369.las	Adjusted GPS Time
LD32251372.las	Adjusted GPS Time
LD32251375.las	Adjusted GPS Time
LD32251378.las	Adjusted GPS Time
LD32251393.las	Adjusted GPS Time
LD32251396.las	Adjusted GPS Time
LD32251399.las	Adjusted GPS Time
LD32251402.las	Adjusted GPS Time
LD32251405.las	Adjusted GPS Time
LD32281333.las	Adjusted GPS Time
LD32281336.las	Adjusted GPS Time
LD32281339.las	Adjusted GPS Time
LD32281342.las	Adjusted GPS Time
LD32281345.las	Adjusted GPS Time
LD32281348.las	Adjusted GPS Time
LD32281351.las	Adjusted GPS Time
LD32281354.las	Adjusted GPS Time
LD32281357.las	Adjusted GPS Time
LD32281360.las	Adjusted GPS Time
LD32281363.las	Adjusted GPS Time
LD32281366.las	Adjusted GPS Time
LD32281369.las	Adjusted GPS Time
LD32281372.las	Adjusted GPS Time
LD32281375.las	Adjusted GPS Time
LD32281378.las	Adjusted GPS Time
LD32281393.las	Adjusted GPS Time
LD32281396.las	Adjusted GPS Time
LD32281399.las	Adjusted GPS Time
LD32281402.las	Adjusted GPS Time
LD32281405.las	Adjusted GPS Time
LD32311333.las	Adjusted GPS Time
LD32311336.las	Adjusted GPS Time
LD32311339.las	Adjusted GPS Time
LD32311342.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

<u>File</u>	<u>GPS Time Type</u>
LD32311345.las	Adjusted GPS Time
LD32311348.las	Adjusted GPS Time
LD32311351.las	Adjusted GPS Time
LD32311354.las	Adjusted GPS Time
LD32311357.las	Adjusted GPS Time
LD32311360.las	Adjusted GPS Time
LD32311363.las	Adjusted GPS Time
LD32311366.las	Adjusted GPS Time
LD32311369.las	Adjusted GPS Time
LD32311372.las	Adjusted GPS Time
LD32311375.las	Adjusted GPS Time
LD32311378.las	Adjusted GPS Time
LD32311378.las	Adjusted GPS Time
LD32311393.las	Adjusted GPS Time
LD32311396.las	Adjusted GPS Time
LD32311399.las	Adjusted GPS Time
LD32341333.las	Adjusted GPS Time
LD32341336.las	Adjusted GPS Time
LD32341339.las	Adjusted GPS Time
LD32341342.las	Adjusted GPS Time
LD32341345.las	Adjusted GPS Time
LD32341348.las	Adjusted GPS Time
LD32341351.las	Adjusted GPS Time
LD32341354.las	Adjusted GPS Time
LD32341357.las	Adjusted GPS Time
LD32341360.las	Adjusted GPS Time
LD32341363.las	Adjusted GPS Time
LD32341366.las	Adjusted GPS Time
LD32341369.las	Adjusted GPS Time
LD32341372.las	Adjusted GPS Time
LD32341375.las	Adjusted GPS Time
LD32341378.las	Adjusted GPS Time
LD32341390.las	Adjusted GPS Time
LD32341393.las	Adjusted GPS Time
LD32341396.las	Adjusted GPS Time
LD32341399.las	Adjusted GPS Time
LD32371333.las	Adjusted GPS Time
LD32371336.las	Adjusted GPS Time
LD32371339.las	Adjusted GPS Time
LD32371342.las	Adjusted GPS Time
LD32371345.las	Adjusted GPS Time
LD32371348.las	Adjusted GPS Time
LD32371351.las	Adjusted GPS Time
LD32371354.las	Adjusted GPS Time
LD32371357.las	Adjusted GPS Time
LD32371360.las	Adjusted GPS Time
LD32371363.las	Adjusted GPS Time
LD32371366.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

<u>File</u>	<u>GPS Time Type</u>
LD32371369.las	Adjusted GPS Time
LD32371372.las	Adjusted GPS Time
LD32371375.las	Adjusted GPS Time
LD32371378.las	Adjusted GPS Time
LD32371387.las	Adjusted GPS Time
LD32371390.las	Adjusted GPS Time
LD32371393.las	Adjusted GPS Time
LD32371396.las	Adjusted GPS Time
LD32371399.las	Adjusted GPS Time
LD32401333.las	Adjusted GPS Time
LD32401336.las	Adjusted GPS Time
LD32401339.las	Adjusted GPS Time
LD32401342.las	Adjusted GPS Time
LD32401345.las	Adjusted GPS Time
LD32401348.las	Adjusted GPS Time
LD32401351.las	Adjusted GPS Time
LD32401354.las	Adjusted GPS Time
LD32401357.las	Adjusted GPS Time
LD32401360.las	Adjusted GPS Time
LD32401363.las	Adjusted GPS Time
LD32401366.las	Adjusted GPS Time
LD32401369.las	Adjusted GPS Time
LD32401372.las	Adjusted GPS Time
LD32401375.las	Adjusted GPS Time
LD32401378.las	Adjusted GPS Time
LD32401387.las	Adjusted GPS Time
LD32401390.las	Adjusted GPS Time
LD32401393.las	Adjusted GPS Time
LD32401396.las	Adjusted GPS Time
LD32431333.las	Adjusted GPS Time
LD32431336.las	Adjusted GPS Time
LD32431339.las	Adjusted GPS Time
LD32431342.las	Adjusted GPS Time
LD32431345.las	Adjusted GPS Time
LD32431348.las	Adjusted GPS Time
LD32431351.las	Adjusted GPS Time
LD32431354.las	Adjusted GPS Time
LD32431357.las	Adjusted GPS Time
LD32431387.las	Adjusted GPS Time
LD32431390.las	Adjusted GPS Time
LD32431393.las	Adjusted GPS Time
LD32431396.las	Adjusted GPS Time
LD32461387.las	Adjusted GPS Time
LD32461390.las	Adjusted GPS Time
LD32461393.las	Adjusted GPS Time
LD32461396.las	Adjusted GPS Time
LD32491390.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

<u>File</u>	<u>GPS Time Type</u>
LD32491393.las	Adjusted GPS Time
LD32491396.las	Adjusted GPS Time
LD32491399.las	Adjusted GPS Time
LD32521393.las	Adjusted GPS Time
LD32521396.las	Adjusted GPS Time
LD35101333.las	Adjusted GPS Time
LD35101336.las	Adjusted GPS Time
LD35101339.las	Adjusted GPS Time
LD35101342.las	Adjusted GPS Time
LD35101345.las	Adjusted GPS Time
LD35131324.las	Adjusted GPS Time
LD35131327.las	Adjusted GPS Time
LD35131330.las	Adjusted GPS Time
LD35131333.las	Adjusted GPS Time
LD35131336.las	Adjusted GPS Time
LD35131339.las	Adjusted GPS Time
LD35131342.las	Adjusted GPS Time
LD35131345.las	Adjusted GPS Time
LD35131348.las	Adjusted GPS Time
LD35161321.las	Adjusted GPS Time
LD35161324.las	Adjusted GPS Time
LD35161327.las	Adjusted GPS Time
LD35161330.las	Adjusted GPS Time
LD35161333.las	Adjusted GPS Time
LD35161336.las	Adjusted GPS Time
LD35161339.las	Adjusted GPS Time
LD35161342.las	Adjusted GPS Time
LD35161345.las	Adjusted GPS Time
LD35161348.las	Adjusted GPS Time
LD35161351.las	Adjusted GPS Time
LD35191324.las	Adjusted GPS Time
LD35191327.las	Adjusted GPS Time
LD35191330.las	Adjusted GPS Time
LD35191333.las	Adjusted GPS Time
LD35191336.las	Adjusted GPS Time
LD35191339.las	Adjusted GPS Time
LD35191342.las	Adjusted GPS Time
LD35191345.las	Adjusted GPS Time
LD35191348.las	Adjusted GPS Time
LD35191351.las	Adjusted GPS Time
LD35191354.las	Adjusted GPS Time
LD35221324.las	Adjusted GPS Time
LD35221327.las	Adjusted GPS Time
LD35221330.las	Adjusted GPS Time
LD35221333.las	Adjusted GPS Time
LD35221336.las	Adjusted GPS Time
LD35221339.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

<u>File</u>	<u>GPS Time Type</u>
LD35221342.las	Adjusted GPS Time
LD35221345.las	Adjusted GPS Time
LD35221348.las	Adjusted GPS Time
LD35221351.las	Adjusted GPS Time
LD35221354.las	Adjusted GPS Time
LD35221357.las	Adjusted GPS Time
LD35251324.las	Adjusted GPS Time
LD35251327.las	Adjusted GPS Time
LD35251330.las	Adjusted GPS Time
LD35251333.las	Adjusted GPS Time
LD35251336.las	Adjusted GPS Time
LD35251339.las	Adjusted GPS Time
LD35251342.las	Adjusted GPS Time
LD35251345.las	Adjusted GPS Time
LD35251348.las	Adjusted GPS Time
LD35251351.las	Adjusted GPS Time
LD35251354.las	Adjusted GPS Time
LD35251357.las	Adjusted GPS Time
LD35281324.las	Adjusted GPS Time
LD35281327.las	Adjusted GPS Time
LD35281330.las	Adjusted GPS Time
LD35281333.las	Adjusted GPS Time
LD35281336.las	Adjusted GPS Time
LD35281339.las	Adjusted GPS Time
LD35281342.las	Adjusted GPS Time
LD35281345.las	Adjusted GPS Time
LD35281348.las	Adjusted GPS Time
LD35281351.las	Adjusted GPS Time
LD35281354.las	Adjusted GPS Time
LD35281357.las	Adjusted GPS Time
LD35281360.las	Adjusted GPS Time
LD35311324.las	Adjusted GPS Time
LD35311327.las	Adjusted GPS Time
LD35311339.las	Adjusted GPS Time
LD35311342.las	Adjusted GPS Time
LD35311345.las	Adjusted GPS Time
LD35311348.las	Adjusted GPS Time
LD35311351.las	Adjusted GPS Time
LD35311354.las	Adjusted GPS Time
LD35311357.las	Adjusted GPS Time
LD35311360.las	Adjusted GPS Time
LD35311363.las	Adjusted GPS Time
LD35341342.las	Adjusted GPS Time
LD35341345.las	Adjusted GPS Time
LD35341348.las	Adjusted GPS Time
LD35341351.las	Adjusted GPS Time
LD35341354.las	Adjusted GPS Time

DPH-3 Report on Time of Global Positioning System Data (Tiled Data) - continued

<u>File</u>	<u>GPS Time Type</u>
LD35341357.las	Adjusted GPS Time
LD35341360.las	Adjusted GPS Time
LD35341363.las	Adjusted GPS Time
LD35341366.las	Adjusted GPS Time
LD35371345.las	Adjusted GPS Time
LD35371348.las	Adjusted GPS Time
LD35371351.las	Adjusted GPS Time
LD35371354.las	Adjusted GPS Time
LD35371357.las	Adjusted GPS Time
LD35371360.las	Adjusted GPS Time
LD35371363.las	Adjusted GPS Time
LD35371366.las	Adjusted GPS Time
LD35401348.las	Adjusted GPS Time
LD35401351.las	Adjusted GPS Time
LD35401354.las	Adjusted GPS Time
LD35401357.las	Adjusted GPS Time
LD35401360.las	Adjusted GPS Time
LD35401363.las	Adjusted GPS Time
LD35401366.las	Adjusted GPS Time
LD35431351.las	Adjusted GPS Time
LD35431354.las	Adjusted GPS Time
LD35431357.las	Adjusted GPS Time
LD35431360.las	Adjusted GPS Time
LD35431363.las	Adjusted GPS Time
LD35431366.las	Adjusted GPS Time
LD35461354.las	Adjusted GPS Time
LD35461357.las	Adjusted GPS Time
LD35461360.las	Adjusted GPS Time
LD35461363.las	Adjusted GPS Time
LD35461366.las	Adjusted GPS Time
LD35491354.las	Adjusted GPS Time
LD35491357.las	Adjusted GPS Time
LD35491360.las	Adjusted GPS Time
LD35491363.las	Adjusted GPS Time
LD35491366.las	Adjusted GPS Time
LD35521357.las	Adjusted GPS Time
LD35521360.las	Adjusted GPS Time
LD35521363.las	Adjusted GPS Time

DPH-4 Report on Datums (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "All data collected shall be tied to the datums listed below: For the Conterminous United States (CONUS), unless otherwise specified by the user and agreed to in advance by the USGS–NGP:

The horizontal datum for latitude and longitude and ellipsoid heights will be the North American Datum of 1983 (NAD 83) using the most recently published adjustment of the National Geodetic Survey (NGS) (currently NAD 83, epoch 2010.00). The vertical datum for orthometric heights will be the North American Vertical Datum of 1988 (NAVD 88). The geoid model used to convert between ellipsoid heights and orthometric heights will be the latest hybrid geoid model of NGS, supporting the latest realization of NAD 83 (currently GEOID12B model)."

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

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
1004.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1007.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1015.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1017.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1020.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1044.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1045.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1046.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1047.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1048.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1049.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1050.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1051.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1052.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1053.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1054.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1055.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1056.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1057.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1081.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1082.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1083.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1084.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1158.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Swath Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
1159.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1160.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1177.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1178.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1197.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1218.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1219.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1220.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1221.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1222.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1223.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1224.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1225.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1226.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1227.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1229.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1236.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1237.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
1238.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
2002.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
2012.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
2041.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
2048.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
2049.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
2103.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
2104.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data)

The USGS Lidar Base Specification Version 1.2 states: "All data collected shall be tied to the datums listed below: For the Conterminous United States (CONUS), unless otherwise specified by the user and agreed to in advance by the USGS–NGP:

The horizontal datum for latitude and longitude and ellipsoid heights will be the North American Datum of 1983 (NAD 83) using the most recently published adjustment of the National Geodetic Survey (NGS) (currently NAD 83, epoch 2010.00). The vertical datum for orthometric heights will be the North American Vertical Datum of 1988 (NAVD 88). The geoid model used to convert between ellipsoid heights and orthometric heights will be the latest hybrid geoid model of NGS, supporting the latest realization of NAD 83 (currently GEOID12B model)."

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

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD31531420.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31531423.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31531426.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31561408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31561411.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31561414.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31561417.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31591405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31591408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31591411.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31591414.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31621402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31621405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31621408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31621411.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31651402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31651405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31651408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31651411.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31681402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31681405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31681408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31711399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31711402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD31711405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31711408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31741399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31741402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31741405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31741408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31771399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31771402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31771405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31771408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31801399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31801402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31801405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31801408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31831399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31831402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31831405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31831408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31861399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31861402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31861405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31861408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31891399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31891402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31891405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31891408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31921402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31921405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31951396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31951399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31951402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31951405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31981396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31981399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD31981402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD31981405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32011399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32011402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32011405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32011408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32041402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32041405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32041408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32071408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD32101348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32101408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32131405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD32131408.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32161405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD32191375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32191405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32221405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD32251360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32251405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281402.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32281405.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD32311336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32311399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD32341390.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32341399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371387.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371390.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32371399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD32401360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401369.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401372.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401375.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401378.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401387.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401390.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32401396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431387.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431390.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32431396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32461387.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32461390.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32461393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32461396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32491390.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32491393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32491396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32491399.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32521393.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD32521396.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD35101333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35101336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35101339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35101342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35101345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131324.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131327.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131330.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35131348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161321.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161324.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161327.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161330.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35161351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191324.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191327.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191330.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD35191351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35191354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221324.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221327.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221330.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35221357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251324.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251327.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251330.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35251357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281324.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281327.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281330.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281333.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281336.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD35281348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35281360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311324.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311327.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311339.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35311363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341342.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35341366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35371345.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35371348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35371351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35371354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35371357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35371360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35371363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35371366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35401348.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-4 Report on Datums (Tiled Data) - continued

File	Horizontal Datum	EPSG Code	Vertical Datum	EPSG Code
LD35401351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35401354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35401357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35401360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35401363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35401366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35431351.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35431354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35431357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35431360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35431363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35431366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35461354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35461357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35461360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35461363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35461366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35491354.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35491357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35491360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35491363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35491366.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35521357.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35521360.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103
LD35521363.las	NAD83 (National Spatial Reference System 2011)	1116	North American Vertical Datum 1988	5103

DPH-5 Report on Coordinate Reference System (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "Lidar data for CONUS will be processed and delivered in the most accurate Coordinate Reference System (CRS) available for a project location, usually State Plane Coordinate System (SPCS) or a state system. Universal Transverse Mercator (UTM) also may be used, particularly when a single suitable local SPCS is not available, UTM is needed for compatibility with existing data for the area, or is needed for other reasons. Other CRSs may be used with prior approval from the USGS–NGP. For Alaska, American Samoa, Commonwealth of the Northern Mariana Islands, Guam, Hawaii, Puerto Rico, U.S. Virgin Islands, and other areas, the horizontal and vertical CRS (specifically including the units) shall be specified and agreed to in advance of collection by the USGS–NGP and all collection partners. In all cases, the CRS that is used shall be recognized and published by the European Petroleum Survey Group (EPSG) and correctly recognized by industry standard geographic information system (GIS) software applications."

The purpose of this section is to show the coordinate reference systems of the LAS files for the lidar swath data.

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	EPSG Code	Coordinate Reference System
1004.las	6430	NAD83(2011) / Colorado North (ftUS)
1007.las	6430	NAD83(2011) / Colorado North (ftUS)
1015.las	6430	NAD83(2011) / Colorado North (ftUS)
1017.las	6430	NAD83(2011) / Colorado North (ftUS)
1020.las	6430	NAD83(2011) / Colorado North (ftUS)
1044.las	6430	NAD83(2011) / Colorado North (ftUS)
1045.las	6430	NAD83(2011) / Colorado North (ftUS)
1046.las	6430	NAD83(2011) / Colorado North (ftUS)
1047.las	6430	NAD83(2011) / Colorado North (ftUS)
1048.las	6430	NAD83(2011) / Colorado North (ftUS)
1049.las	6430	NAD83(2011) / Colorado North (ftUS)
1050.las	6430	NAD83(2011) / Colorado North (ftUS)
1051.las	6430	NAD83(2011) / Colorado North (ftUS)
1052.las	6430	NAD83(2011) / Colorado North (ftUS)
1053.las	6430	NAD83(2011) / Colorado North (ftUS)
1054.las	6430	NAD83(2011) / Colorado North (ftUS)
1055.las	6430	NAD83(2011) / Colorado North (ftUS)
1056.las	6430	NAD83(2011) / Colorado North (ftUS)
1057.las	6430	NAD83(2011) / Colorado North (ftUS)
1081.las	6430	NAD83(2011) / Colorado North (ftUS)
1082.las	6430	NAD83(2011) / Colorado North (ftUS)
1083.las	6430	NAD83(2011) / Colorado North (ftUS)
1084.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Swath Data) - continued

File	EPSG Code	Coordinate Reference System
1158.las	6430	NAD83(2011) / Colorado North (ftUS)
1159.las	6430	NAD83(2011) / Colorado North (ftUS)
1160.las	6430	NAD83(2011) / Colorado North (ftUS)
1177.las	6430	NAD83(2011) / Colorado North (ftUS)
1178.las	6430	NAD83(2011) / Colorado North (ftUS)
1197.las	6430	NAD83(2011) / Colorado North (ftUS)
1218.las	6430	NAD83(2011) / Colorado North (ftUS)
1219.las	6430	NAD83(2011) / Colorado North (ftUS)
1220.las	6430	NAD83(2011) / Colorado North (ftUS)
1221.las	6430	NAD83(2011) / Colorado North (ftUS)
1222.las	6430	NAD83(2011) / Colorado North (ftUS)
1223.las	6430	NAD83(2011) / Colorado North (ftUS)
1224.las	6430	NAD83(2011) / Colorado North (ftUS)
1225.las	6430	NAD83(2011) / Colorado North (ftUS)
1226.las	6430	NAD83(2011) / Colorado North (ftUS)
1227.las	6430	NAD83(2011) / Colorado North (ftUS)
1229.las	6430	NAD83(2011) / Colorado North (ftUS)
1236.las	6430	NAD83(2011) / Colorado North (ftUS)
1237.las	6430	NAD83(2011) / Colorado North (ftUS)
1238.las	6430	NAD83(2011) / Colorado North (ftUS)
2002.las	6430	NAD83(2011) / Colorado North (ftUS)
2012.las	6430	NAD83(2011) / Colorado North (ftUS)
2041.las	6430	NAD83(2011) / Colorado North (ftUS)
2048.las	6430	NAD83(2011) / Colorado North (ftUS)
2049.las	6430	NAD83(2011) / Colorado North (ftUS)
2103.las	6430	NAD83(2011) / Colorado North (ftUS)
2104.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

The purpose of this section is to show the coordinate reference systems of the LAS files for the lidar tiled data.

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls)

File	EPSG Code	Coordinate Reference System
LD31531420.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31531423.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31531426.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31561408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31561411.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31561414.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31561417.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31591405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31591408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31591411.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31591414.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31621402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31621405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31621408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31621411.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31651402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31651405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31651408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31651411.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31681402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31681405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31681408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31711399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31711402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31711405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31711408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31741399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31741402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31741405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31741408.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

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File	EPSG Code	Coordinate Reference System
LD31771399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31771402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31771405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31771408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31801399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31801402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31801405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31801408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31831399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31831402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31831405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31831408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31861399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31861402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31861405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31861408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31891399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31891402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31891405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31891408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31921402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31921405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31951396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31951399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31951402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31951405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31981396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31981399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31981402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD31981405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32011399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32011402.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

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File	EPSG Code	Coordinate Reference System
LD32011405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32011408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32041402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32041405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32041408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32071408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101351.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

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File	EPSG Code	Coordinate Reference System
LD32101354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32101408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32131405.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

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File	EPSG Code	Coordinate Reference System
LD32131408.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32161405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191366.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

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File	EPSG Code	Coordinate Reference System
LD32191369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32191405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32221405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251345.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

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File	EPSG Code	Coordinate Reference System
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LD32251351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32251405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281378.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

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File	EPSG Code	Coordinate Reference System
LD32281393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281402.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32281405.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32311399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341354.las	6430	NAD83(2011) / Colorado North (ftUS)

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File	EPSG Code	Coordinate Reference System
LD32341357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341390.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32341399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371387.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371390.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32371396.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

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File	EPSG Code	Coordinate Reference System
LD32371399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401369.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401372.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401375.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401378.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401387.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401390.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32401396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431387.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431390.las	6430	NAD83(2011) / Colorado North (ftUS)

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File	EPSG Code	Coordinate Reference System
LD32431393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32431396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32461387.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32461390.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32461393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32461396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32491390.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32491393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32491396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32491399.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32521393.las	6430	NAD83(2011) / Colorado North (ftUS)
LD32521396.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35101333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35101336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35101339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35101342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35101345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131324.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131327.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131330.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35131348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161321.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161324.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161327.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161330.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161336.las	6430	NAD83(2011) / Colorado North (ftUS)

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File	EPSG Code	Coordinate Reference System
LD35161339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35161351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191324.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191327.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191330.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35191354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221324.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221327.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221330.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35221357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251324.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251327.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251330.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251333.las	6430	NAD83(2011) / Colorado North (ftUS)

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File	EPSG Code	Coordinate Reference System
LD35251336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35251357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281324.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281327.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281330.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281333.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281336.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35281360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311324.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311327.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311339.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35311363.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

- continued

File	EPSG Code	Coordinate Reference System
LD35341342.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35341345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35341348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35341351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35341354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35341357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35341360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35341363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35341366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35371345.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35371348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35371351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35371354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35371357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35371360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35371363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35371366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35401348.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35401351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35401354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35401357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35401360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35401363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35401366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35431351.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35431354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35431357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35431360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35431363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35431366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35461354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35461357.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-5 Report on Coordinate Reference System (Tiled Data)

- continued

File	EPSG Code	Coordinate Reference System
LD35461360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35461363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35461366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35491354.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35491357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35491360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35491363.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35491366.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35521357.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35521360.las	6430	NAD83(2011) / Colorado North (ftUS)
LD35521363.las	6430	NAD83(2011) / Colorado North (ftUS)

DPH-6 Report on Units of Reference (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "All references to the unit of measure 'Feet' or 'Foot' shall 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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	Horizontal Unit	Vertical Unit
1004.las	US Survey Foot	US survey foot
1007.las	US Survey Foot	US survey foot
1015.las	US Survey Foot	US survey foot
1017.las	US Survey Foot	US survey foot
1020.las	US Survey Foot	US survey foot
1044.las	US Survey Foot	US survey foot
1045.las	US Survey Foot	US survey foot
1046.las	US Survey Foot	US survey foot
1047.las	US Survey Foot	US survey foot
1048.las	US Survey Foot	US survey foot
1049.las	US Survey Foot	US survey foot
1050.las	US Survey Foot	US survey foot
1051.las	US Survey Foot	US survey foot
1052.las	US Survey Foot	US survey foot
1053.las	US Survey Foot	US survey foot
1054.las	US Survey Foot	US survey foot
1055.las	US Survey Foot	US survey foot
1056.las	US Survey Foot	US survey foot
1057.las	US Survey Foot	US survey foot
1081.las	US Survey Foot	US survey foot
1082.las	US Survey Foot	US survey foot
1083.las	US Survey Foot	US survey foot
1084.las	US Survey Foot	US survey foot
1158.las	US Survey Foot	US survey foot
1159.las	US Survey Foot	US survey foot
1160.las	US Survey Foot	US survey foot
1177.las	US Survey Foot	US survey foot
1178.las	US Survey Foot	US survey foot
1197.las	US Survey Foot	US survey foot
1218.las	US Survey Foot	US survey foot
1219.las	US Survey Foot	US survey foot
1220.las	US Survey Foot	US survey foot
1221.las	US Survey Foot	US survey foot
1222.las	US Survey Foot	US survey foot
1223.las	US Survey Foot	US survey foot
1224.las	US Survey Foot	US survey foot
1225.las	US Survey Foot	US survey foot
1226.las	US Survey Foot	US survey foot
1227.las	US Survey Foot	US survey foot
1229.las	US Survey Foot	US survey foot
1236.las	US Survey Foot	US survey foot
1237.las	US Survey Foot	US survey foot
1238.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Swath Data)
- continued

<u>File</u>	<u>Horizontal Unit</u>	<u>Vertical Unit</u>
2002.las	US Survey Foot	US survey foot
2012.las	US Survey Foot	US survey foot
2041.las	US Survey Foot	US survey foot
2048.las	US Survey Foot	US survey foot
2049.las	US Survey Foot	US survey foot
2103.las	US Survey Foot	US survey foot
2104.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data)

The USGS Lidar Base Specification Version 1.2 states: "All references to the unit of measure 'Feet' or 'Foot' shall 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 tiled data.

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

File	Horizontal Unit	Vertical Unit
LD31531420.las	US Survey Foot	US survey foot
LD31531423.las	US Survey Foot	US survey foot
LD31531426.las	US Survey Foot	US survey foot
LD31561408.las	US Survey Foot	US survey foot
LD31561411.las	US Survey Foot	US survey foot
LD31561414.las	US Survey Foot	US survey foot
LD31561417.las	US Survey Foot	US survey foot
LD31591405.las	US Survey Foot	US survey foot
LD31591408.las	US Survey Foot	US survey foot
LD31591411.las	US Survey Foot	US survey foot
LD31591414.las	US Survey Foot	US survey foot
LD31621402.las	US Survey Foot	US survey foot
LD31621405.las	US Survey Foot	US survey foot
LD31621408.las	US Survey Foot	US survey foot
LD31621411.las	US Survey Foot	US survey foot
LD31651402.las	US Survey Foot	US survey foot
LD31651405.las	US Survey Foot	US survey foot
LD31651408.las	US Survey Foot	US survey foot
LD31651411.las	US Survey Foot	US survey foot
LD31681402.las	US Survey Foot	US survey foot
LD31681405.las	US Survey Foot	US survey foot
LD31681408.las	US Survey Foot	US survey foot
LD31711399.las	US Survey Foot	US survey foot
LD31711402.las	US Survey Foot	US survey foot
LD31711405.las	US Survey Foot	US survey foot
LD31711408.las	US Survey Foot	US survey foot
LD31741399.las	US Survey Foot	US survey foot
LD31741402.las	US Survey Foot	US survey foot
LD31741405.las	US Survey Foot	US survey foot
LD31741408.las	US Survey Foot	US survey foot
LD31771399.las	US Survey Foot	US survey foot
LD31771402.las	US Survey Foot	US survey foot
LD31771405.las	US Survey Foot	US survey foot
LD31771408.las	US Survey Foot	US survey foot
LD31801399.las	US Survey Foot	US survey foot
LD31801402.las	US Survey Foot	US survey foot
LD31801405.las	US Survey Foot	US survey foot
LD31801408.las	US Survey Foot	US survey foot
LD31831399.las	US Survey Foot	US survey foot
LD31831402.las	US Survey Foot	US survey foot
LD31831405.las	US Survey Foot	US survey foot
LD31831408.las	US Survey Foot	US survey foot
LD31861399.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
LD31861402.las	US Survey Foot	US survey foot
LD31861405.las	US Survey Foot	US survey foot
LD31861408.las	US Survey Foot	US survey foot
LD31891399.las	US Survey Foot	US survey foot
LD31891402.las	US Survey Foot	US survey foot
LD31891405.las	US Survey Foot	US survey foot
LD31891408.las	US Survey Foot	US survey foot
LD31921402.las	US Survey Foot	US survey foot
LD31921405.las	US Survey Foot	US survey foot
LD31951396.las	US Survey Foot	US survey foot
LD31951399.las	US Survey Foot	US survey foot
LD31951402.las	US Survey Foot	US survey foot
LD31951405.las	US Survey Foot	US survey foot
LD31981396.las	US Survey Foot	US survey foot
LD31981399.las	US Survey Foot	US survey foot
LD31981402.las	US Survey Foot	US survey foot
LD31981405.las	US Survey Foot	US survey foot
LD32011399.las	US Survey Foot	US survey foot
LD32011402.las	US Survey Foot	US survey foot
LD32011405.las	US Survey Foot	US survey foot
LD32011408.las	US Survey Foot	US survey foot
LD32041402.las	US Survey Foot	US survey foot
LD32041405.las	US Survey Foot	US survey foot
LD32041408.las	US Survey Foot	US survey foot
LD32071333.las	US Survey Foot	US survey foot
LD32071336.las	US Survey Foot	US survey foot
LD32071339.las	US Survey Foot	US survey foot
LD32071342.las	US Survey Foot	US survey foot
LD32071345.las	US Survey Foot	US survey foot
LD32071348.las	US Survey Foot	US survey foot
LD32071351.las	US Survey Foot	US survey foot
LD32071354.las	US Survey Foot	US survey foot
LD32071357.las	US Survey Foot	US survey foot
LD32071360.las	US Survey Foot	US survey foot
LD32071363.las	US Survey Foot	US survey foot
LD32071366.las	US Survey Foot	US survey foot
LD32071369.las	US Survey Foot	US survey foot
LD32071372.las	US Survey Foot	US survey foot
LD32071375.las	US Survey Foot	US survey foot
LD32071378.las	US Survey Foot	US survey foot
LD32071399.las	US Survey Foot	US survey foot
LD32071402.las	US Survey Foot	US survey foot
LD32071405.las	US Survey Foot	US survey foot
LD32071408.las	US Survey Foot	US survey foot
LD32101333.las	US Survey Foot	US survey foot
LD32101336.las	US Survey Foot	US survey foot
LD32101339.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
LD32101342.las	US Survey Foot	US survey foot
LD32101345.las	US Survey Foot	US survey foot
LD32101348.las	US Survey Foot	US survey foot
LD32101351.las	US Survey Foot	US survey foot
LD32101354.las	US Survey Foot	US survey foot
LD32101357.las	US Survey Foot	US survey foot
LD32101360.las	US Survey Foot	US survey foot
LD32101363.las	US Survey Foot	US survey foot
LD32101366.las	US Survey Foot	US survey foot
LD32101369.las	US Survey Foot	US survey foot
LD32101372.las	US Survey Foot	US survey foot
LD32101375.las	US Survey Foot	US survey foot
LD32101378.las	US Survey Foot	US survey foot
LD32101399.las	US Survey Foot	US survey foot
LD32101402.las	US Survey Foot	US survey foot
LD32101405.las	US Survey Foot	US survey foot
LD32101408.las	US Survey Foot	US survey foot
LD32131333.las	US Survey Foot	US survey foot
LD32131336.las	US Survey Foot	US survey foot
LD32131339.las	US Survey Foot	US survey foot
LD32131342.las	US Survey Foot	US survey foot
LD32131345.las	US Survey Foot	US survey foot
LD32131348.las	US Survey Foot	US survey foot
LD32131351.las	US Survey Foot	US survey foot
LD32131354.las	US Survey Foot	US survey foot
LD32131357.las	US Survey Foot	US survey foot
LD32131360.las	US Survey Foot	US survey foot
LD32131363.las	US Survey Foot	US survey foot
LD32131366.las	US Survey Foot	US survey foot
LD32131369.las	US Survey Foot	US survey foot
LD32131372.las	US Survey Foot	US survey foot
LD32131375.las	US Survey Foot	US survey foot
LD32131378.las	US Survey Foot	US survey foot
LD32131399.las	US Survey Foot	US survey foot
LD32131402.las	US Survey Foot	US survey foot
LD32131405.las	US Survey Foot	US survey foot
LD32131408.las	US Survey Foot	US survey foot
LD32161333.las	US Survey Foot	US survey foot
LD32161336.las	US Survey Foot	US survey foot
LD32161339.las	US Survey Foot	US survey foot
LD32161342.las	US Survey Foot	US survey foot
LD32161345.las	US Survey Foot	US survey foot
LD32161348.las	US Survey Foot	US survey foot
LD32161351.las	US Survey Foot	US survey foot
LD32161354.las	US Survey Foot	US survey foot
LD32161357.las	US Survey Foot	US survey foot
LD32161360.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
LD32161363.las	US Survey Foot	US survey foot
LD32161366.las	US Survey Foot	US survey foot
LD32161369.las	US Survey Foot	US survey foot
LD32161372.las	US Survey Foot	US survey foot
LD32161375.las	US Survey Foot	US survey foot
LD32161378.las	US Survey Foot	US survey foot
LD32161399.las	US Survey Foot	US survey foot
LD32161402.las	US Survey Foot	US survey foot
LD32161405.las	US Survey Foot	US survey foot
LD32191333.las	US Survey Foot	US survey foot
LD32191336.las	US Survey Foot	US survey foot
LD32191339.las	US Survey Foot	US survey foot
LD32191342.las	US Survey Foot	US survey foot
LD32191345.las	US Survey Foot	US survey foot
LD32191348.las	US Survey Foot	US survey foot
LD32191351.las	US Survey Foot	US survey foot
LD32191354.las	US Survey Foot	US survey foot
LD32191357.las	US Survey Foot	US survey foot
LD32191360.las	US Survey Foot	US survey foot
LD32191363.las	US Survey Foot	US survey foot
LD32191366.las	US Survey Foot	US survey foot
LD32191369.las	US Survey Foot	US survey foot
LD32191372.las	US Survey Foot	US survey foot
LD32191375.las	US Survey Foot	US survey foot
LD32191378.las	US Survey Foot	US survey foot
LD32191399.las	US Survey Foot	US survey foot
LD32191402.las	US Survey Foot	US survey foot
LD32191405.las	US Survey Foot	US survey foot
LD32221333.las	US Survey Foot	US survey foot
LD32221336.las	US Survey Foot	US survey foot
LD32221339.las	US Survey Foot	US survey foot
LD32221342.las	US Survey Foot	US survey foot
LD32221345.las	US Survey Foot	US survey foot
LD32221348.las	US Survey Foot	US survey foot
LD32221351.las	US Survey Foot	US survey foot
LD32221354.las	US Survey Foot	US survey foot
LD32221357.las	US Survey Foot	US survey foot
LD32221360.las	US Survey Foot	US survey foot
LD32221363.las	US Survey Foot	US survey foot
LD32221366.las	US Survey Foot	US survey foot
LD32221369.las	US Survey Foot	US survey foot
LD32221372.las	US Survey Foot	US survey foot
LD32221375.las	US Survey Foot	US survey foot
LD32221378.las	US Survey Foot	US survey foot
LD32221396.las	US Survey Foot	US survey foot
LD32221399.las	US Survey Foot	US survey foot
LD32221402.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data) - continued

File	Horizontal Unit	Vertical Unit
LD32221405.las	US Survey Foot	US survey foot
LD32251333.las	US Survey Foot	US survey foot
LD32251336.las	US Survey Foot	US survey foot
LD32251339.las	US Survey Foot	US survey foot
LD32251342.las	US Survey Foot	US survey foot
LD32251345.las	US Survey Foot	US survey foot
LD32251348.las	US Survey Foot	US survey foot
LD32251351.las	US Survey Foot	US survey foot
LD32251354.las	US Survey Foot	US survey foot
LD32251357.las	US Survey Foot	US survey foot
LD32251360.las	US Survey Foot	US survey foot
LD32251363.las	US Survey Foot	US survey foot
LD32251366.las	US Survey Foot	US survey foot
LD32251369.las	US Survey Foot	US survey foot
LD32251372.las	US Survey Foot	US survey foot
LD32251375.las	US Survey Foot	US survey foot
LD32251378.las	US Survey Foot	US survey foot
LD32251393.las	US Survey Foot	US survey foot
LD32251396.las	US Survey Foot	US survey foot
LD32251399.las	US Survey Foot	US survey foot
LD32251402.las	US Survey Foot	US survey foot
LD32251405.las	US Survey Foot	US survey foot
LD32281333.las	US Survey Foot	US survey foot
LD32281336.las	US Survey Foot	US survey foot
LD32281339.las	US Survey Foot	US survey foot
LD32281342.las	US Survey Foot	US survey foot
LD32281345.las	US Survey Foot	US survey foot
LD32281348.las	US Survey Foot	US survey foot
LD32281351.las	US Survey Foot	US survey foot
LD32281354.las	US Survey Foot	US survey foot
LD32281357.las	US Survey Foot	US survey foot
LD32281360.las	US Survey Foot	US survey foot
LD32281363.las	US Survey Foot	US survey foot
LD32281366.las	US Survey Foot	US survey foot
LD32281369.las	US Survey Foot	US survey foot
LD32281372.las	US Survey Foot	US survey foot
LD32281375.las	US Survey Foot	US survey foot
LD32281378.las	US Survey Foot	US survey foot
LD32281393.las	US Survey Foot	US survey foot
LD32281396.las	US Survey Foot	US survey foot
LD32281399.las	US Survey Foot	US survey foot
LD32281402.las	US Survey Foot	US survey foot
LD32281405.las	US Survey Foot	US survey foot
LD32311333.las	US Survey Foot	US survey foot
LD32311336.las	US Survey Foot	US survey foot
LD32311339.las	US Survey Foot	US survey foot
LD32311342.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
LD32311345.las	US Survey Foot	US survey foot
LD32311348.las	US Survey Foot	US survey foot
LD32311351.las	US Survey Foot	US survey foot
LD32311354.las	US Survey Foot	US survey foot
LD32311357.las	US Survey Foot	US survey foot
LD32311360.las	US Survey Foot	US survey foot
LD32311363.las	US Survey Foot	US survey foot
LD32311366.las	US Survey Foot	US survey foot
LD32311369.las	US Survey Foot	US survey foot
LD32311372.las	US Survey Foot	US survey foot
LD32311375.las	US Survey Foot	US survey foot
LD32311378.las	US Survey Foot	US survey foot
LD32311393.las	US Survey Foot	US survey foot
LD32311396.las	US Survey Foot	US survey foot
LD32311399.las	US Survey Foot	US survey foot
LD32341333.las	US Survey Foot	US survey foot
LD32341336.las	US Survey Foot	US survey foot
LD32341339.las	US Survey Foot	US survey foot
LD32341342.las	US Survey Foot	US survey foot
LD32341345.las	US Survey Foot	US survey foot
LD32341348.las	US Survey Foot	US survey foot
LD32341351.las	US Survey Foot	US survey foot
LD32341354.las	US Survey Foot	US survey foot
LD32341357.las	US Survey Foot	US survey foot
LD32341360.las	US Survey Foot	US survey foot
LD32341363.las	US Survey Foot	US survey foot
LD32341366.las	US Survey Foot	US survey foot
LD32341369.las	US Survey Foot	US survey foot
LD32341372.las	US Survey Foot	US survey foot
LD32341375.las	US Survey Foot	US survey foot
LD32341378.las	US Survey Foot	US survey foot
LD32341390.las	US Survey Foot	US survey foot
LD32341393.las	US Survey Foot	US survey foot
LD32341396.las	US Survey Foot	US survey foot
LD32341399.las	US Survey Foot	US survey foot
LD32371333.las	US Survey Foot	US survey foot
LD32371336.las	US Survey Foot	US survey foot
LD32371339.las	US Survey Foot	US survey foot
LD32371342.las	US Survey Foot	US survey foot
LD32371345.las	US Survey Foot	US survey foot
LD32371348.las	US Survey Foot	US survey foot
LD32371351.las	US Survey Foot	US survey foot
LD32371354.las	US Survey Foot	US survey foot
LD32371357.las	US Survey Foot	US survey foot
LD32371360.las	US Survey Foot	US survey foot
LD32371363.las	US Survey Foot	US survey foot
LD32371366.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
LD32371369.las	US Survey Foot	US survey foot
LD32371372.las	US Survey Foot	US survey foot
LD32371375.las	US Survey Foot	US survey foot
LD32371378.las	US Survey Foot	US survey foot
LD32371387.las	US Survey Foot	US survey foot
LD32371390.las	US Survey Foot	US survey foot
LD32371393.las	US Survey Foot	US survey foot
LD32371396.las	US Survey Foot	US survey foot
LD32371399.las	US Survey Foot	US survey foot
LD32401333.las	US Survey Foot	US survey foot
LD32401336.las	US Survey Foot	US survey foot
LD32401339.las	US Survey Foot	US survey foot
LD32401342.las	US Survey Foot	US survey foot
LD32401345.las	US Survey Foot	US survey foot
LD32401348.las	US Survey Foot	US survey foot
LD32401351.las	US Survey Foot	US survey foot
LD32401354.las	US Survey Foot	US survey foot
LD32401357.las	US Survey Foot	US survey foot
LD32401360.las	US Survey Foot	US survey foot
LD32401363.las	US Survey Foot	US survey foot
LD32401366.las	US Survey Foot	US survey foot
LD32401369.las	US Survey Foot	US survey foot
LD32401372.las	US Survey Foot	US survey foot
LD32401375.las	US Survey Foot	US survey foot
LD32401378.las	US Survey Foot	US survey foot
LD32401387.las	US Survey Foot	US survey foot
LD32401390.las	US Survey Foot	US survey foot
LD32401393.las	US Survey Foot	US survey foot
LD32401396.las	US Survey Foot	US survey foot
LD32431333.las	US Survey Foot	US survey foot
LD32431336.las	US Survey Foot	US survey foot
LD32431339.las	US Survey Foot	US survey foot
LD32431342.las	US Survey Foot	US survey foot
LD32431345.las	US Survey Foot	US survey foot
LD32431348.las	US Survey Foot	US survey foot
LD32431351.las	US Survey Foot	US survey foot
LD32431354.las	US Survey Foot	US survey foot
LD32431357.las	US Survey Foot	US survey foot
LD32431387.las	US Survey Foot	US survey foot
LD32431390.las	US Survey Foot	US survey foot
LD32431393.las	US Survey Foot	US survey foot
LD32431396.las	US Survey Foot	US survey foot
LD32461387.las	US Survey Foot	US survey foot
LD32461390.las	US Survey Foot	US survey foot
LD32461393.las	US Survey Foot	US survey foot
LD32461396.las	US Survey Foot	US survey foot
LD32491390.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data)

- continued

File	Horizontal Unit	Vertical Unit
LD32491393.las	US Survey Foot	US survey foot
LD32491396.las	US Survey Foot	US survey foot
LD32491399.las	US Survey Foot	US survey foot
LD32521393.las	US Survey Foot	US survey foot
LD32521396.las	US Survey Foot	US survey foot
LD35101333.las	US Survey Foot	US survey foot
LD35101336.las	US Survey Foot	US survey foot
LD35101339.las	US Survey Foot	US survey foot
LD35101342.las	US Survey Foot	US survey foot
LD35101345.las	US Survey Foot	US survey foot
LD35131324.las	US Survey Foot	US survey foot
LD35131327.las	US Survey Foot	US survey foot
LD35131330.las	US Survey Foot	US survey foot
LD35131333.las	US Survey Foot	US survey foot
LD35131336.las	US Survey Foot	US survey foot
LD35131339.las	US Survey Foot	US survey foot
LD35131342.las	US Survey Foot	US survey foot
LD35131345.las	US Survey Foot	US survey foot
LD35131348.las	US Survey Foot	US survey foot
LD35161321.las	US Survey Foot	US survey foot
LD35161324.las	US Survey Foot	US survey foot
LD35161327.las	US Survey Foot	US survey foot
LD35161330.las	US Survey Foot	US survey foot
LD35161333.las	US Survey Foot	US survey foot
LD35161336.las	US Survey Foot	US survey foot
LD35161339.las	US Survey Foot	US survey foot
LD35161342.las	US Survey Foot	US survey foot
LD35161345.las	US Survey Foot	US survey foot
LD35161348.las	US Survey Foot	US survey foot
LD35161351.las	US Survey Foot	US survey foot
LD35191324.las	US Survey Foot	US survey foot
LD35191327.las	US Survey Foot	US survey foot
LD35191330.las	US Survey Foot	US survey foot
LD35191333.las	US Survey Foot	US survey foot
LD35191336.las	US Survey Foot	US survey foot
LD35191339.las	US Survey Foot	US survey foot
LD35191342.las	US Survey Foot	US survey foot
LD35191345.las	US Survey Foot	US survey foot
LD35191348.las	US Survey Foot	US survey foot
LD35191351.las	US Survey Foot	US survey foot
LD35191354.las	US Survey Foot	US survey foot
LD35221324.las	US Survey Foot	US survey foot
LD35221327.las	US Survey Foot	US survey foot
LD35221330.las	US Survey Foot	US survey foot
LD35221333.las	US Survey Foot	US survey foot
LD35221336.las	US Survey Foot	US survey foot
LD35221339.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data) - continued

File	Horizontal Unit	Vertical Unit
LD35221342.las	US Survey Foot	US survey foot
LD35221345.las	US Survey Foot	US survey foot
LD35221348.las	US Survey Foot	US survey foot
LD35221351.las	US Survey Foot	US survey foot
LD35221354.las	US Survey Foot	US survey foot
LD35221357.las	US Survey Foot	US survey foot
LD35251324.las	US Survey Foot	US survey foot
LD35251327.las	US Survey Foot	US survey foot
LD35251330.las	US Survey Foot	US survey foot
LD35251333.las	US Survey Foot	US survey foot
LD35251336.las	US Survey Foot	US survey foot
LD35251339.las	US Survey Foot	US survey foot
LD35251342.las	US Survey Foot	US survey foot
LD35251345.las	US Survey Foot	US survey foot
LD35251348.las	US Survey Foot	US survey foot
LD35251351.las	US Survey Foot	US survey foot
LD35251354.las	US Survey Foot	US survey foot
LD35251357.las	US Survey Foot	US survey foot
LD35281324.las	US Survey Foot	US survey foot
LD35281327.las	US Survey Foot	US survey foot
LD35281330.las	US Survey Foot	US survey foot
LD35281333.las	US Survey Foot	US survey foot
LD35281336.las	US Survey Foot	US survey foot
LD35281339.las	US Survey Foot	US survey foot
LD35281342.las	US Survey Foot	US survey foot
LD35281345.las	US Survey Foot	US survey foot
LD35281348.las	US Survey Foot	US survey foot
LD35281351.las	US Survey Foot	US survey foot
LD35281354.las	US Survey Foot	US survey foot
LD35281357.las	US Survey Foot	US survey foot
LD35281360.las	US Survey Foot	US survey foot
LD35311324.las	US Survey Foot	US survey foot
LD35311327.las	US Survey Foot	US survey foot
LD35311339.las	US Survey Foot	US survey foot
LD35311342.las	US Survey Foot	US survey foot
LD35311345.las	US Survey Foot	US survey foot
LD35311348.las	US Survey Foot	US survey foot
LD35311351.las	US Survey Foot	US survey foot
LD35311354.las	US Survey Foot	US survey foot
LD35311357.las	US Survey Foot	US survey foot
LD35311360.las	US Survey Foot	US survey foot
LD35311363.las	US Survey Foot	US survey foot
LD35341342.las	US Survey Foot	US survey foot
LD35341345.las	US Survey Foot	US survey foot
LD35341348.las	US Survey Foot	US survey foot
LD35341351.las	US Survey Foot	US survey foot
LD35341354.las	US Survey Foot	US survey foot

DPH-6 Report on Units of Reference (Tiled Data) - continued

File	Horizontal Unit	Vertical Unit
LD35341357.las	US Survey Foot	US survey foot
LD35341360.las	US Survey Foot	US survey foot
LD35341363.las	US Survey Foot	US survey foot
LD35341366.las	US Survey Foot	US survey foot
LD35371345.las	US Survey Foot	US survey foot
LD35371348.las	US Survey Foot	US survey foot
LD35371351.las	US Survey Foot	US survey foot
LD35371354.las	US Survey Foot	US survey foot
LD35371357.las	US Survey Foot	US survey foot
LD35371360.las	US Survey Foot	US survey foot
LD35371363.las	US Survey Foot	US survey foot
LD35371366.las	US Survey Foot	US survey foot
LD35401348.las	US Survey Foot	US survey foot
LD35401351.las	US Survey Foot	US survey foot
LD35401354.las	US Survey Foot	US survey foot
LD35401357.las	US Survey Foot	US survey foot
LD35401360.las	US Survey Foot	US survey foot
LD35401363.las	US Survey Foot	US survey foot
LD35401366.las	US Survey Foot	US survey foot
LD35431351.las	US Survey Foot	US survey foot
LD35431354.las	US Survey Foot	US survey foot
LD35431357.las	US Survey Foot	US survey foot
LD35431360.las	US Survey Foot	US survey foot
LD35431363.las	US Survey Foot	US survey foot
LD35431366.las	US Survey Foot	US survey foot
LD35461354.las	US Survey Foot	US survey foot
LD35461357.las	US Survey Foot	US survey foot
LD35461360.las	US Survey Foot	US survey foot
LD35461363.las	US Survey Foot	US survey foot
LD35461366.las	US Survey Foot	US survey foot
LD35491354.las	US Survey Foot	US survey foot
LD35491357.las	US Survey Foot	US survey foot
LD35491360.las	US Survey Foot	US survey foot
LD35491363.las	US Survey Foot	US survey foot
LD35491366.las	US Survey Foot	US survey foot
LD35521357.las	US Survey Foot	US survey foot
LD35521360.las	US Survey Foot	US survey foot
LD35521363.las	US Survey Foot	US survey foot

DPH-7 Report on Swath Identification

The USGS Lidar Base Specification Version 1.2 states: "At the time of its creation and prior to any further processing, each swath shall be assigned a unique File Source Identification (ID), and each point within the swath shall be assigned a Point Source ID equal to the File Source ID. The Point Source ID on each point will be persisted unchanged throughout all processing and delivery. See the LAS Specification version 1.4 (American Society for Photogrammetry and Remote Sensing, 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 DPH-9) may violate the unique values specification described in this test.

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	File Source ID	Point Source ID
1004.las	1004	1004
1007.las	1007	1007
1015.las	1015	1015
1017.las	1017	1017
1020.las	1020	1020
1044.las	1044	1044
1045.las	1045	1045
1046.las	1046	1046
1047.las	1047	1047
1048.las	1048	1048
1049.las	1049	1049
1050.las	1050	1050
1051.las	1051	1051
1052.las	1052	1052
1053.las	1053	1053
1054.las	1054	1054
1055.las	1055	1055
1056.las	1056	1056
1057.las	1057	1057
1081.las	1081	1081
1082.las	1082	1082
1083.las	1083	1083
1084.las	1084	1084
1158.las	1158	1158
1159.las	1159	1159
1160.las	1160	1160
1177.las	1177	1177
1178.las	1178	1178
1197.las	1197	1197
1218.las	1218	1218
1219.las	1219	1219
1220.las	1220	1220
1221.las	1221	1221
1222.las	1222	1222
1223.las	1223	1223
1224.las	1224	1224
1225.las	1225	1225
1226.las	1226	1226
1227.las	1227	1227

DPH-7 Report on File Source ID (Swath Data) - continued

File	File Source ID	Point Source ID
1229.las	1229	1229
1236.las	1236	1236
1237.las	1237	1237
1238.las	1238	1238
2002.las	2002	2002
2012.las	2012	2012
2041.las	2041	2041
2048.las	2048	2048
2049.las	2049	2049
2103.las	2103	2103
2104.las	2104	2104

DPH-8 Report on Point Families (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "Point families (multiple return 'children' of a single 'parent' pulse) will be maintained throughout 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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	Point Families Present
1004.las	Yes
1007.las	Yes
1015.las	Yes
1017.las	Yes
1020.las	Yes
1044.las	Yes
1045.las	Yes
1046.las	Yes
1047.las	Yes
1048.las	Yes
1049.las	Yes
1050.las	Yes
1051.las	Yes
1052.las	Yes
1053.las	Yes
1054.las	Yes
1055.las	Yes
1056.las	Yes
1057.las	Yes
1081.las	Yes
1082.las	Yes
1083.las	Yes
1084.las	Yes
1158.las	Yes
1159.las	Yes
1160.las	Yes
1177.las	Yes
1178.las	Yes
1197.las	Yes
1218.las	Yes
1219.las	Yes
1220.las	Yes
1221.las	Yes
1222.las	Yes
1223.las	Yes
1224.las	Yes
1225.las	Yes
1226.las	Yes
1227.las	Yes
1229.las	Yes
1236.las	Yes
1237.las	Yes

DPH-8 Report on Point Families (Swath Data) - continued

<u>File</u>	<u>Point Families Present</u>
1238.las	Yes
2002.las	Yes
2012.las	Yes
2041.las	Yes
2048.las	Yes
2049.las	Yes
2103.las	Yes
2104.las	Yes

DPH-8 Report on Point Families (Tiled Data)

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

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Product ion\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

File	Point Families Present
LD31531420.las	Yes
LD31531423.las	Yes
LD31531426.las	Yes
LD31561408.las	Yes
LD31561411.las	Yes
LD31561414.las	Yes
LD31561417.las	Yes
LD31591405.las	Yes
LD31591408.las	Yes
LD31591411.las	Yes
LD31591414.las	Yes
LD31621402.las	Yes
LD31621405.las	Yes
LD31621408.las	Yes
LD31621411.las	Yes
LD31651402.las	Yes
LD31651405.las	Yes
LD31651408.las	Yes
LD31651411.las	Yes
LD31681402.las	Yes
LD31681405.las	Yes
LD31681408.las	Yes
LD31711399.las	Yes
LD31711402.las	Yes
LD31711405.las	Yes
LD31711408.las	Yes
LD31741399.las	Yes
LD31741402.las	Yes
LD31741405.las	Yes
LD31741408.las	Yes
LD31771399.las	Yes
LD31771402.las	Yes
LD31771405.las	Yes
LD31771408.las	Yes
LD31801399.las	Yes
LD31801402.las	Yes
LD31801405.las	Yes
LD31801408.las	Yes
LD31831399.las	Yes
LD31831402.las	Yes
LD31831405.las	Yes
LD31831408.las	Yes
LD31861399.las	Yes
LD31861402.las	Yes
LD31861405.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

<u>File</u>	<u>Point Families Present</u>
LD31861408.las	Yes
LD31891399.las	Yes
LD31891402.las	Yes
LD31891405.las	Yes
LD31891408.las	Yes
LD31921402.las	Yes
LD31921405.las	Yes
LD31951396.las	Yes
LD31951399.las	Yes
LD31951402.las	Yes
LD31951405.las	Yes
LD31981396.las	Yes
LD31981399.las	Yes
LD31981402.las	Yes
LD31981405.las	Yes
LD32011399.las	Yes
LD32011402.las	Yes
LD32011405.las	Yes
LD32011408.las	Yes
LD32041402.las	Yes
LD32041405.las	Yes
LD32041408.las	Yes
LD32071333.las	Yes
LD32071336.las	Yes
LD32071339.las	Yes
LD32071342.las	Yes
LD32071345.las	Yes
LD32071348.las	Yes
LD32071351.las	Yes
LD32071354.las	Yes
LD32071357.las	Yes
LD32071360.las	Yes
LD32071363.las	Yes
LD32071366.las	Yes
LD32071369.las	Yes
LD32071372.las	Yes
LD32071375.las	Yes
LD32071378.las	Yes
LD32071399.las	Yes
LD32071402.las	Yes
LD32071405.las	Yes
LD32071408.las	Yes
LD32101333.las	Yes
LD32101336.las	Yes
LD32101339.las	Yes
LD32101342.las	Yes
LD32101345.las	Yes
LD32101348.las	Yes
LD32101351.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

File	Point Families Present
LD32101354.las	Yes
LD32101357.las	Yes
LD32101360.las	Yes
LD32101363.las	Yes
LD32101366.las	Yes
LD32101369.las	Yes
LD32101372.las	Yes
LD32101375.las	Yes
LD32101378.las	Yes
LD32101399.las	Yes
LD32101402.las	Yes
LD32101405.las	Yes
LD32101408.las	Yes
LD32131333.las	Yes
LD32131336.las	Yes
LD32131339.las	Yes
LD32131342.las	Yes
LD32131345.las	Yes
LD32131348.las	Yes
LD32131351.las	Yes
LD32131354.las	Yes
LD32131357.las	Yes
LD32131360.las	Yes
LD32131363.las	Yes
LD32131366.las	Yes
LD32131369.las	Yes
LD32131372.las	Yes
LD32131375.las	Yes
LD32131378.las	Yes
LD32131399.las	Yes
LD32131402.las	Yes
LD32131405.las	Yes
LD32131408.las	Yes
LD32161333.las	Yes
LD32161336.las	Yes
LD32161339.las	Yes
LD32161342.las	Yes
LD32161345.las	Yes
LD32161348.las	Yes
LD32161351.las	Yes
LD32161354.las	Yes
LD32161357.las	Yes
LD32161360.las	Yes
LD32161363.las	Yes
LD32161366.las	Yes
LD32161369.las	Yes
LD32161372.las	Yes
LD32161375.las	Yes
LD32161378.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

<u>File</u>	<u>Point Families Present</u>
LD32161399.las	Yes
LD32161402.las	Yes
LD32161405.las	Yes
LD32191333.las	Yes
LD32191336.las	Yes
LD32191339.las	Yes
LD32191342.las	Yes
LD32191345.las	Yes
LD32191348.las	Yes
LD32191351.las	Yes
LD32191354.las	Yes
LD32191357.las	Yes
LD32191360.las	Yes
LD32191363.las	Yes
LD32191366.las	Yes
LD32191369.las	Yes
LD32191372.las	Yes
LD32191375.las	Yes
LD32191378.las	Yes
LD32191399.las	Yes
LD32191402.las	Yes
LD32191405.las	Yes
LD32221333.las	Yes
LD32221336.las	Yes
LD32221339.las	Yes
LD32221342.las	Yes
LD32221345.las	Yes
LD32221348.las	Yes
LD32221351.las	Yes
LD32221354.las	Yes
LD32221357.las	Yes
LD32221360.las	Yes
LD32221363.las	Yes
LD32221366.las	Yes
LD32221369.las	Yes
LD32221372.las	Yes
LD32221375.las	Yes
LD32221378.las	Yes
LD32221396.las	Yes
LD32221399.las	Yes
LD32221402.las	Yes
LD32221405.las	Yes
LD32251333.las	Yes
LD32251336.las	Yes
LD32251339.las	Yes
LD32251342.las	Yes
LD32251345.las	Yes
LD32251348.las	Yes
LD32251351.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

<u>File</u>	<u>Point Families Present</u>
LD32251354.las	Yes
LD32251357.las	Yes
LD32251360.las	Yes
LD32251363.las	Yes
LD32251366.las	Yes
LD32251369.las	Yes
LD32251372.las	Yes
LD32251375.las	Yes
LD32251378.las	Yes
LD32251393.las	Yes
LD32251396.las	Yes
LD32251399.las	Yes
LD32251402.las	Yes
LD32251405.las	Yes
LD32281333.las	Yes
LD32281336.las	Yes
LD32281339.las	Yes
LD32281342.las	Yes
LD32281345.las	Yes
LD32281348.las	Yes
LD32281351.las	Yes
LD32281354.las	Yes
LD32281357.las	Yes
LD32281360.las	Yes
LD32281363.las	Yes
LD32281366.las	Yes
LD32281369.las	Yes
LD32281372.las	Yes
LD32281375.las	Yes
LD32281378.las	Yes
LD32281393.las	Yes
LD32281396.las	Yes
LD32281399.las	Yes
LD32281402.las	Yes
LD32281405.las	Yes
LD32311333.las	Yes
LD32311336.las	Yes
LD32311339.las	Yes
LD32311342.las	Yes
LD32311345.las	Yes
LD32311348.las	Yes
LD32311351.las	Yes
LD32311354.las	Yes
LD32311357.las	Yes
LD32311360.las	Yes
LD32311363.las	Yes
LD32311366.las	Yes
LD32311369.las	Yes
LD32311372.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

File	Point Families Present
LD32311375.las	Yes
LD32311378.las	Yes
LD32311393.las	Yes
LD32311396.las	Yes
LD32311399.las	Yes
LD32341333.las	Yes
LD32341336.las	Yes
LD32341339.las	Yes
LD32341342.las	Yes
LD32341345.las	Yes
LD32341348.las	Yes
LD32341351.las	Yes
LD32341354.las	Yes
LD32341357.las	Yes
LD32341360.las	Yes
LD32341363.las	Yes
LD32341366.las	Yes
LD32341369.las	Yes
LD32341372.las	Yes
LD32341375.las	Yes
LD32341378.las	Yes
LD32341390.las	Yes
LD32341393.las	Yes
LD32341396.las	Yes
LD32341399.las	Yes
LD32371333.las	Yes
LD32371336.las	Yes
LD32371339.las	Yes
LD32371342.las	Yes
LD32371345.las	Yes
LD32371348.las	Yes
LD32371351.las	Yes
LD32371354.las	Yes
LD32371357.las	Yes
LD32371360.las	Yes
LD32371363.las	Yes
LD32371366.las	Yes
LD32371369.las	Yes
LD32371372.las	Yes
LD32371375.las	Yes
LD32371378.las	Yes
LD32371387.las	Yes
LD32371390.las	Yes
LD32371393.las	Yes
LD32371396.las	Yes
LD32371399.las	Yes
LD32401333.las	Yes
LD32401336.las	Yes
LD32401339.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

<u>File</u>	<u>Point Families Present</u>
LD32401342.las	Yes
LD32401345.las	Yes
LD32401348.las	Yes
LD32401351.las	Yes
LD32401354.las	Yes
LD32401357.las	Yes
LD32401360.las	Yes
LD32401363.las	Yes
LD32401366.las	Yes
LD32401369.las	Yes
LD32401372.las	Yes
LD32401375.las	Yes
LD32401378.las	Yes
LD32401387.las	Yes
LD32401390.las	Yes
LD32401393.las	Yes
LD32401396.las	Yes
LD32431333.las	Yes
LD32431336.las	Yes
LD32431339.las	Yes
LD32431342.las	Yes
LD32431345.las	Yes
LD32431348.las	Yes
LD32431351.las	Yes
LD32431354.las	Yes
LD32431357.las	Yes
LD32431387.las	Yes
LD32431390.las	Yes
LD32431393.las	Yes
LD32431396.las	Yes
LD32461387.las	Yes
LD32461390.las	Yes
LD32461393.las	Yes
LD32461396.las	Yes
LD32491390.las	Yes
LD32491393.las	Yes
LD32491396.las	Yes
LD32491399.las	Yes
LD32521393.las	Yes
LD32521396.las	Yes
LD35101333.las	Yes
LD35101336.las	Yes
LD35101339.las	Yes
LD35101342.las	Yes
LD35101345.las	Yes
LD35131324.las	Yes
LD35131327.las	Yes
LD35131330.las	Yes
LD35131333.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

<u>File</u>	<u>Point Families Present</u>
LD35131336.las	Yes
LD35131339.las	Yes
LD35131342.las	Yes
LD35131345.las	Yes
LD35131348.las	Yes
LD35161321.las	Yes
LD35161324.las	Yes
LD35161327.las	Yes
LD35161330.las	Yes
LD35161333.las	Yes
LD35161336.las	Yes
LD35161339.las	Yes
LD35161342.las	Yes
LD35161345.las	Yes
LD35161348.las	Yes
LD35161351.las	Yes
LD35191324.las	Yes
LD35191327.las	Yes
LD35191330.las	Yes
LD35191333.las	Yes
LD35191336.las	Yes
LD35191339.las	Yes
LD35191342.las	Yes
LD35191345.las	Yes
LD35191348.las	Yes
LD35191351.las	Yes
LD35191354.las	Yes
LD35221324.las	Yes
LD35221327.las	Yes
LD35221330.las	Yes
LD35221333.las	Yes
LD35221336.las	Yes
LD35221339.las	Yes
LD35221342.las	Yes
LD35221345.las	Yes
LD35221348.las	Yes
LD35221351.las	Yes
LD35221354.las	Yes
LD35221357.las	Yes
LD35251324.las	Yes
LD35251327.las	Yes
LD35251330.las	Yes
LD35251333.las	Yes
LD35251336.las	Yes
LD35251339.las	Yes
LD35251342.las	Yes
LD35251345.las	Yes
LD35251348.las	Yes
LD35251351.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

File	Point Families Present
LD35251354.las	Yes
LD35251357.las	Yes
LD35281324.las	Yes
LD35281327.las	Yes
LD35281330.las	Yes
LD35281333.las	Yes
LD35281336.las	Yes
LD35281339.las	Yes
LD35281342.las	Yes
LD35281345.las	Yes
LD35281348.las	Yes
LD35281351.las	Yes
LD35281354.las	Yes
LD35281357.las	Yes
LD35281360.las	Yes
LD35311324.las	Yes
LD35311327.las	Yes
LD35311339.las	Yes
LD35311342.las	Yes
LD35311345.las	Yes
LD35311348.las	Yes
LD35311351.las	Yes
LD35311354.las	Yes
LD35311357.las	Yes
LD35311360.las	Yes
LD35311363.las	Yes
LD35341342.las	Yes
LD35341345.las	Yes
LD35341348.las	Yes
LD35341351.las	Yes
LD35341354.las	Yes
LD35341357.las	Yes
LD35341360.las	Yes
LD35341363.las	Yes
LD35341366.las	Yes
LD35371345.las	Yes
LD35371348.las	Yes
LD35371351.las	Yes
LD35371354.las	Yes
LD35371357.las	Yes
LD35371360.las	Yes
LD35371363.las	Yes
LD35371366.las	Yes
LD35401348.las	Yes
LD35401351.las	Yes
LD35401354.las	Yes
LD35401357.las	Yes
LD35401360.las	Yes
LD35401363.las	Yes

DPH-8 Report on Point Families (Tiled Data) - continued

<u>File</u>	<u>Point Families Present</u>
LD35401366.las	Yes
LD35431351.las	Yes
LD35431354.las	Yes
LD35431357.las	Yes
LD35431360.las	Yes
LD35431363.las	Yes
LD35431366.las	Yes
LD35461354.las	Yes
LD35461357.las	Yes
LD35461360.las	Yes
LD35461363.las	Yes
LD35461366.las	Yes
LD35491354.las	Yes
LD35491357.las	Yes
LD35491360.las	Yes
LD35491363.las	Yes
LD35491366.las	Yes
LD35521357.las	Yes
LD35521360.las	Yes
LD35521363.las	Yes

DPH-9 Report on Swath Size and Segmentation (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "The widespread adoption of 64-bit operating systems in mainstream computing (most notably Windows-7, 64-bit or newer operating systems) has obviated the earlier need for 2 GB limits on swath file sizes. Unless otherwise required by the data producer, lidar swaths may be of any file size supported within a 64-bit computing system. In cases where segmentation of the swaths is required by the data producer, the following requirements apply:

- (1) Subswath segments of a given original swath will be of comparable size.
- (2) Each subswath shall retain the File Source ID of the original complete swath.
- (3) Points within each subswath shall retain the Point Source ID of the original complete swath.
- (4) Each subswath file shall 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 subswaths shall be consistent with the collection order of the points ("-a" will be the first subswath; "-n" will be the last subswath).
- (5) Point families will be maintained intact within each subswath.
- (6) Subswaths will be broken at the edge of the scan line."

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

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

File	File Size (bytes)	MB	GB
1004.las	1,496,948,384	1427.601	1.394
1007.las	1,543,621,826	1472.112	1.438
1015.las	2,218,857,880	2116.068	2.066
1017.las	712,303,526	679.306	0.663
1020.las	1,436,975,288	1370.406	1.338
1044.las	69,085,238	65.885	0.064
1045.las	452,138,212	431.193	0.421
1046.las	503,055,184	479.751	0.469
1047.las	705,386,526	672.709	0.657
1048.las	655,236,364	624.882	0.610
1049.las	892,104,798	850.777	0.831
1050.las	942,447,568	898.788	0.878
1051.las	1,674,238,780	1596.679	1.559
1052.las	1,532,005,876	1461.035	1.427
1053.las	1,624,154,572	1548.915	1.513
1054.las	1,494,367,134	1425.140	1.392
1055.las	1,327,276,434	1265.789	1.236
1056.las	1,141,067,828	1088.207	1.063
1057.las	661,046,160	630.423	0.616
1081.las	1,145,454,062	1092.390	1.067
1082.las	584,254,144	557.188	0.544
1083.las	939,895,262	896.354	0.875
1084.las	1,494,843,828	1425.594	1.392
1158.las	482,228,022	459.888	0.449
1159.las	473,187,674	451.267	0.441
1160.las	394,404,100	376.133	0.367
1177.las	2,343,844,468	2235.264	2.183
1178.las	1,567,990,012	1495.352	1.460
1197.las	320,862,982	305.999	0.299

DPH-9 Report on Swath Size and Segmentation (Swath Data) - continued

File	File Size (bytes)	MB	GB
1218.las	890,116,114	848.881	0.829
1219.las	1,147,008,108	1093.872	1.068
1220.las	1,160,289,796	1106.539	1.081
1221.las	1,160,206,396	1106.459	1.081
1222.las	1,159,079,938	1105.385	1.079
1223.las	1,158,914,528	1105.227	1.079
1224.las	1,155,823,518	1102.279	1.076
1225.las	1,181,503,490	1126.770	1.100
1226.las	1,161,520,658	1107.712	1.082
1227.las	1,161,135,884	1107.345	1.081
1229.las	927,438,696	884.474	0.864
1236.las	26,733,012	25.495	0.025
1237.las	103,347,938	98.560	0.096
1238.las	314,381,798	299.818	0.293
2002.las	1,368,593,618	1305.193	1.275
2012.las	2,816,682,060	2686.197	2.623
2041.las	1,303,717,846	1243.322	1.214
2048.las	1,316,225,698	1255.251	1.226
2049.las	1,546,909,654	1475.248	1.441
2103.las	1,366,825,680	1303.507	1.273
2104.las	871,100,812	830.746	0.811

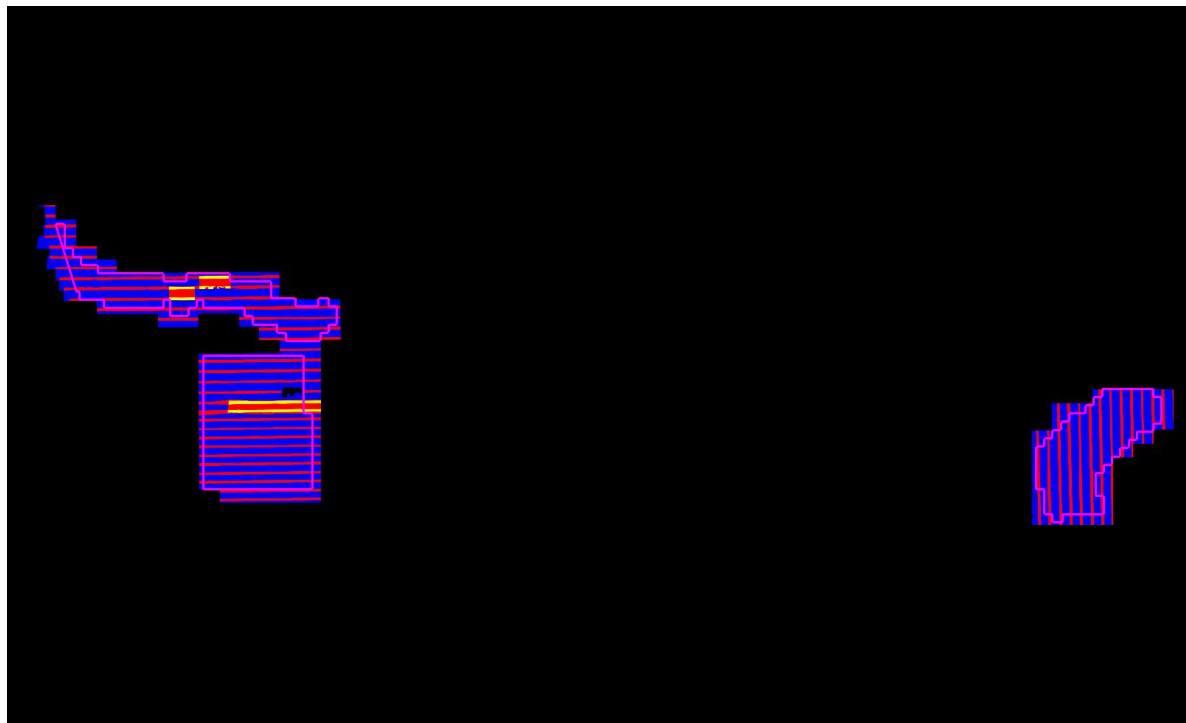
DPH-10 Report on Scope of Collection

The USGS Lidar Base Specification Version 1.2 states: "All collected swaths shall be delivered as part of the Raw Data Deliverable, including, calibration swaths and cross-ties. All collected returns within each swath shall also be delivered. No points are to be deleted from the swath LAS files. Exceptions to this rule are the extraneous data outside of the BPA (such as aircraft turns, transit between the collection area and airport, and transit between fill-in areas)."

The purpose of this section is to show collection scan overlap. Lack of overlap would be displayed as black polygons or slivers between collection scans.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_10\Flightline_Coverage_Overlap.jp2](#)



Purple polygon is buffered project area (BPA) boundary

Single	Double	Triple	Quadruple coverage or more
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DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath)

The USGS Lidar Base Specification Version 1.2 states: "In ideal theoretical conditions, smooth surface repeatability is a measure of variations documented on a surface that would be expected to be flat and without variation. Users of lidar technology commonly refer to these variations as "noise." Single-swath data will be assessed using only single returns in nonvegetated areas. Repeatability will be evaluated by measuring departures from planarity of single returns from hard planar surfaces, normalizing for actual variation in the surface elevation. Repeatability of only single returns will then be assessed at multiple locations within hard surfaced areas (for example, parking lots or large rooftops). Each sample area will be evaluated using a signed difference raster (maximum elevation - minimum elevation) at a cell size equal to twice the ANPS, rounded up to the next integer. Sample areas will be approximately 50 square meters. The maximum acceptable variations within sample areas at each QL are listed in the table "Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3" (table 2). Isolated noise is expected within the sample areas and will be disregarded."

Table 2. Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3.
[cm, centimeter]

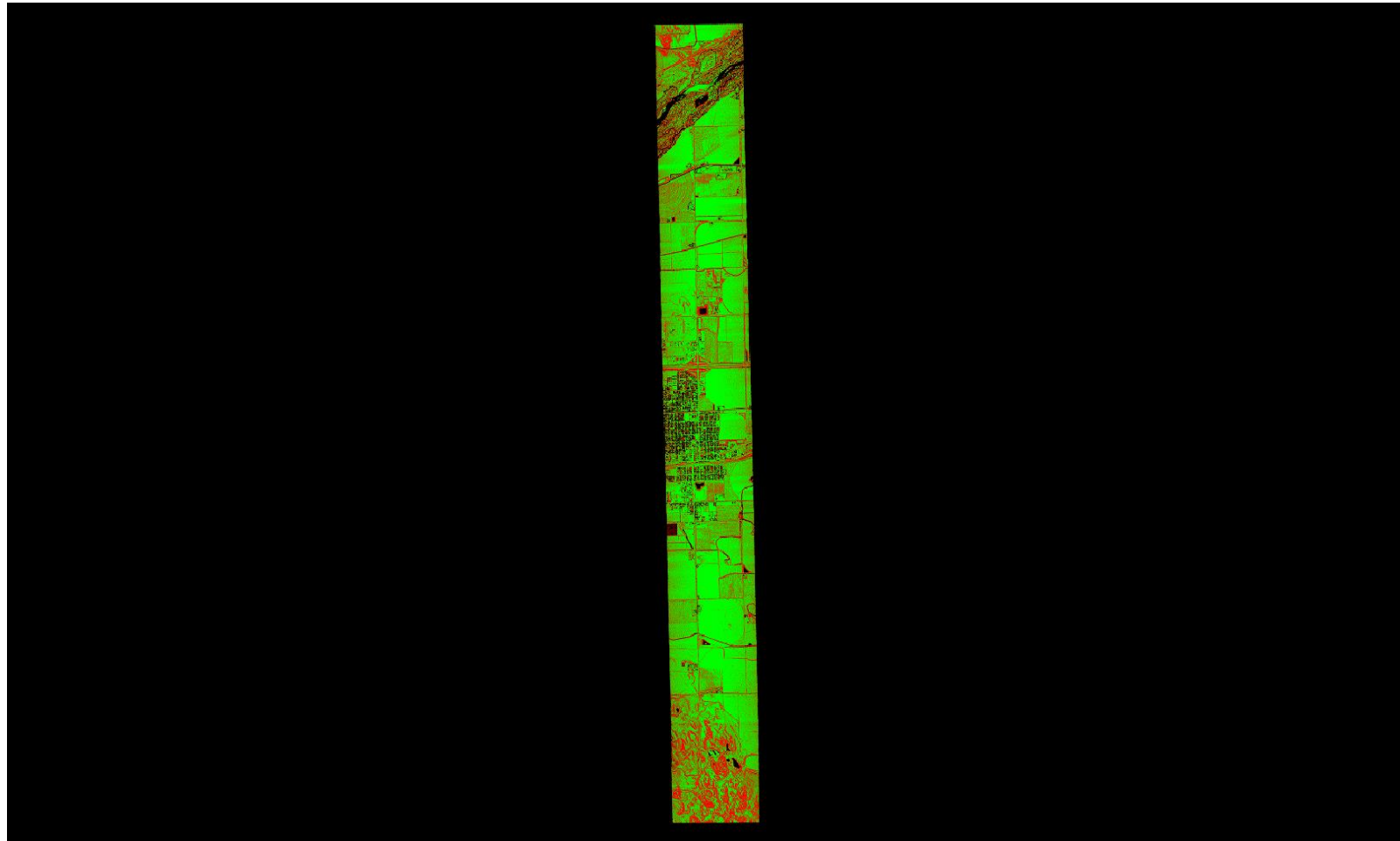
Quality Level (QL)	Smooth surface repeatability (cm)
QL0	≤3
QL1	≤6
QL2	≤6
QL3	≤12

The purpose of this section is to evaluate smooth surface repeatability by measuring departures from planarity of single returns from hard planar surfaces, normalizing for actual variation in the surface elevation. Repeatability of only single returns is then assessed at multiple locations within hard surfaced areas (for example, parking lots or large rooftops).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1004_GRID.jp2](#)

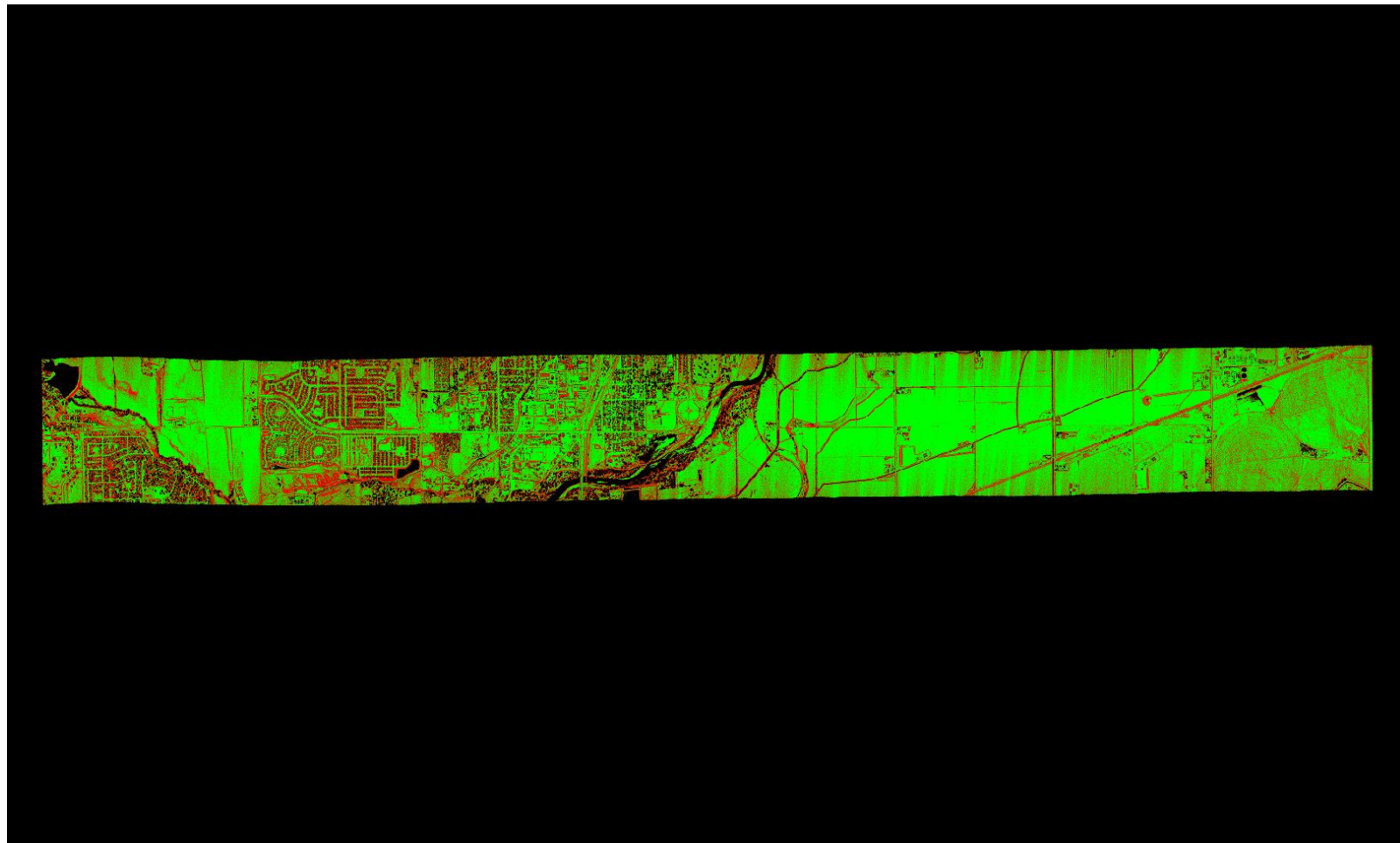


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1007_GRID.jp2](#)

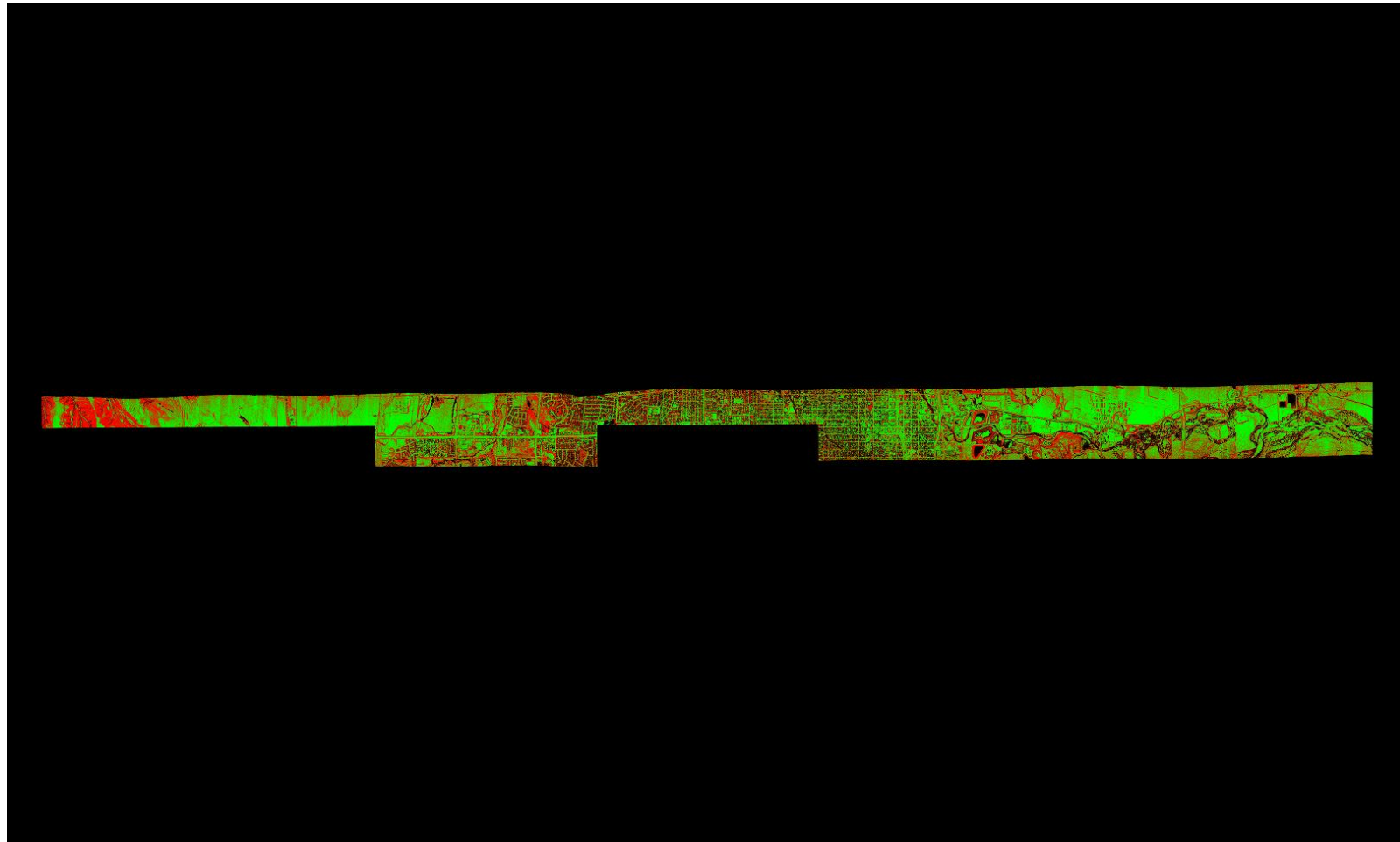


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1015_GRID.jp2](#)

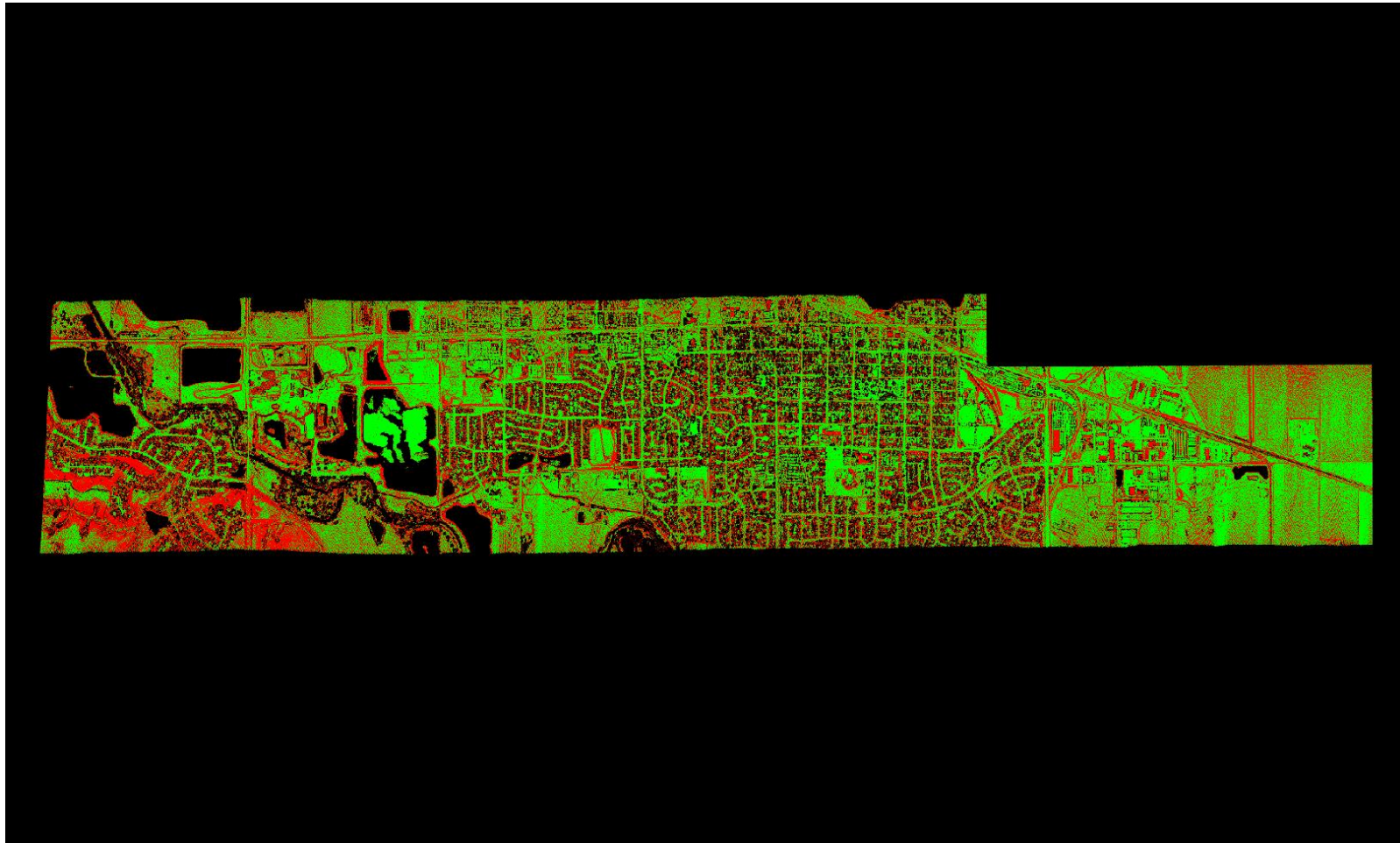


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1017_GRID.jp2](#)

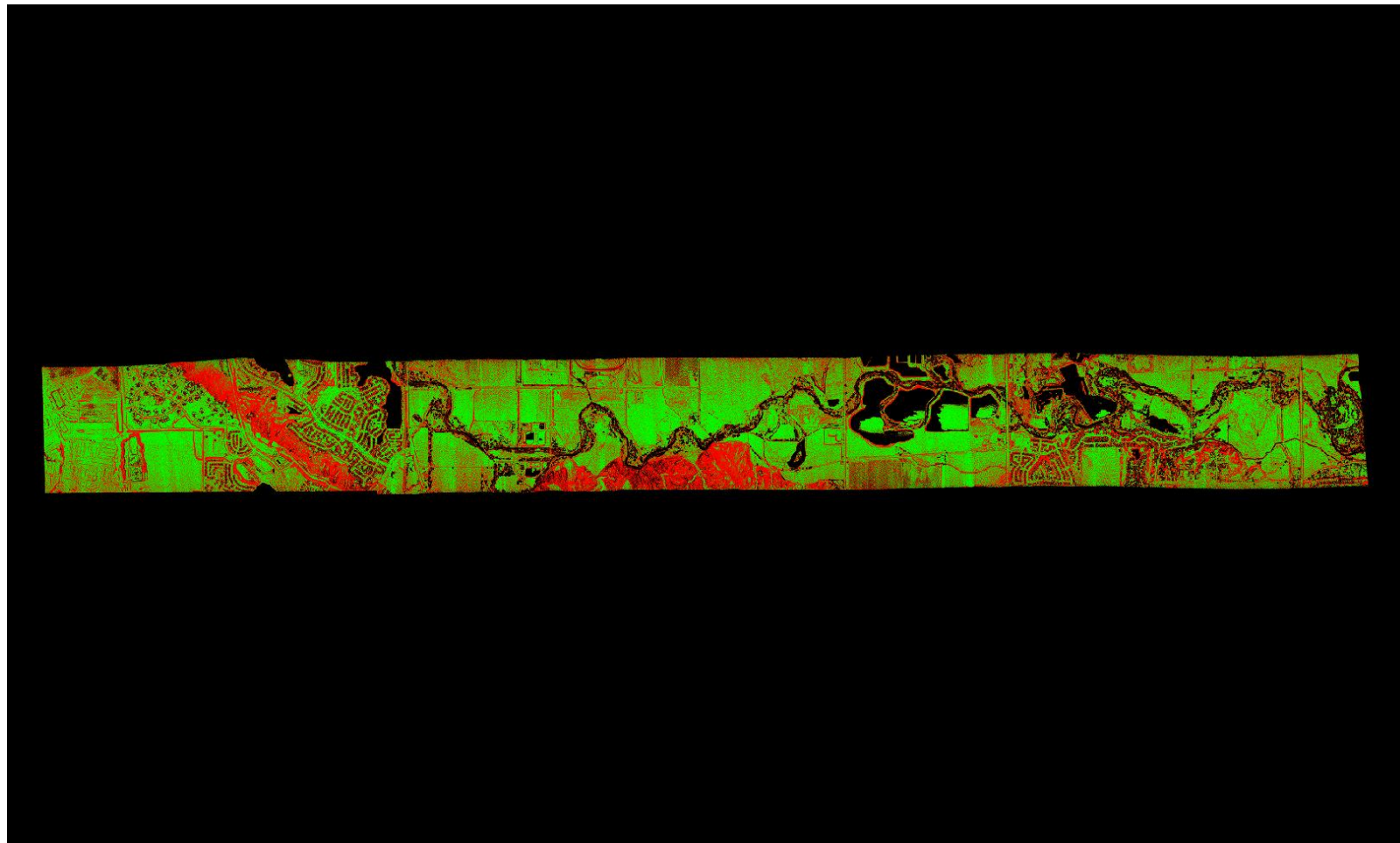


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1020_GRID.jp2](#)

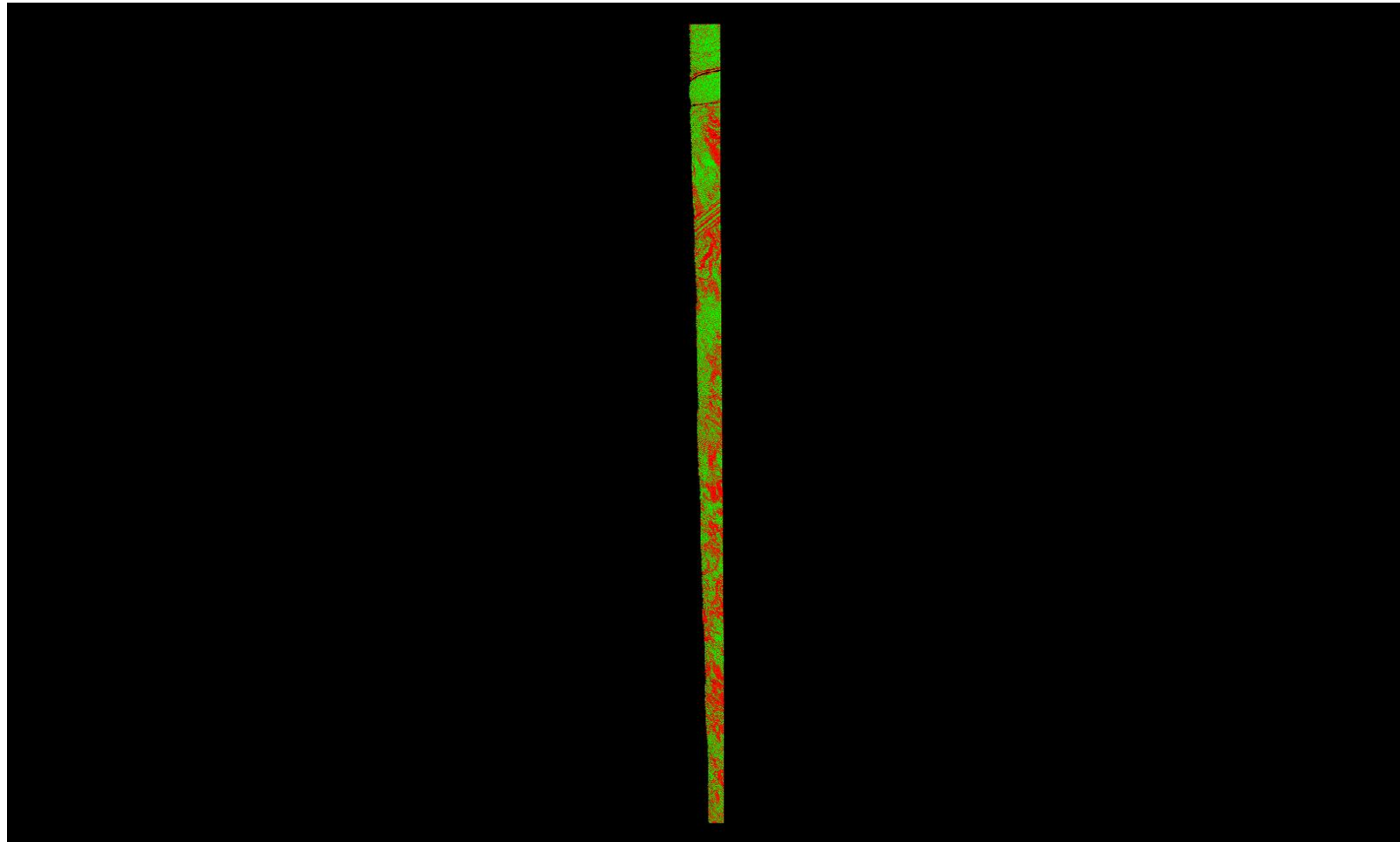


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1044_GRID.jp2](#)

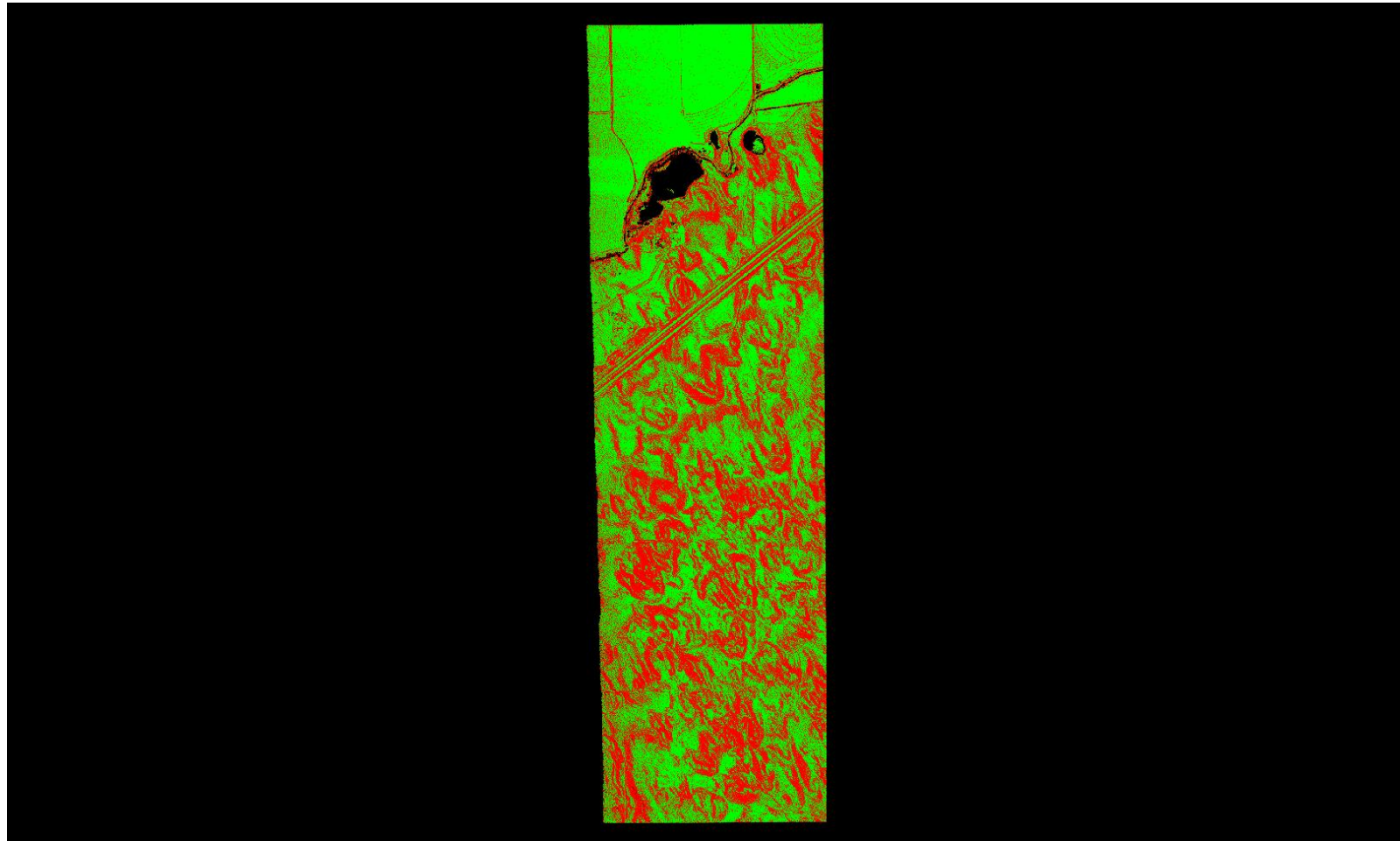


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1045_GRID.jp2](#)

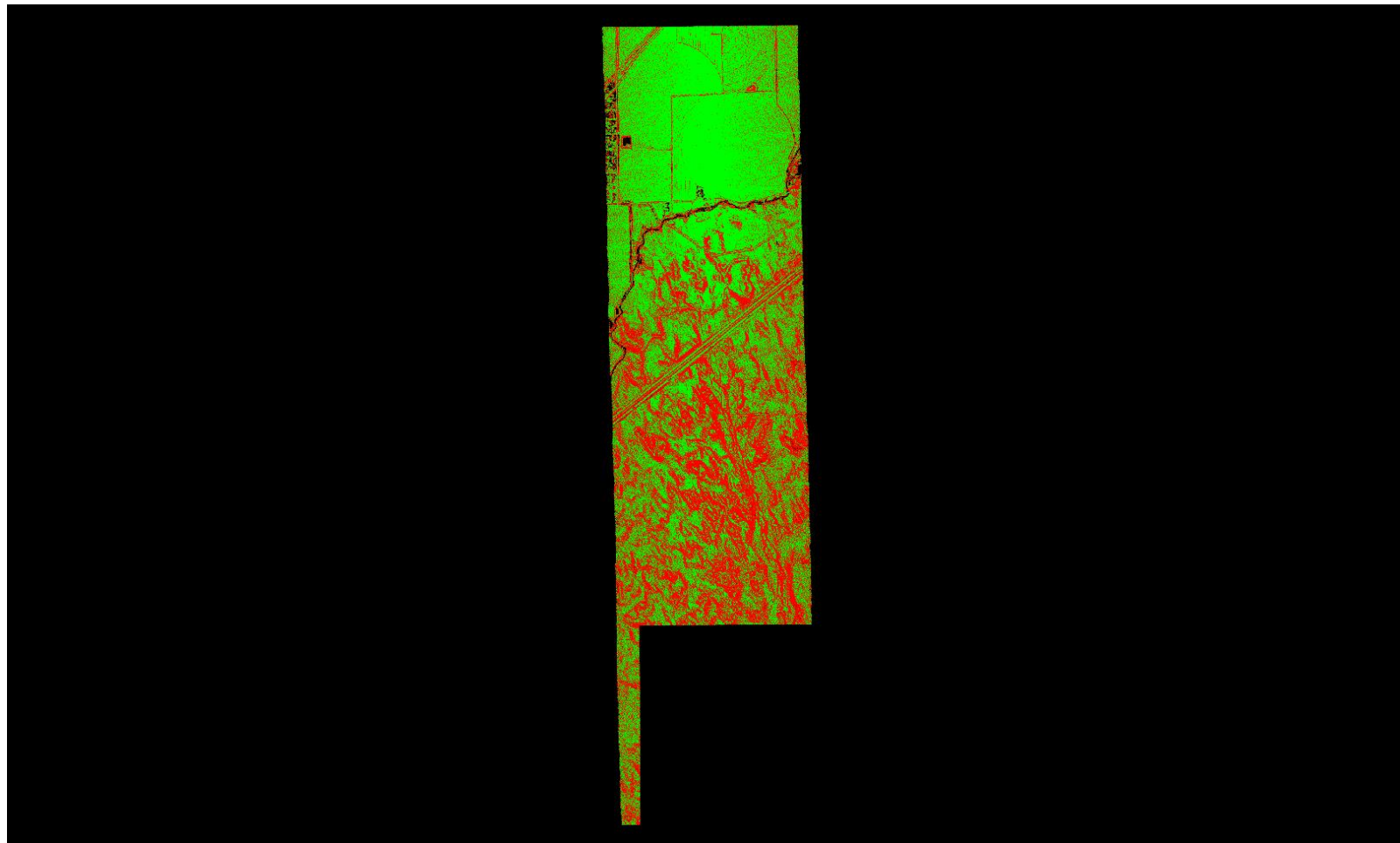


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1046_GRID.jp2](#)

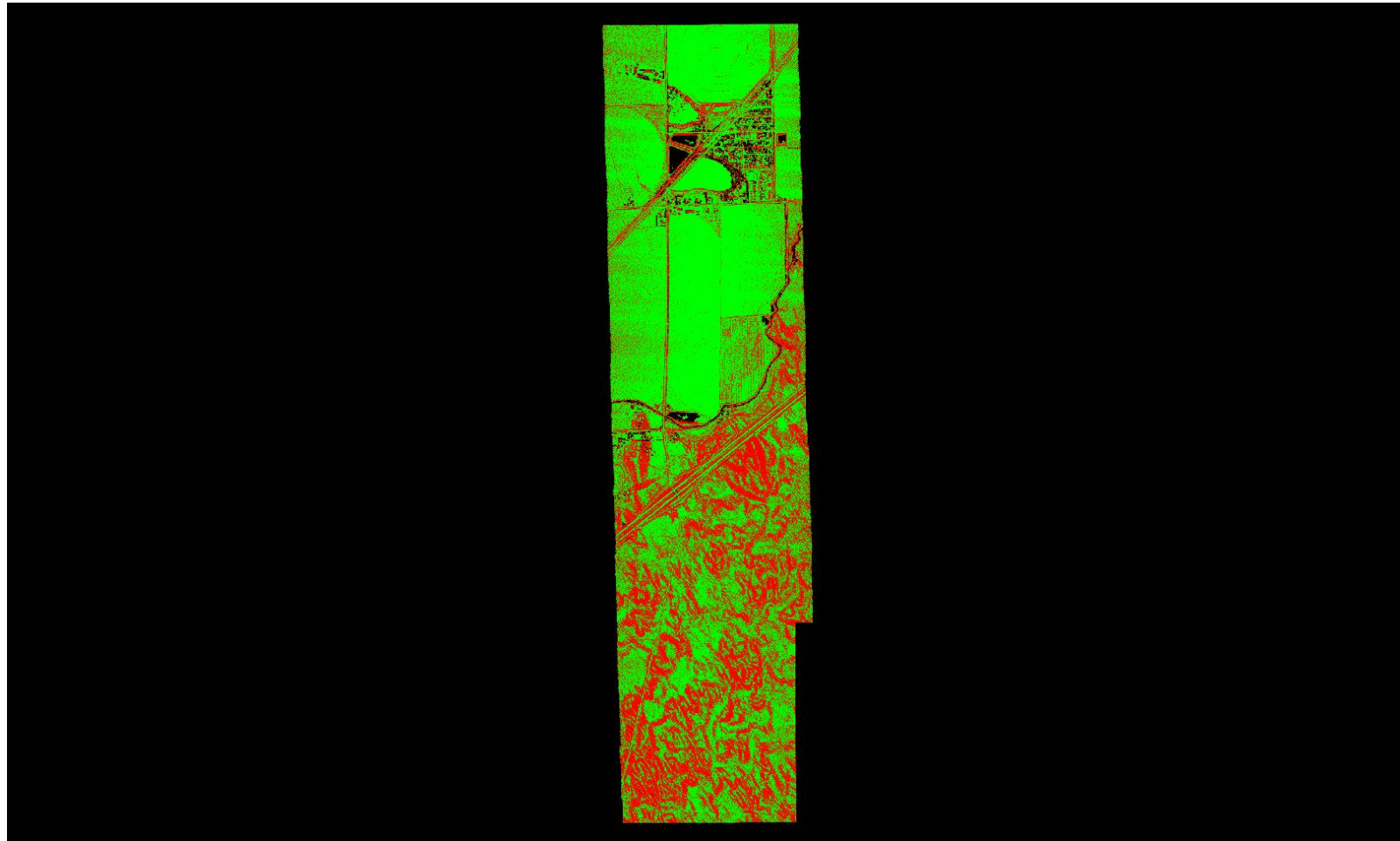


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1047_GRID.jp2](#)

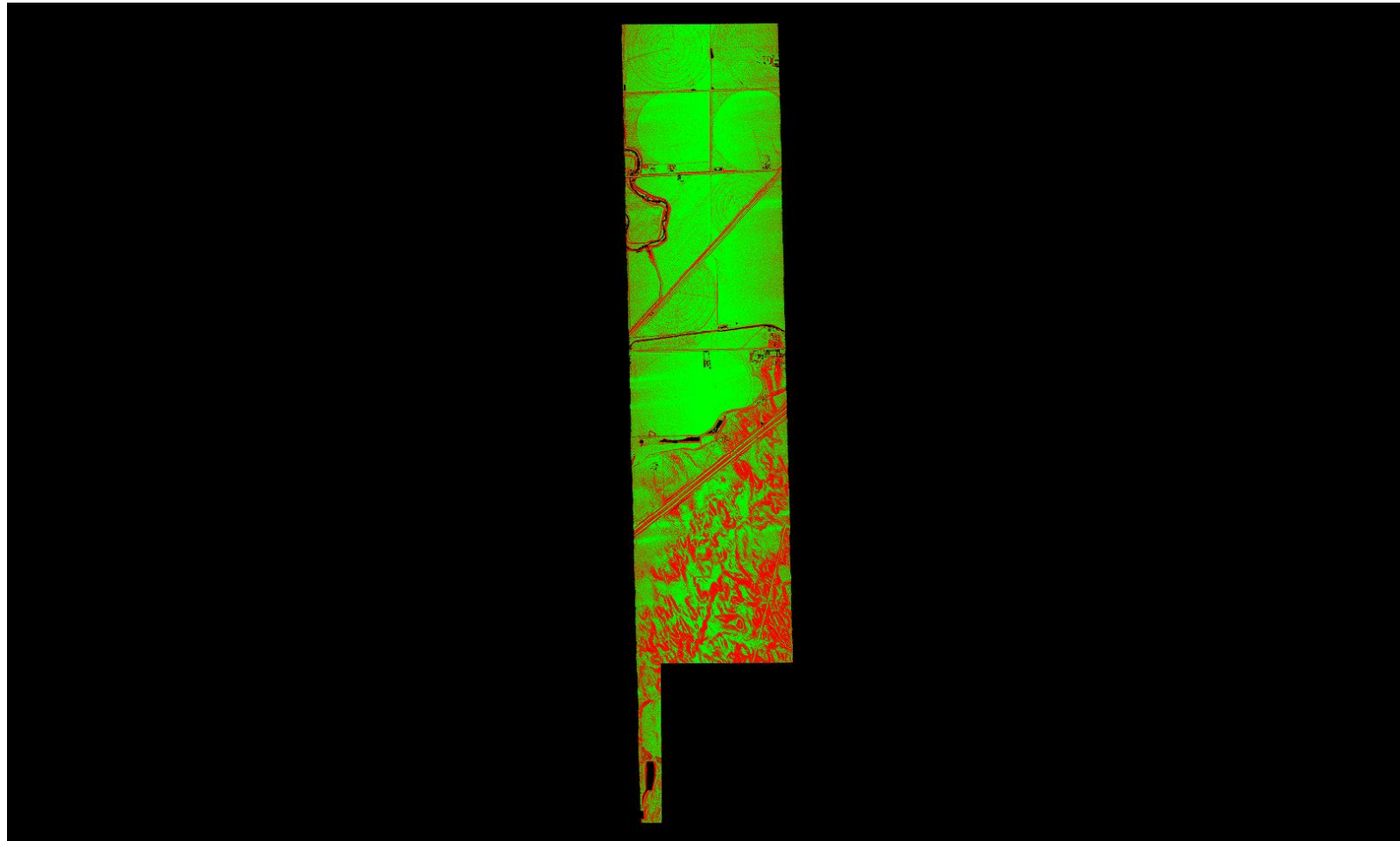


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1048_GRID.jp2](#)

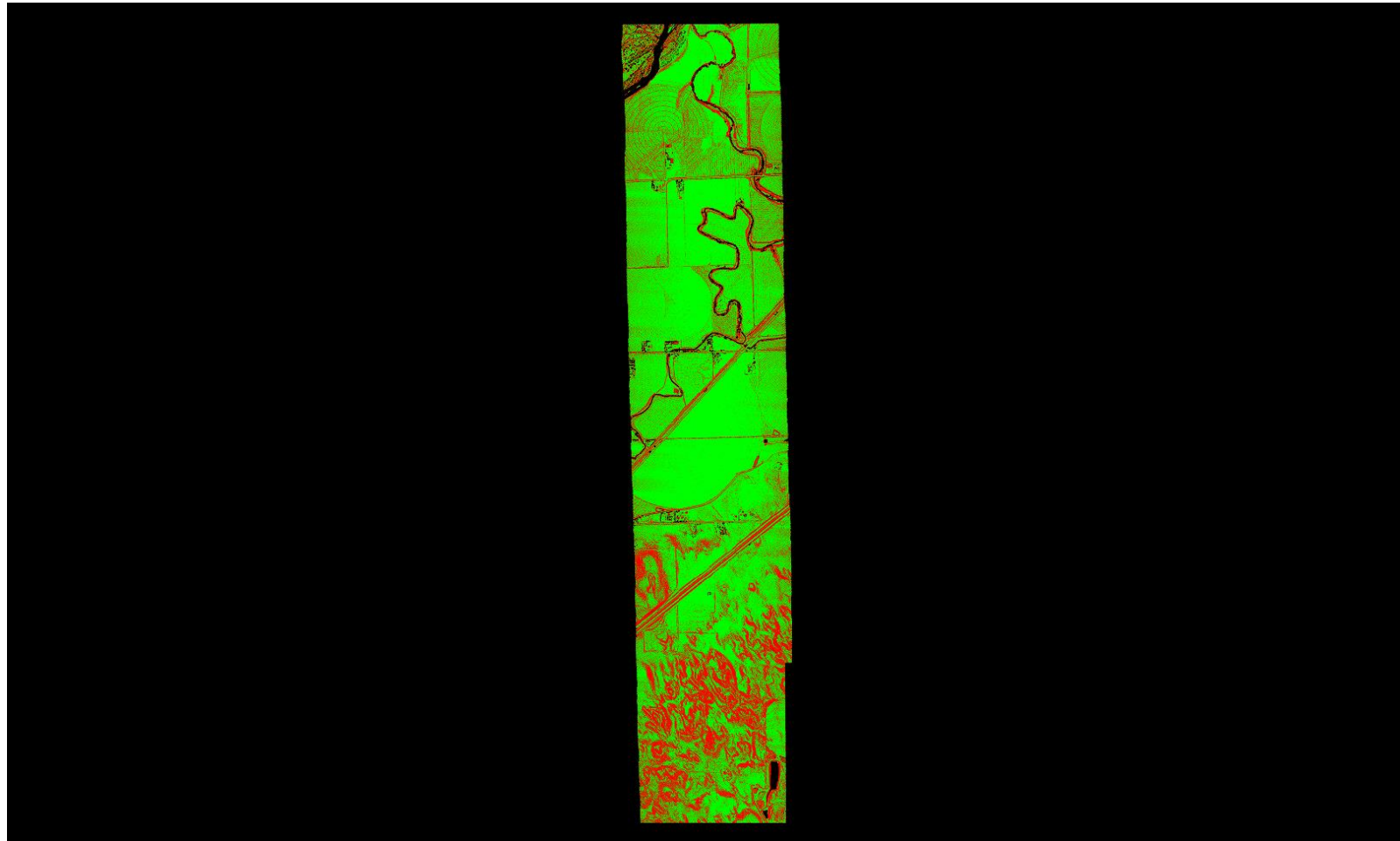


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1049_GRID.jp2](#)

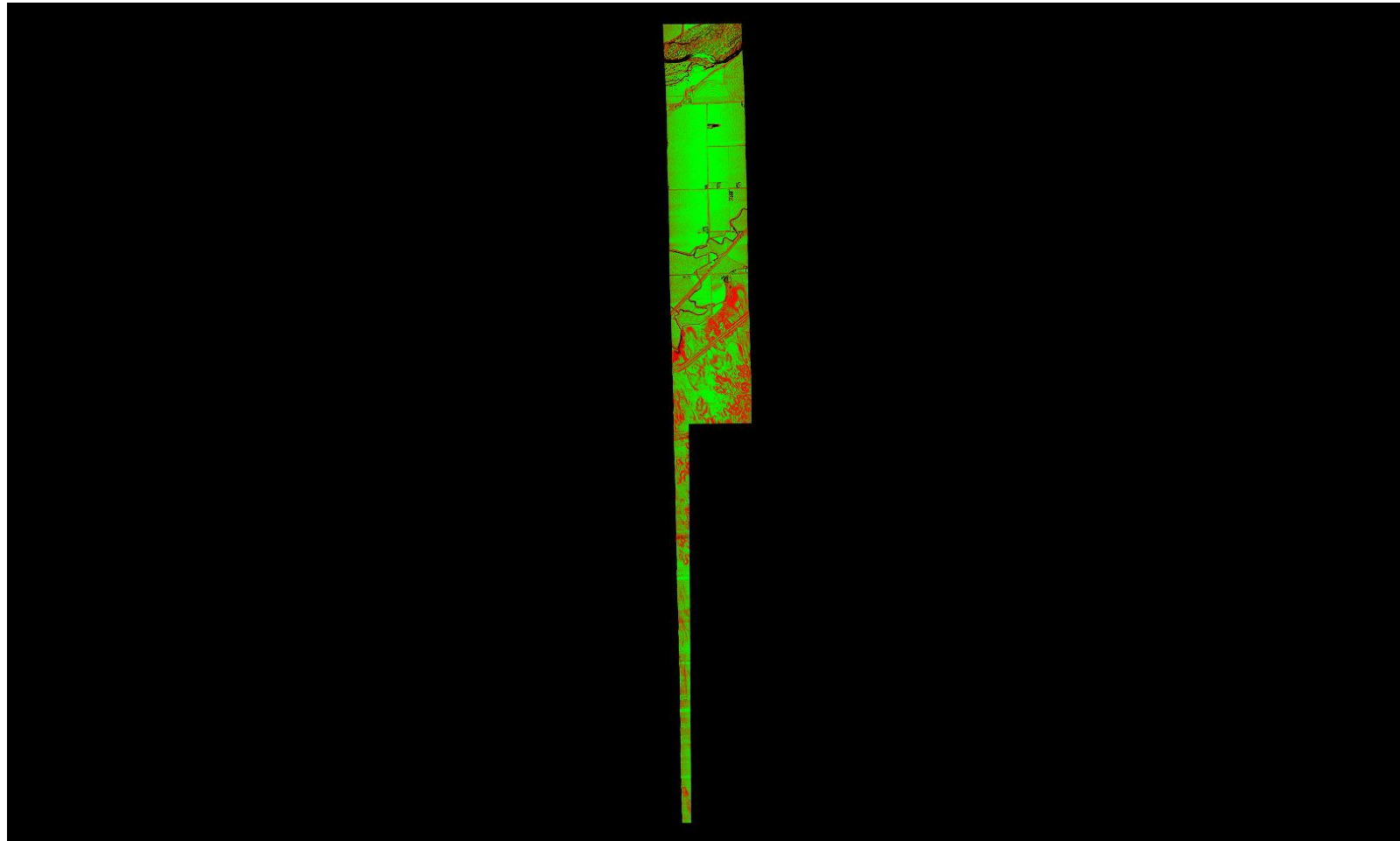


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1050_GRID.jp2](#)

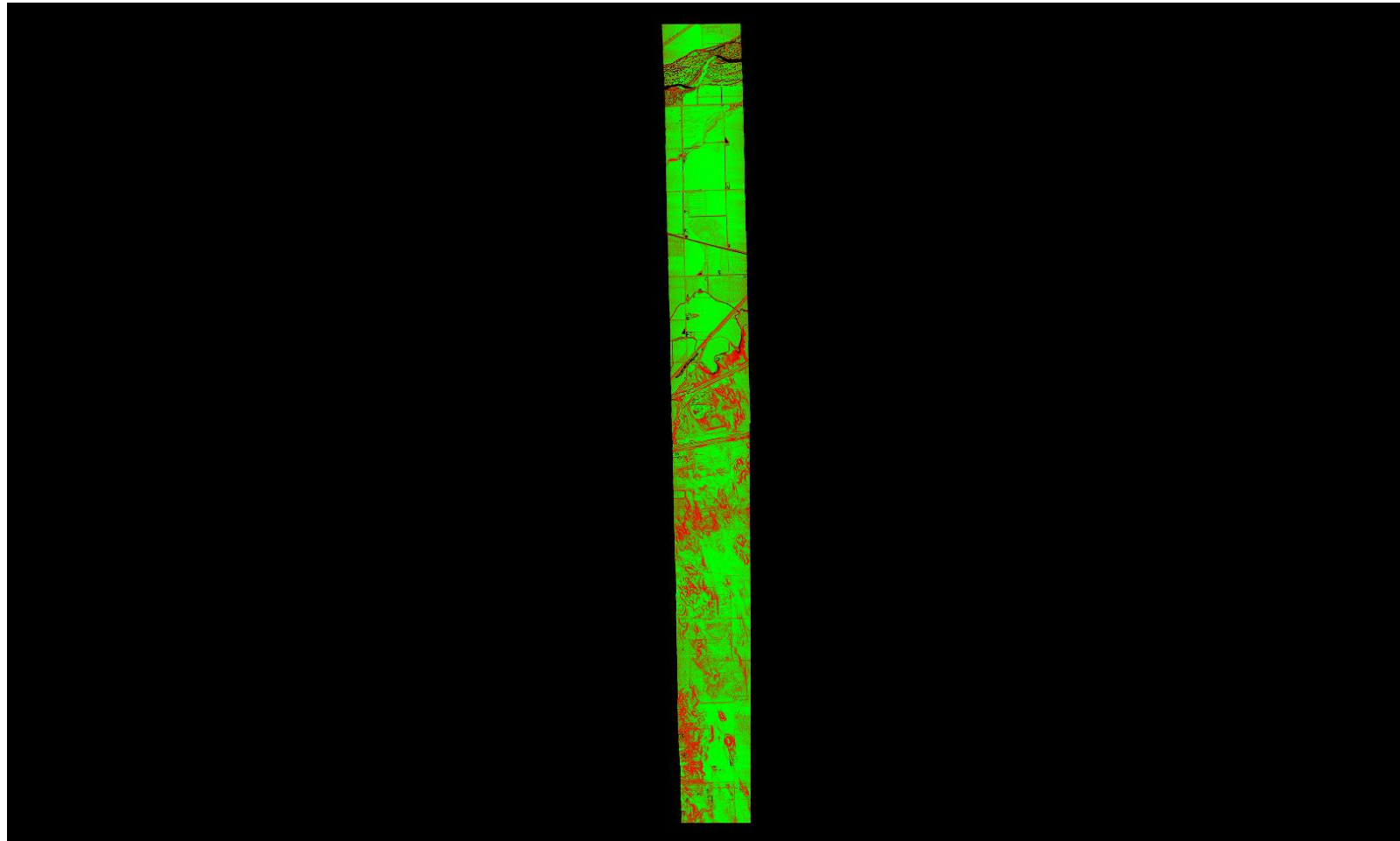


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1051_GRID.jp2](#)

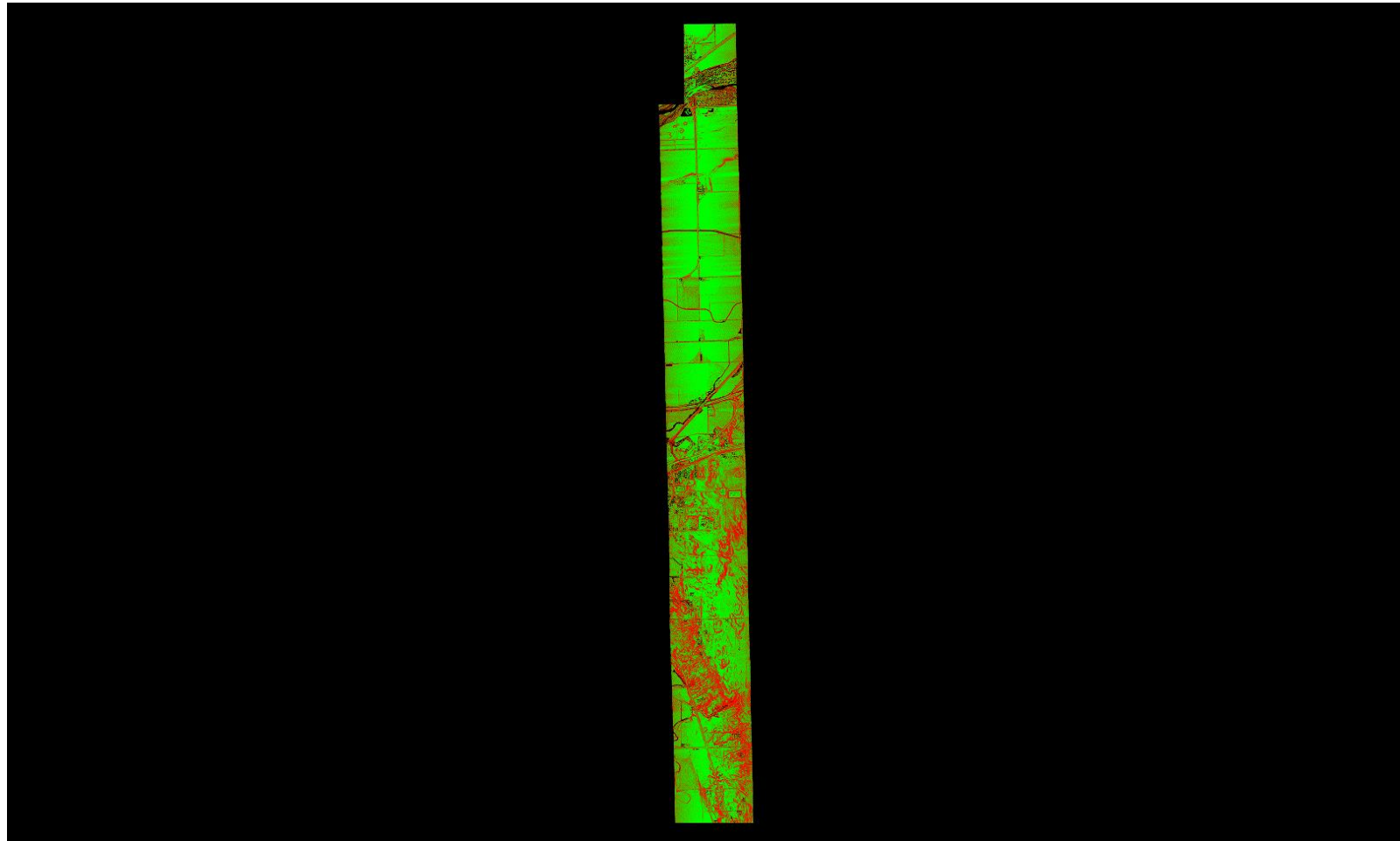


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1052_GRID.jp2](#)

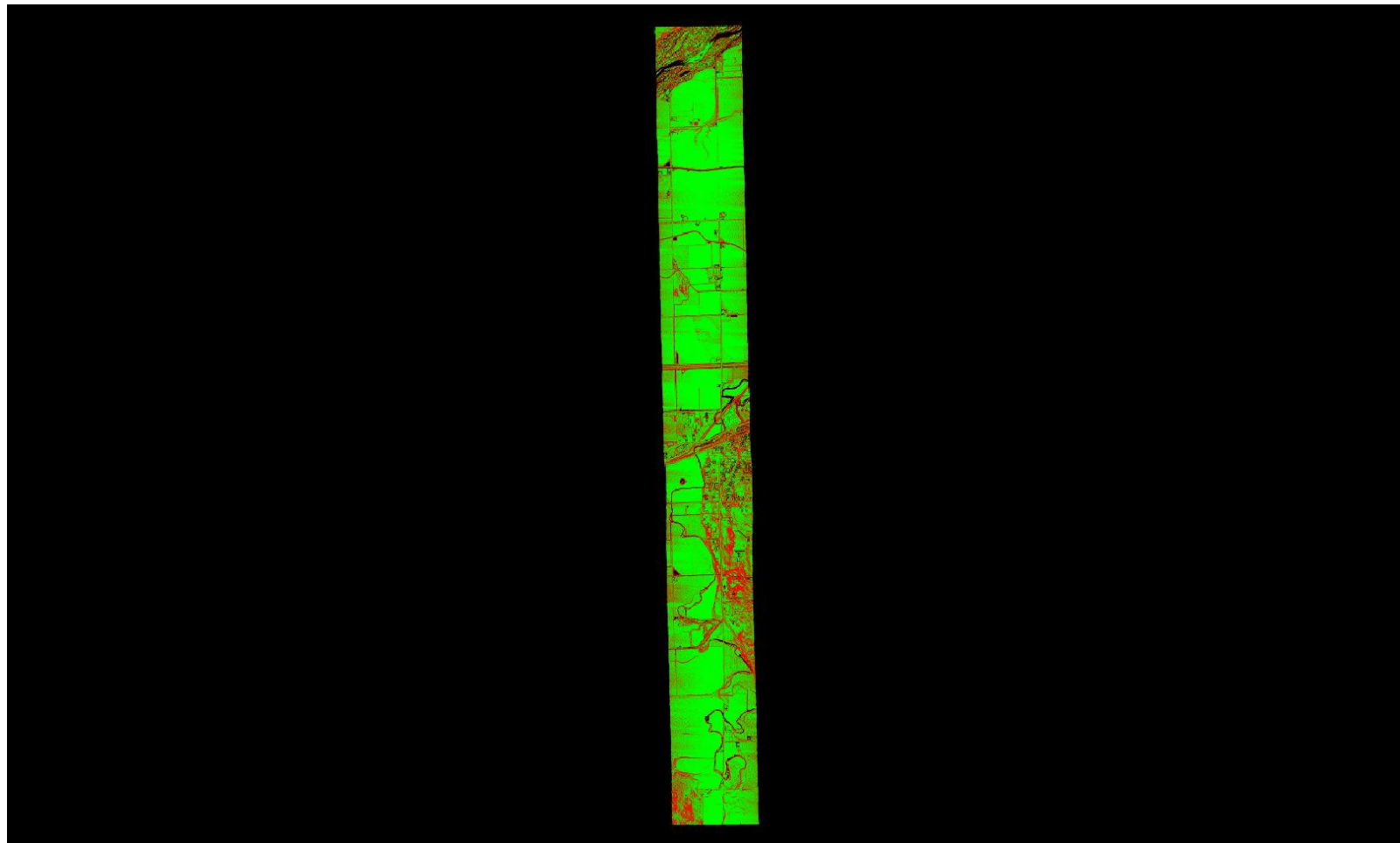


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1053_GRID.jp2](#)

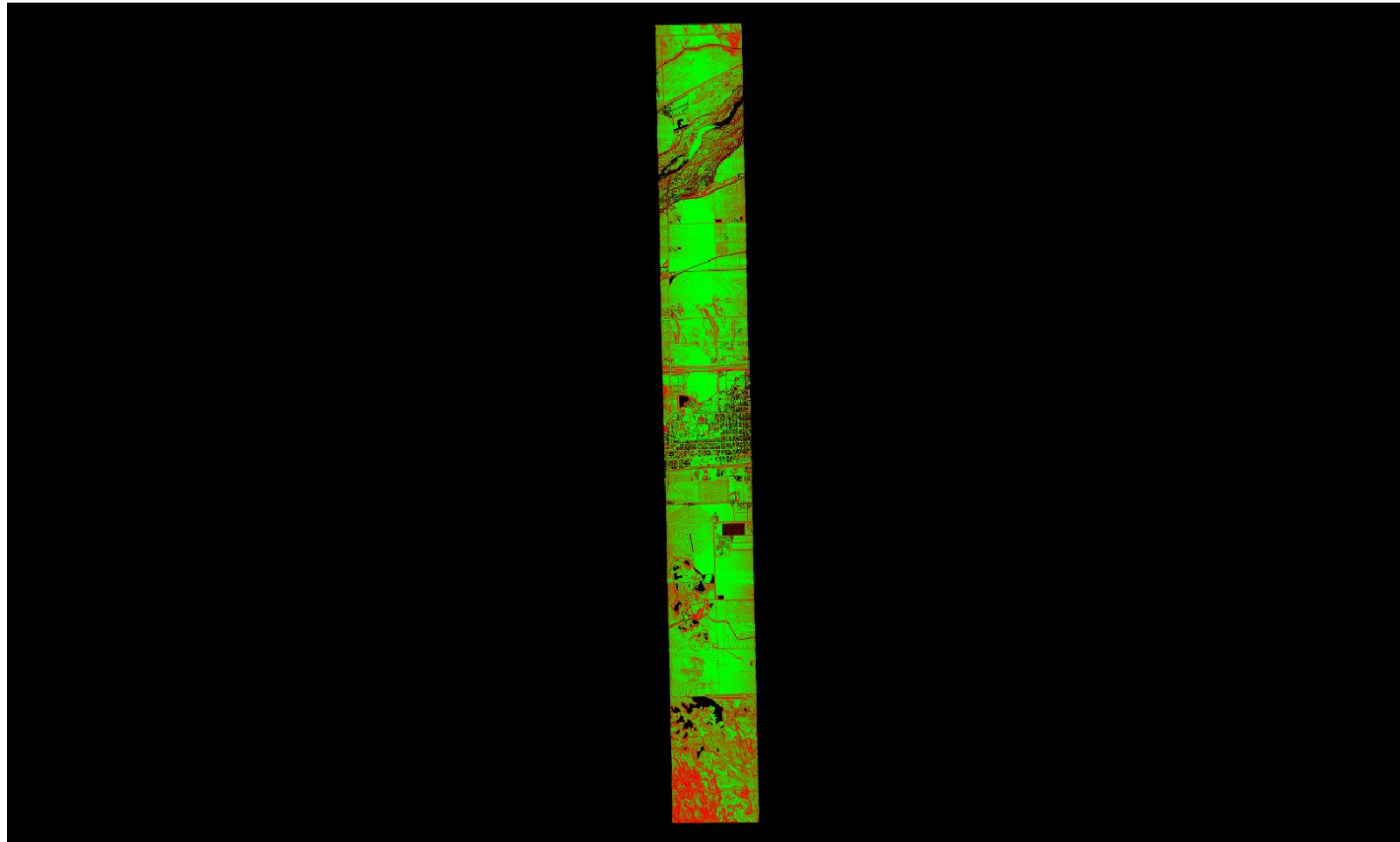


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1054_GRID.jp2](#)

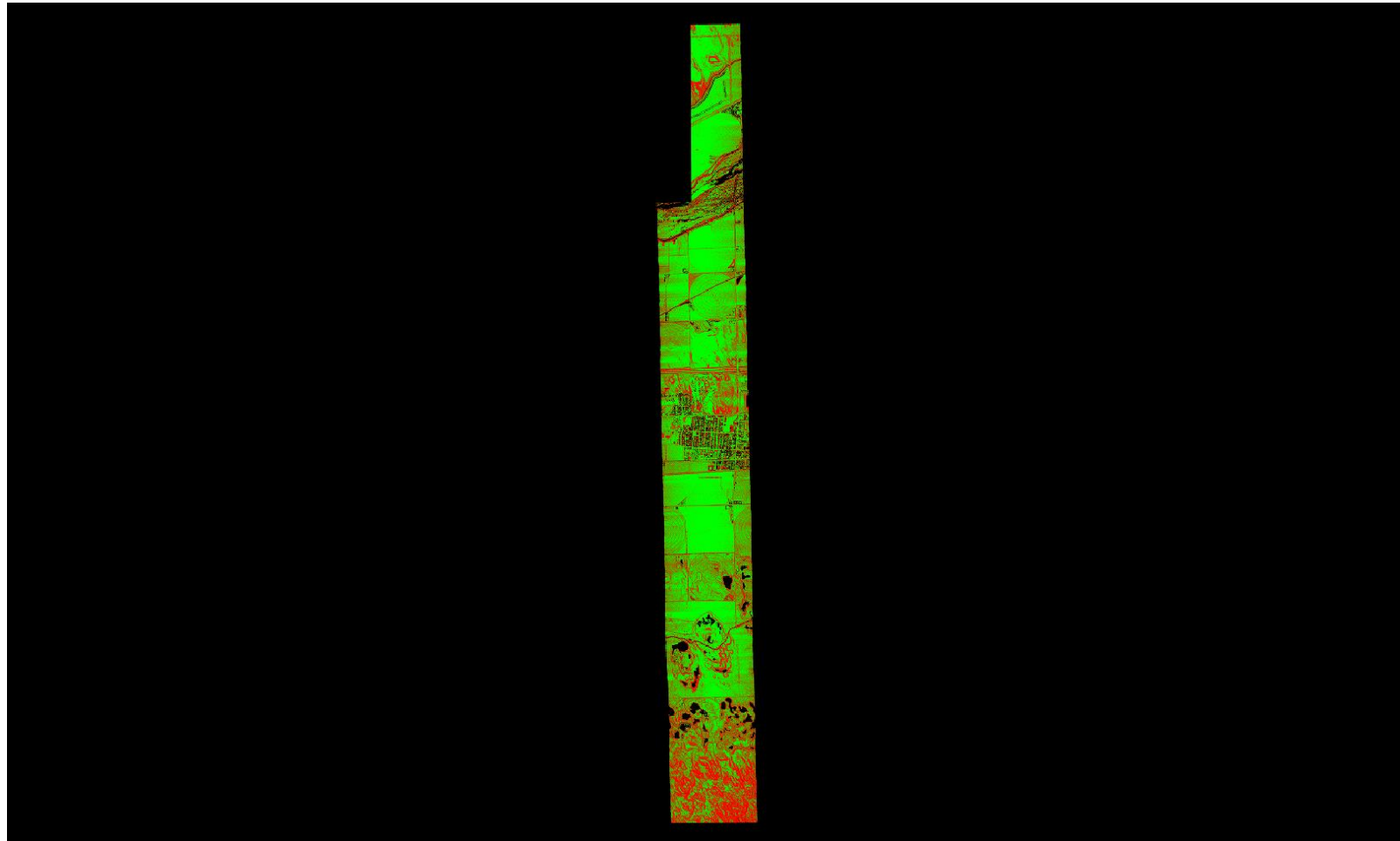


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1055_GRID.jp2](#)

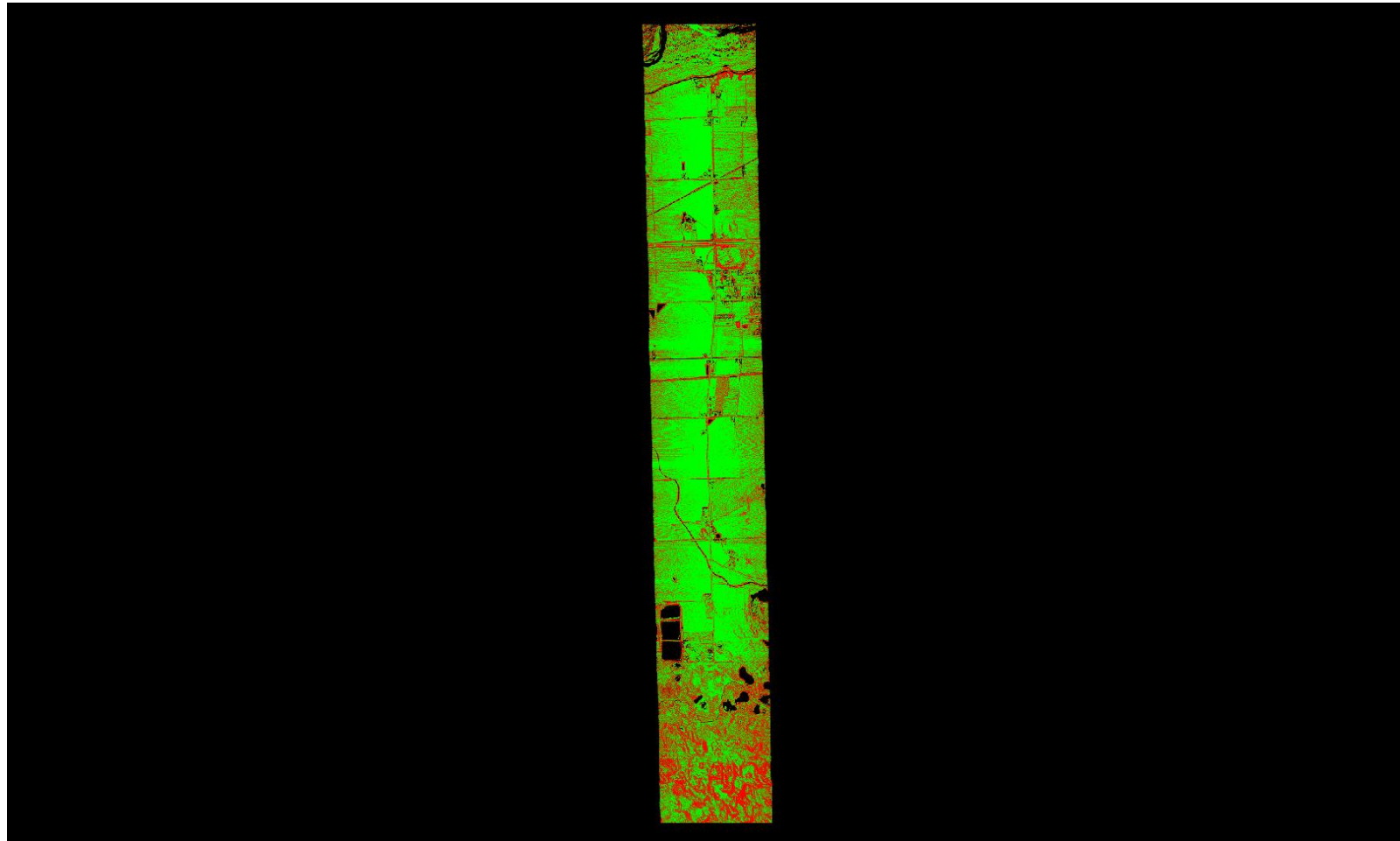


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1056_GRID.jp2](#)

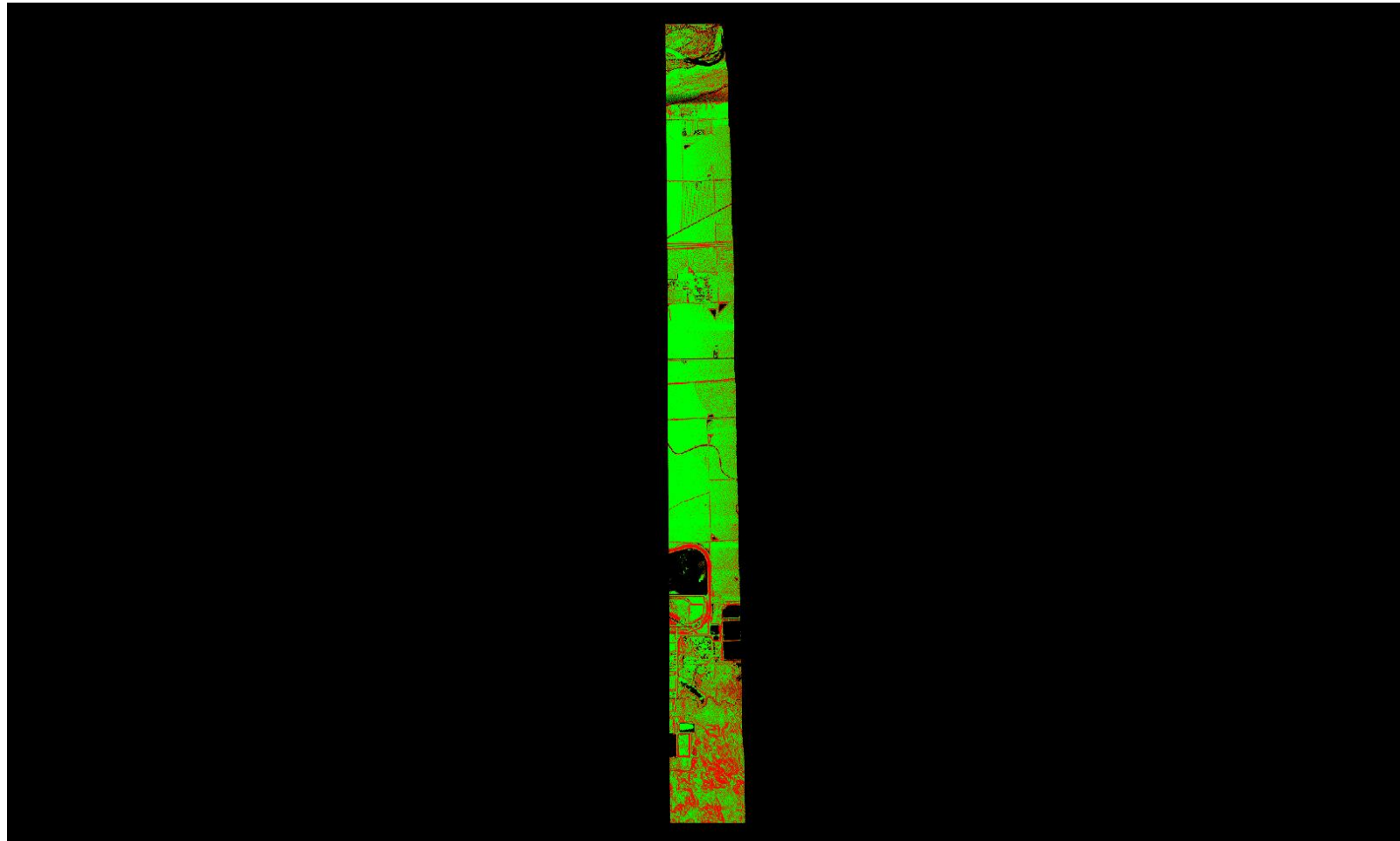


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1057_GRID.jp2](#)



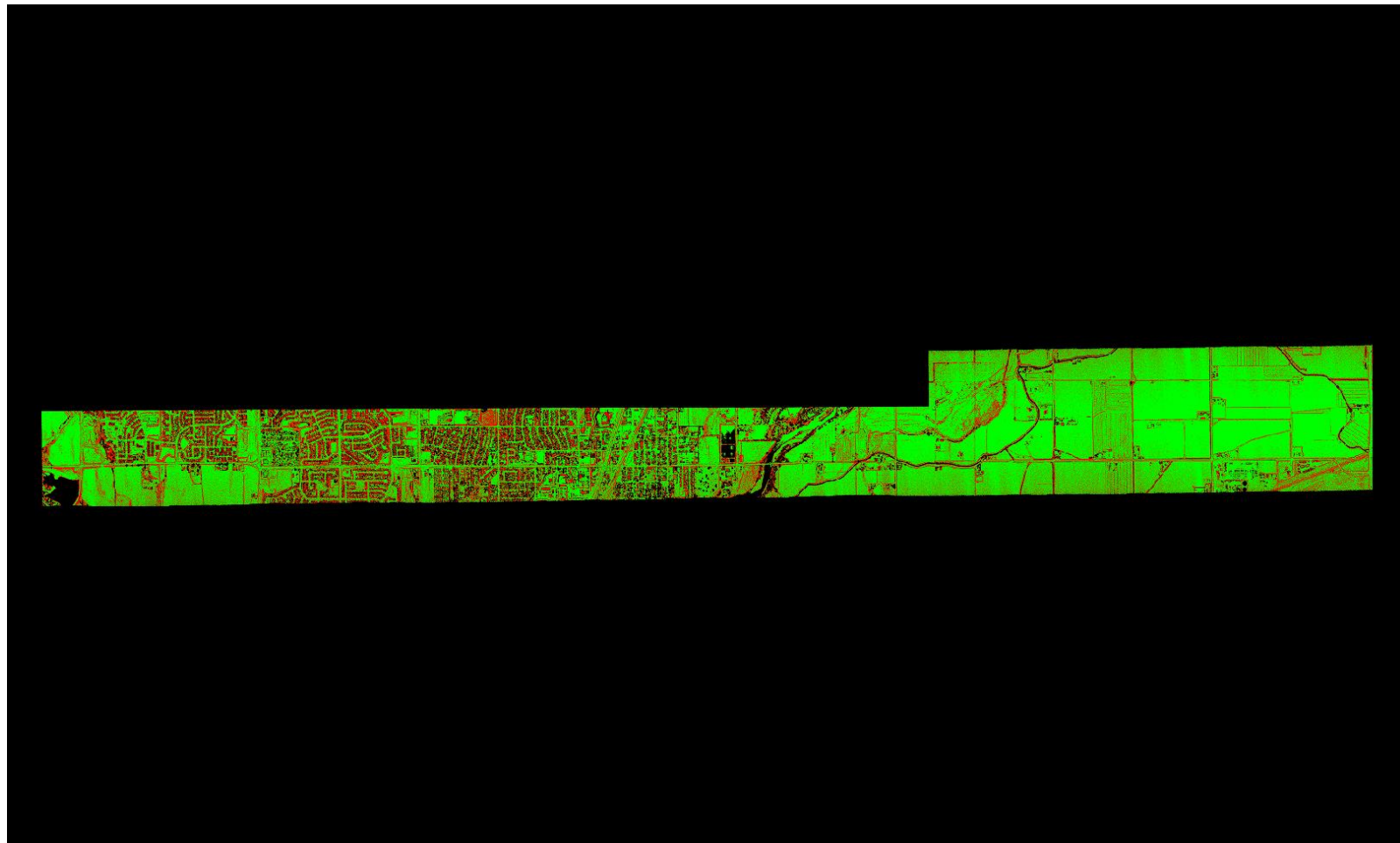
0	0.060	0.597 (Meter)
0	0.196	1.960 (US Survey Feet)

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.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1081_GRID.jp2](#)

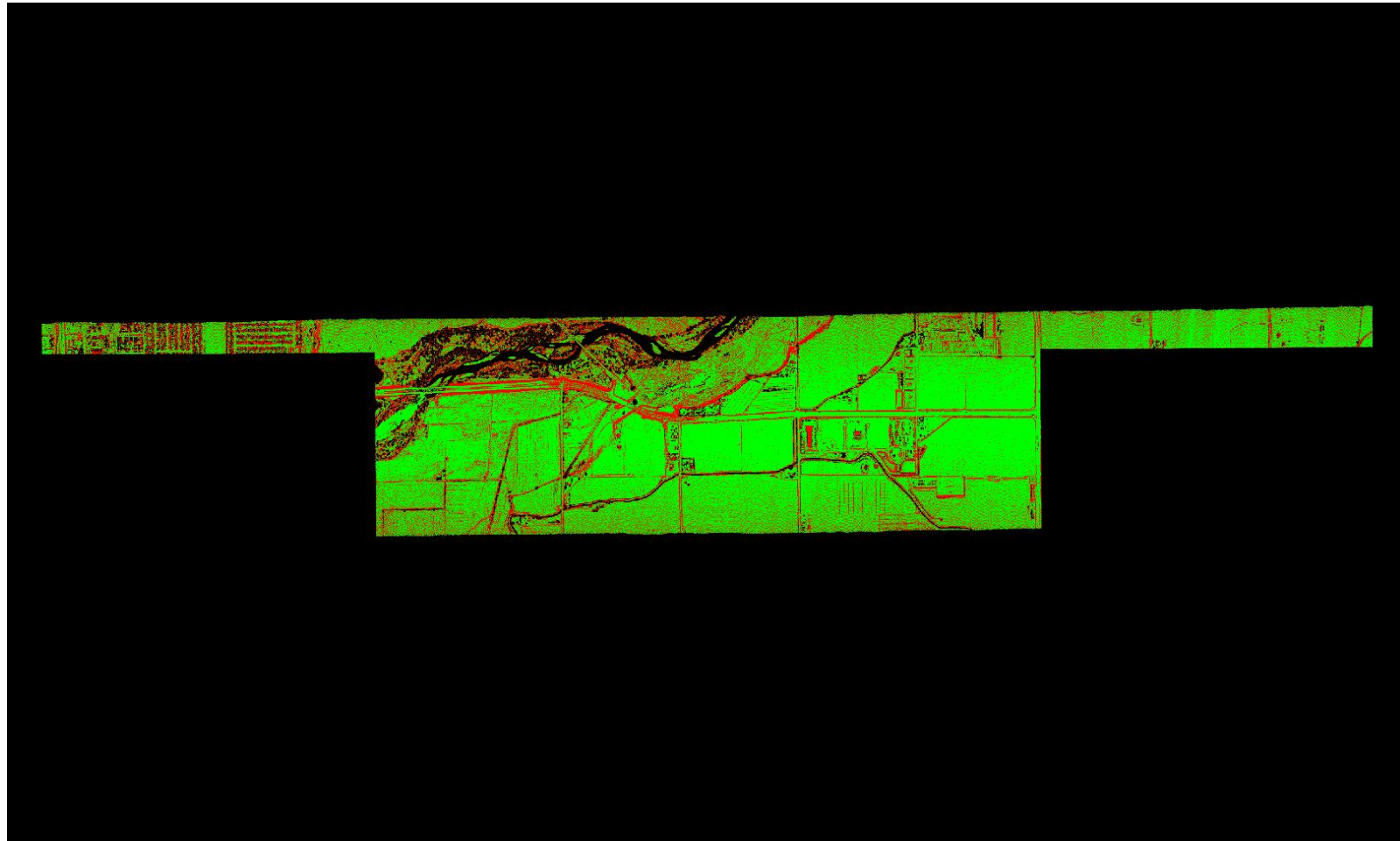


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1082_GRID.jp2](#)



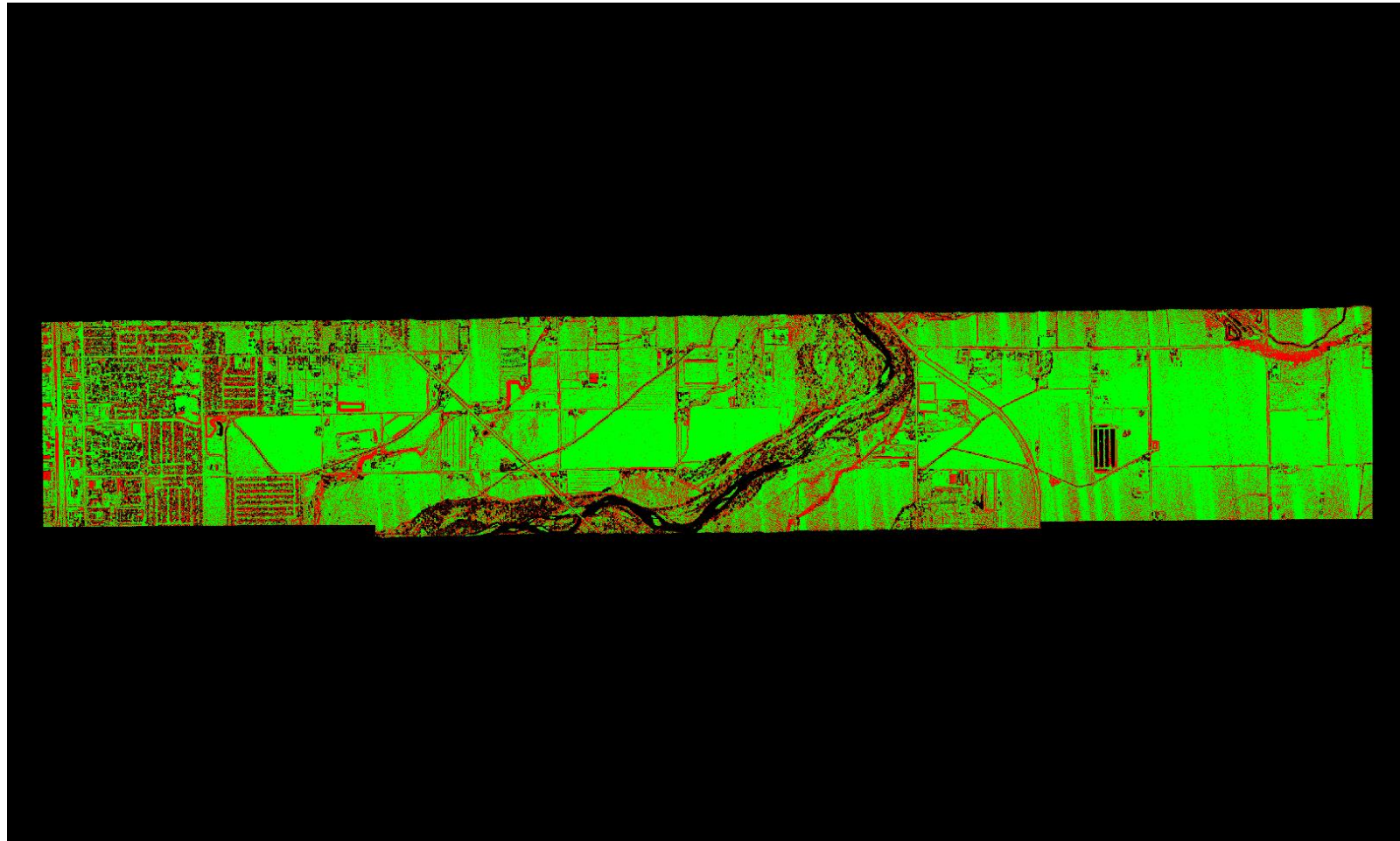
0	0.060	0.597 (Meter)
0	0.196	1.960 (US Survey Feet)

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.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1083_GRID.jp2](#)

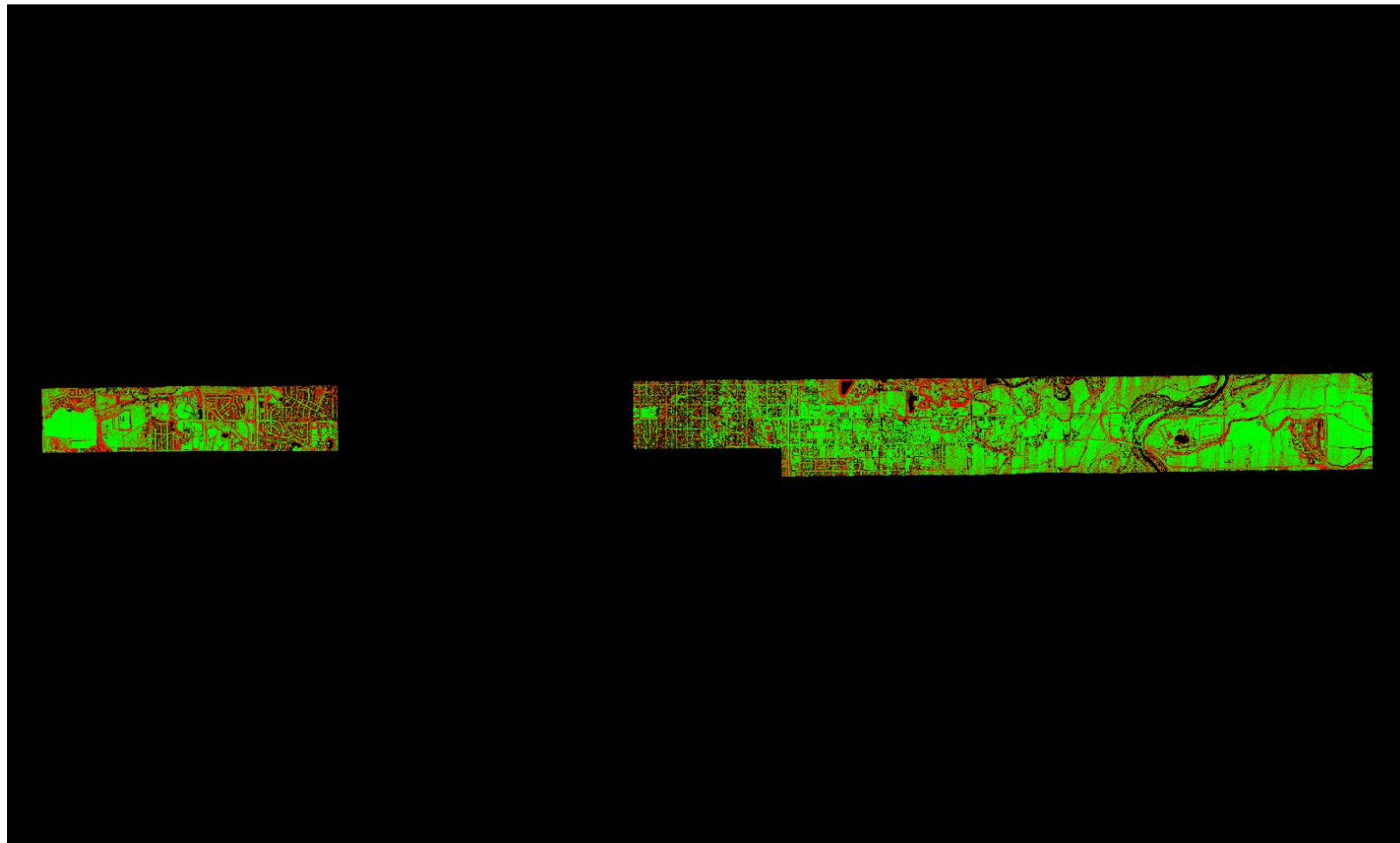


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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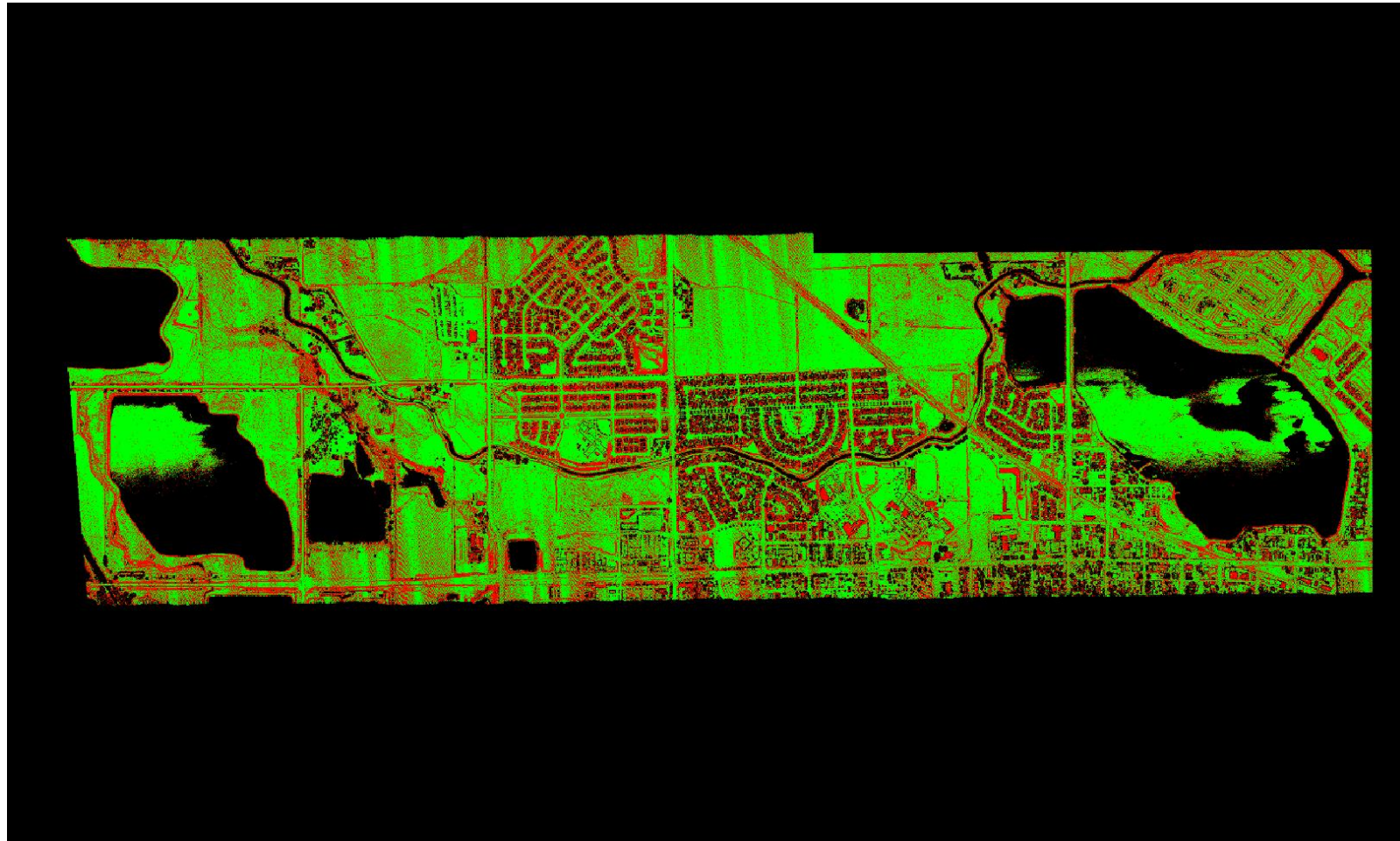


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1158_GRID.jp2](#)

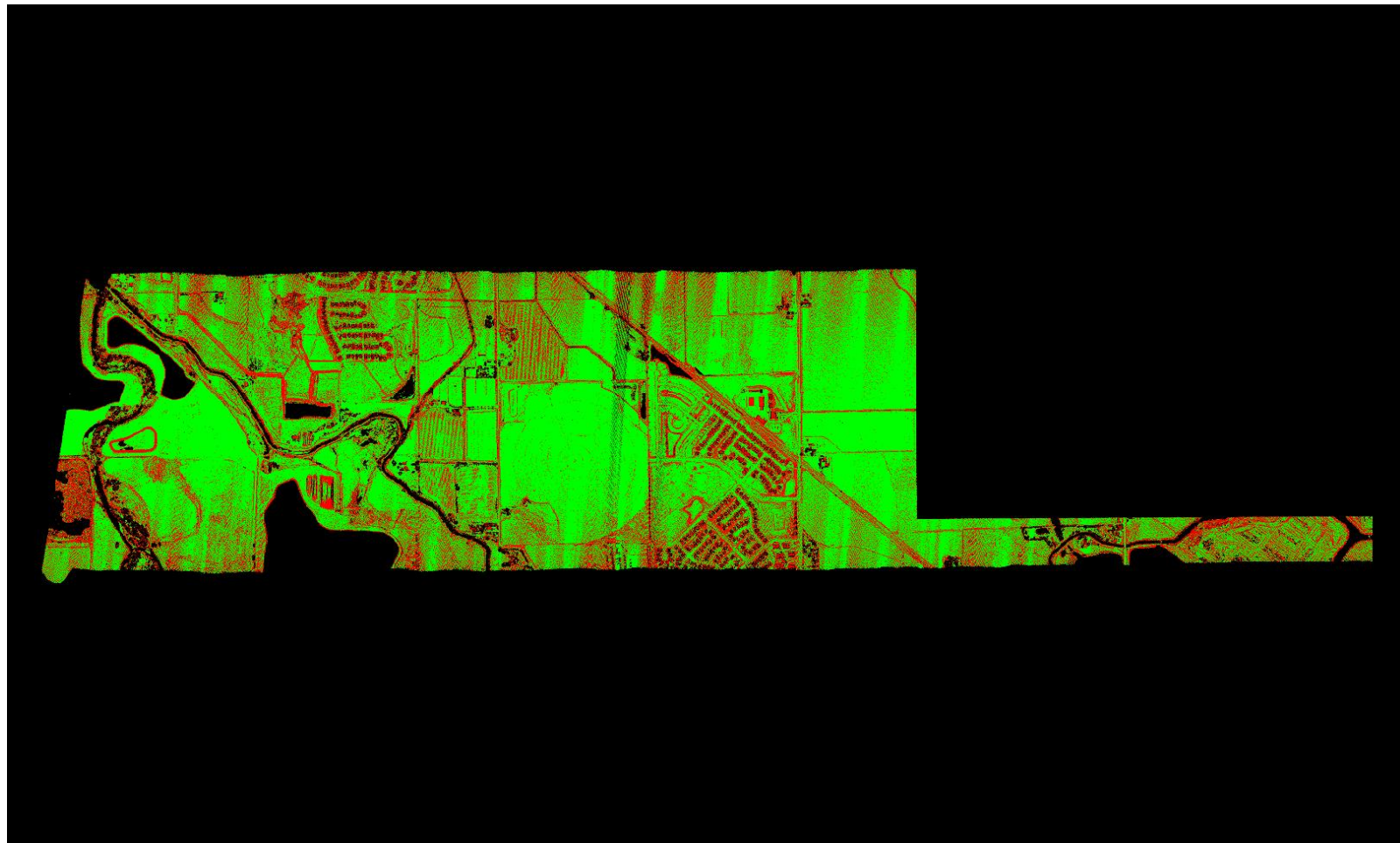


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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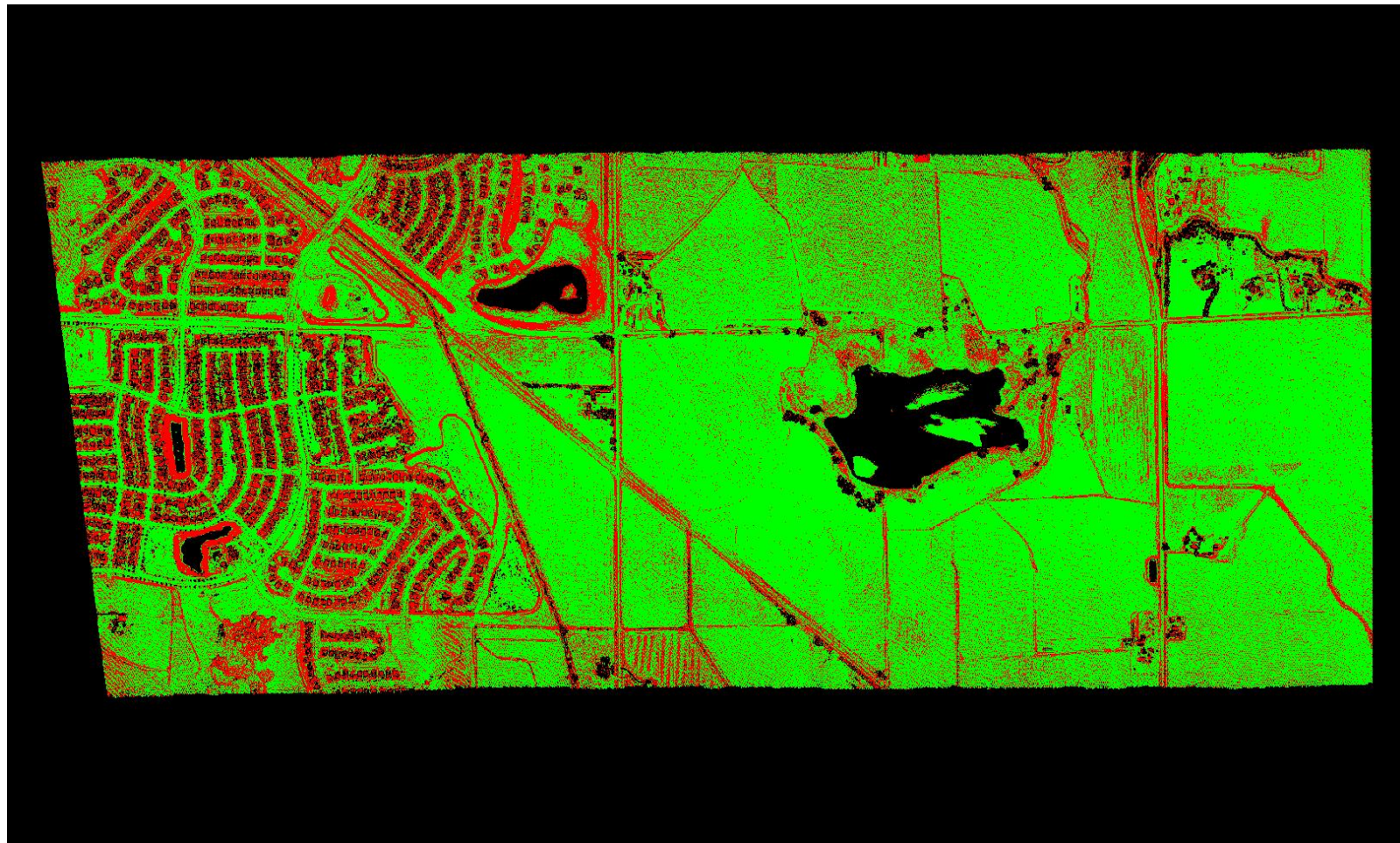


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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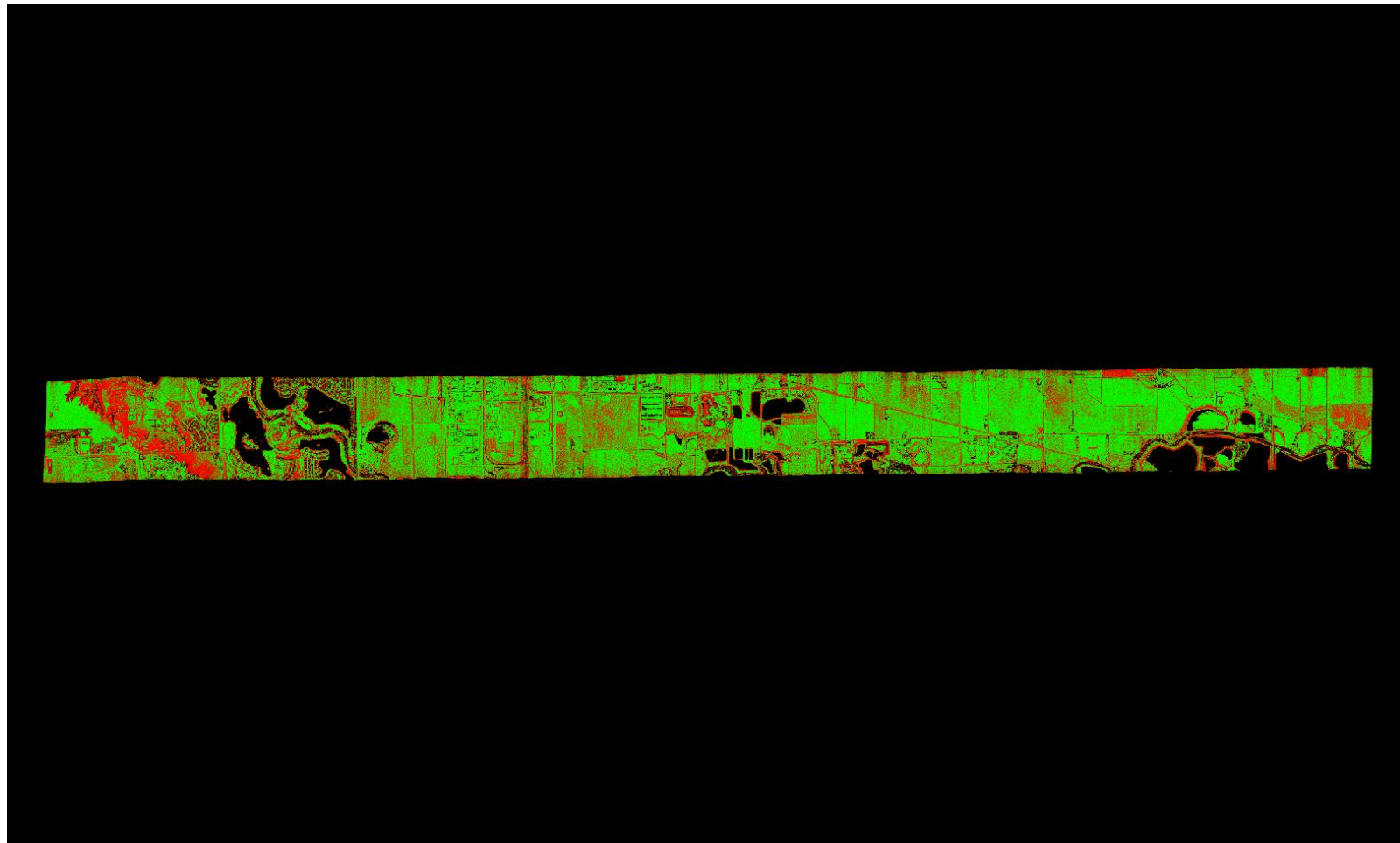


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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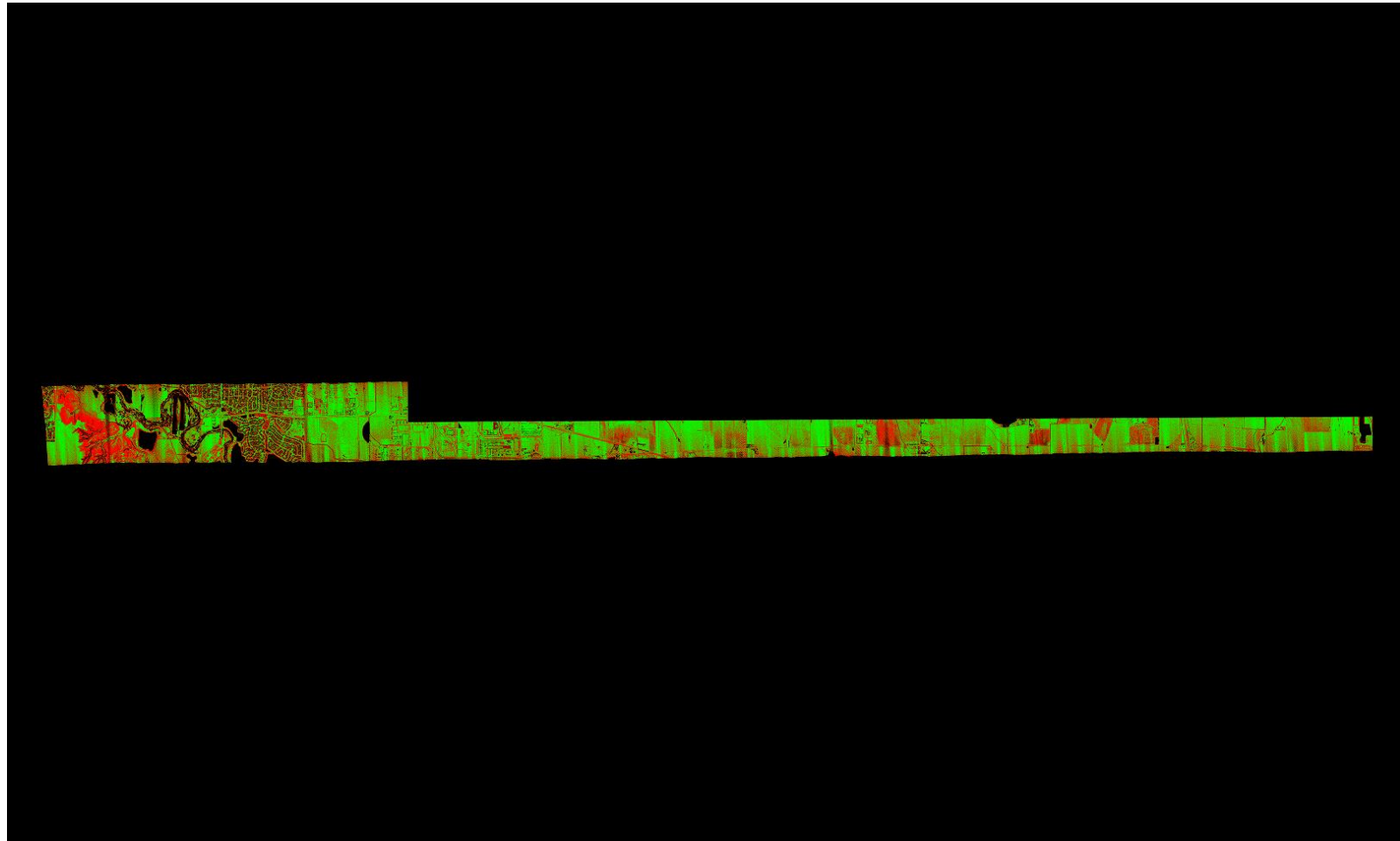


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1178_GRID.jp2](#)

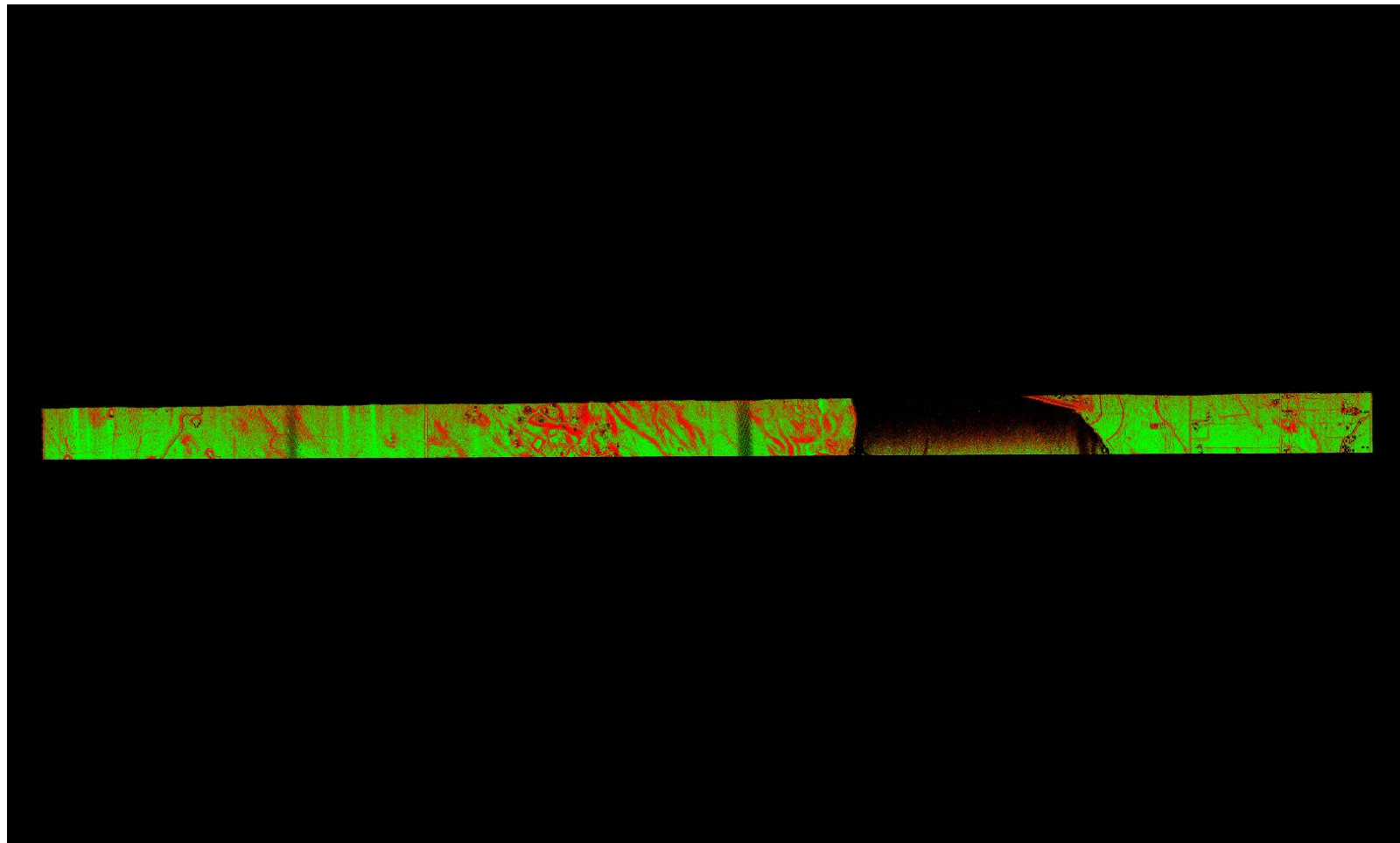


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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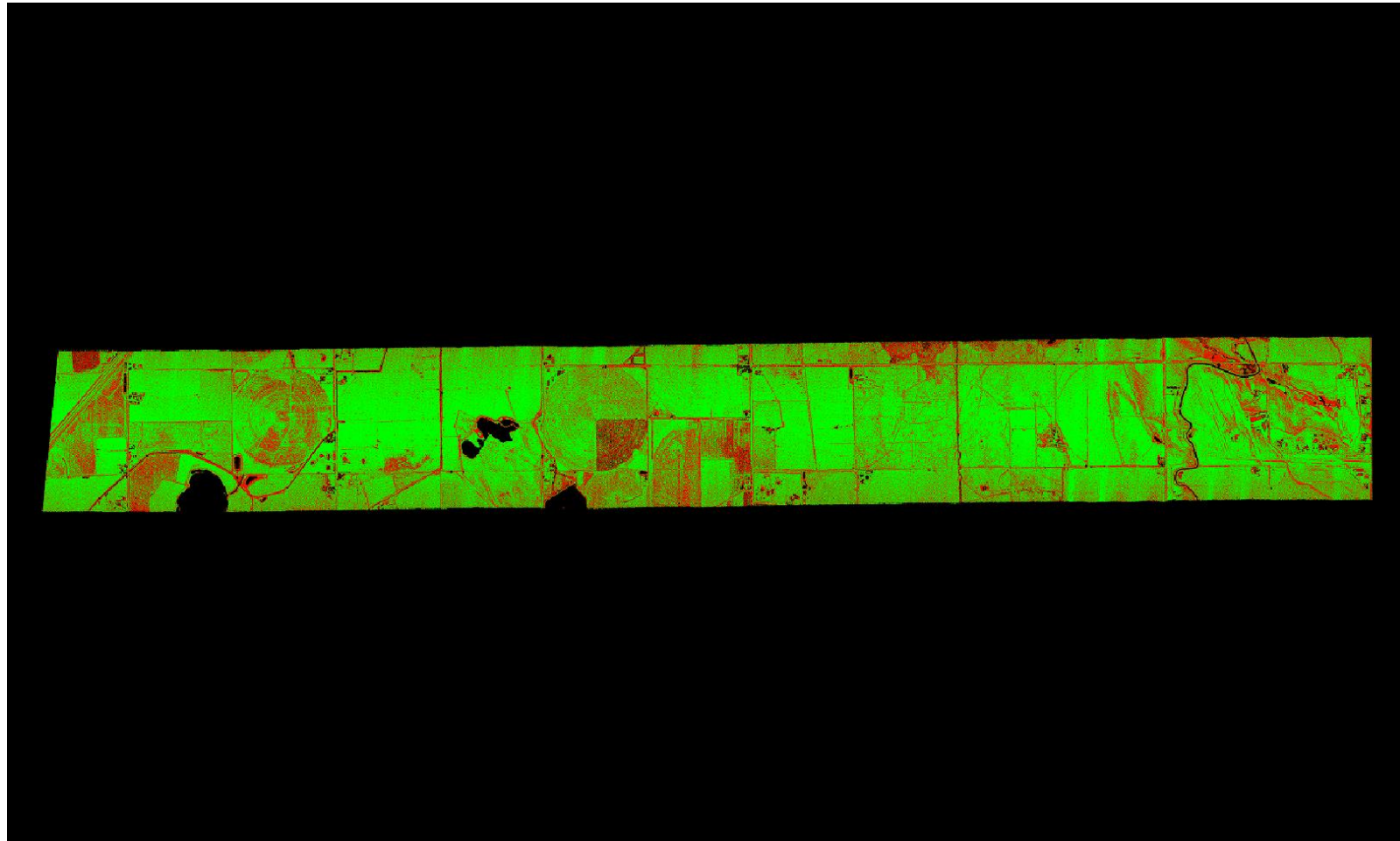


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1218_GRID.jp2](#)

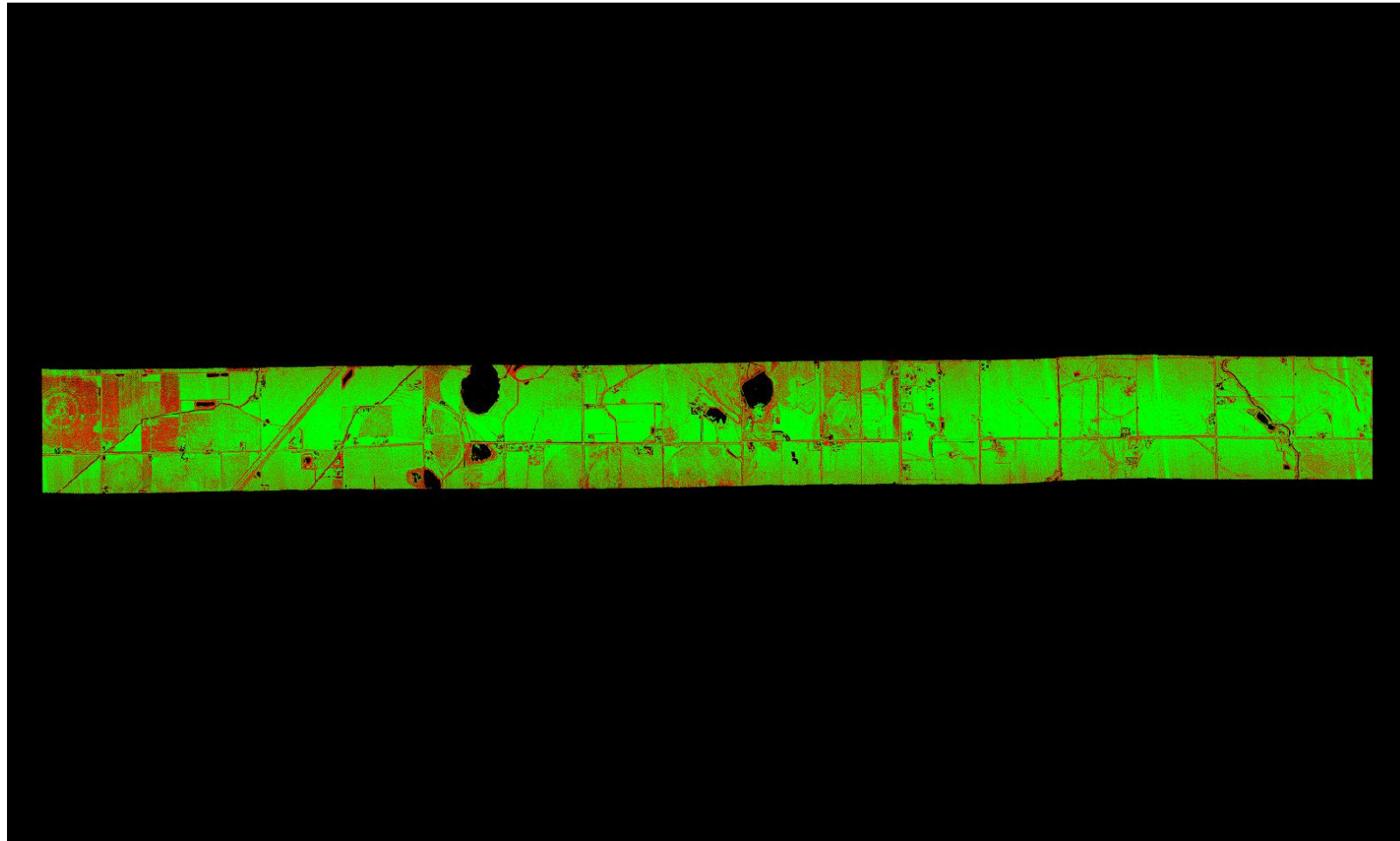


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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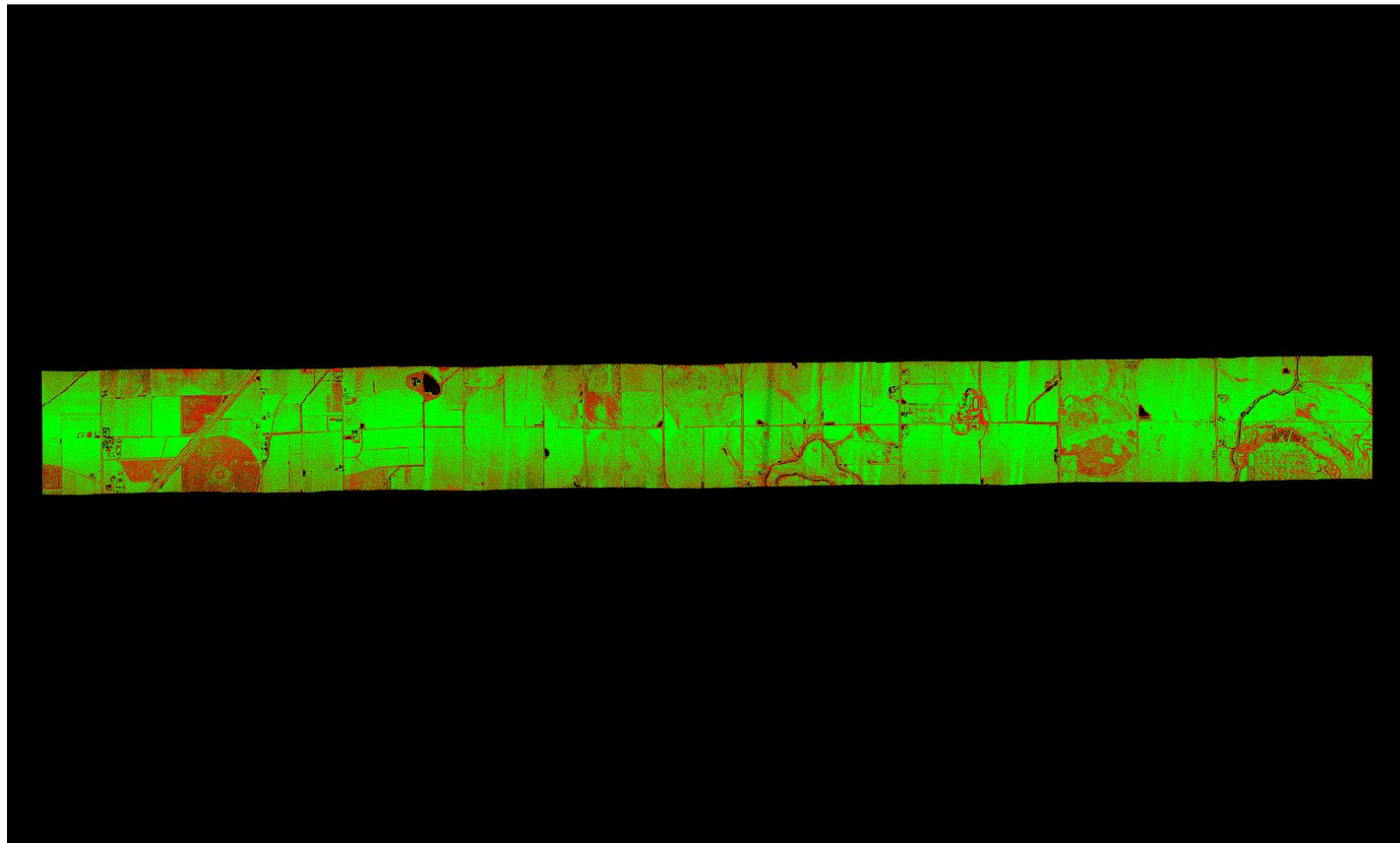


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1220_GRID.jp2](#)

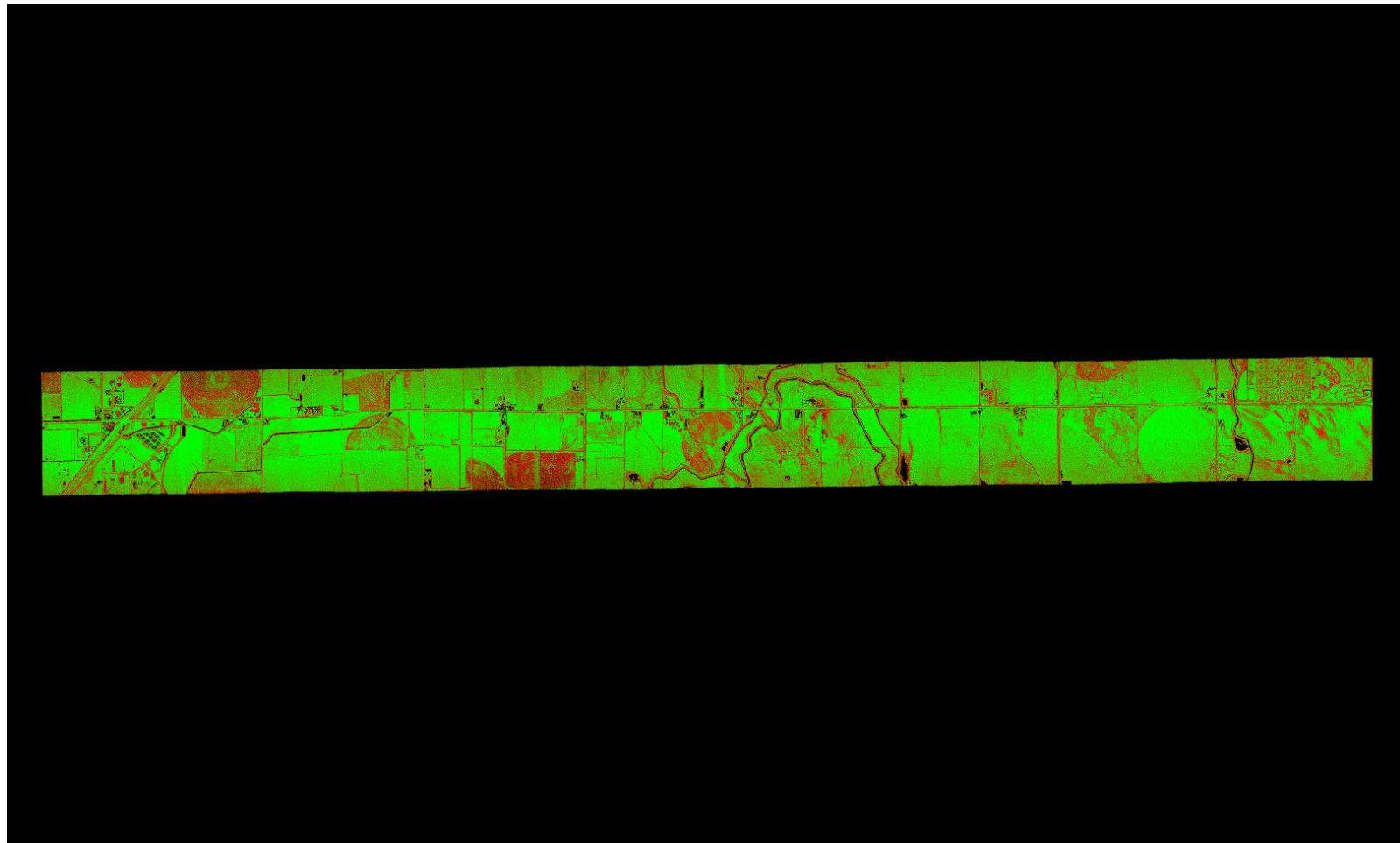


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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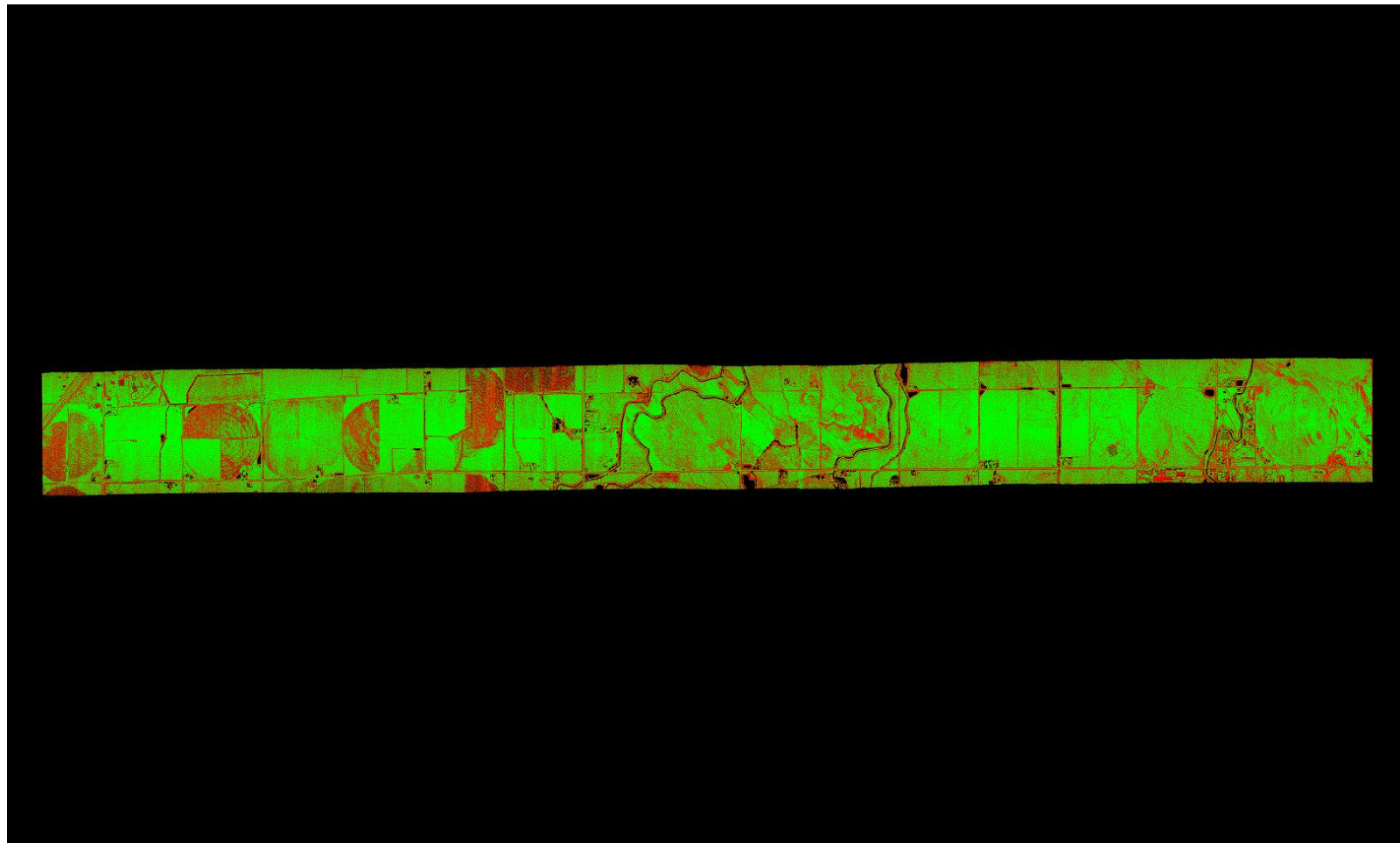


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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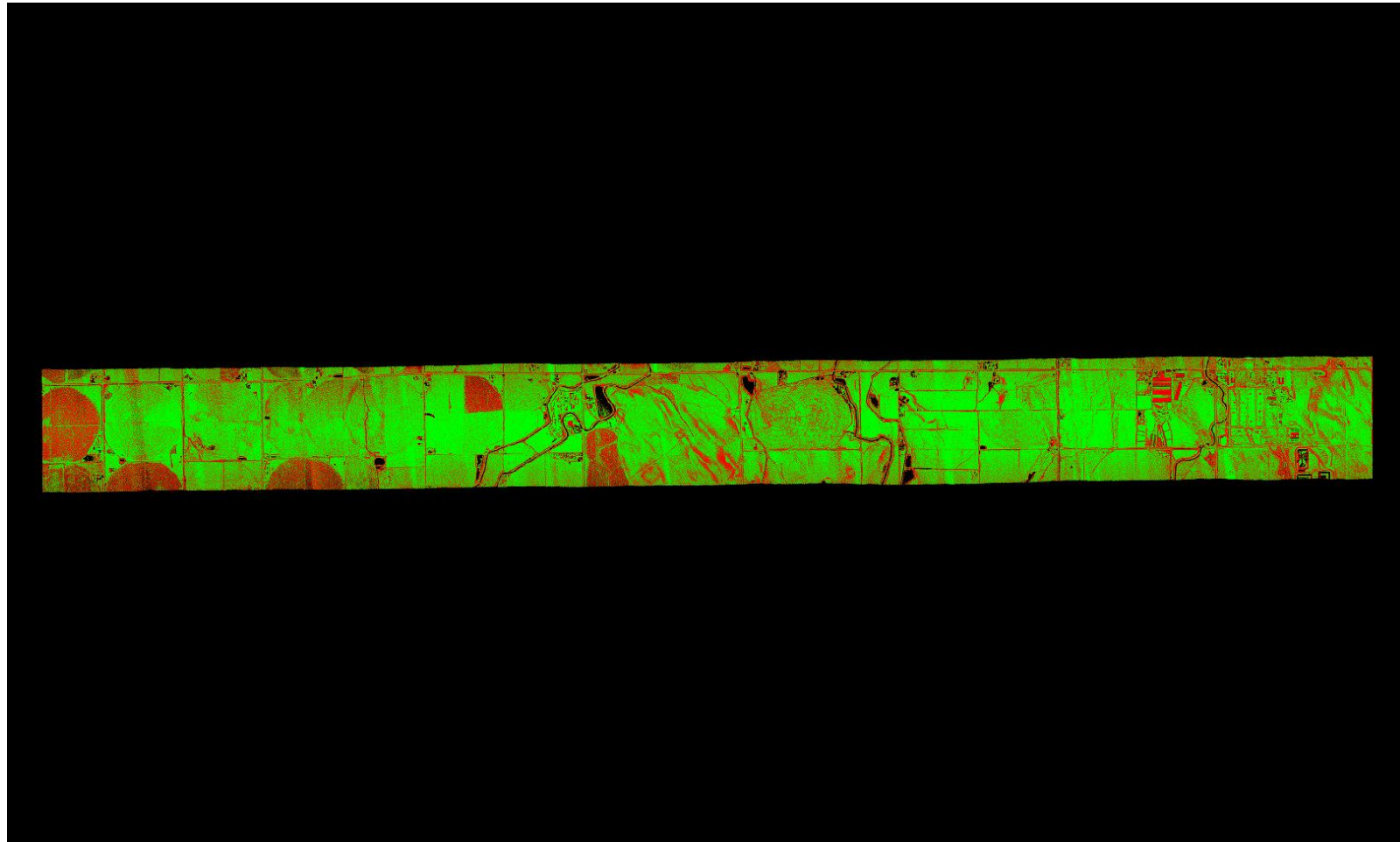


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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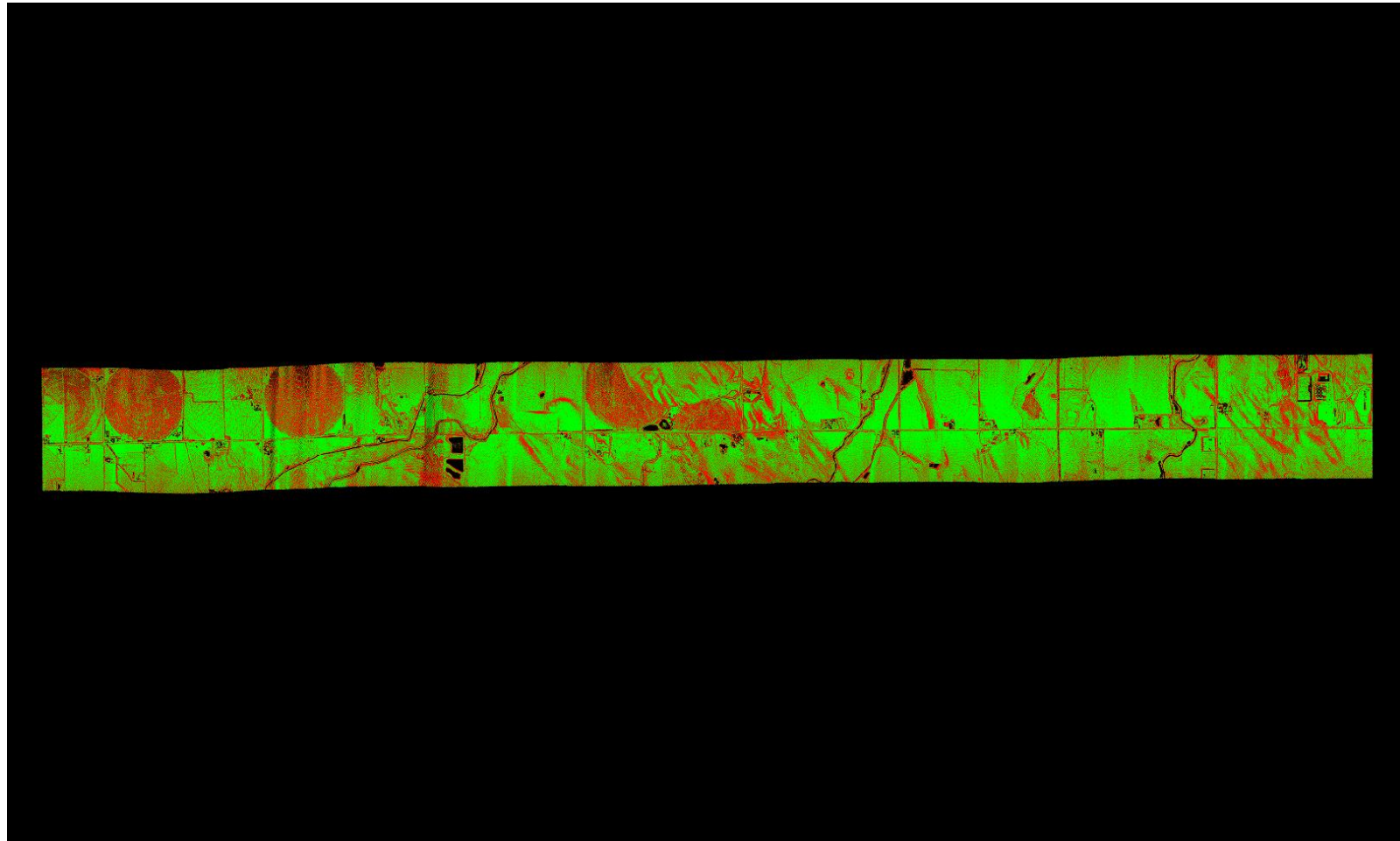


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1224_GRID.jp2](#)

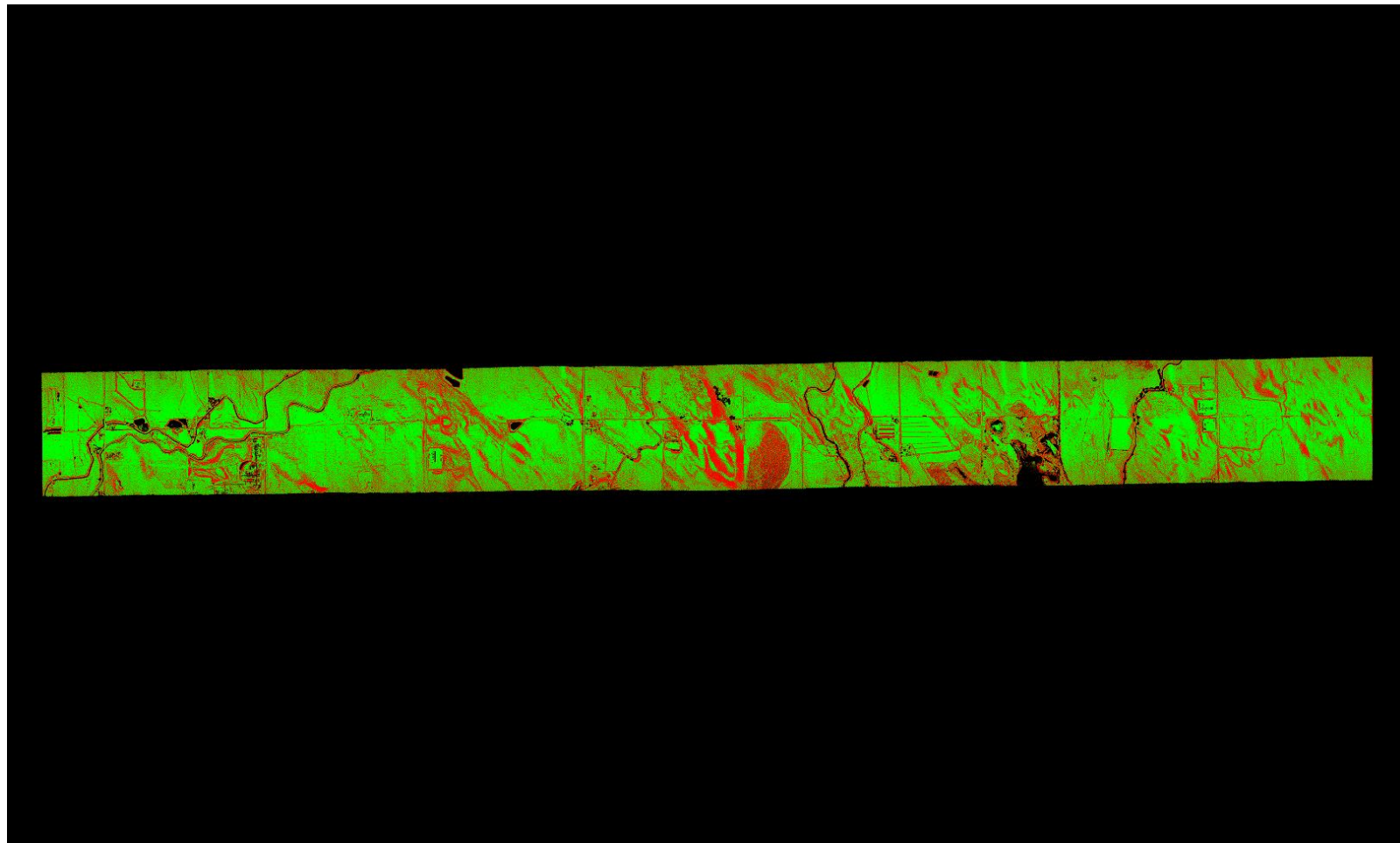


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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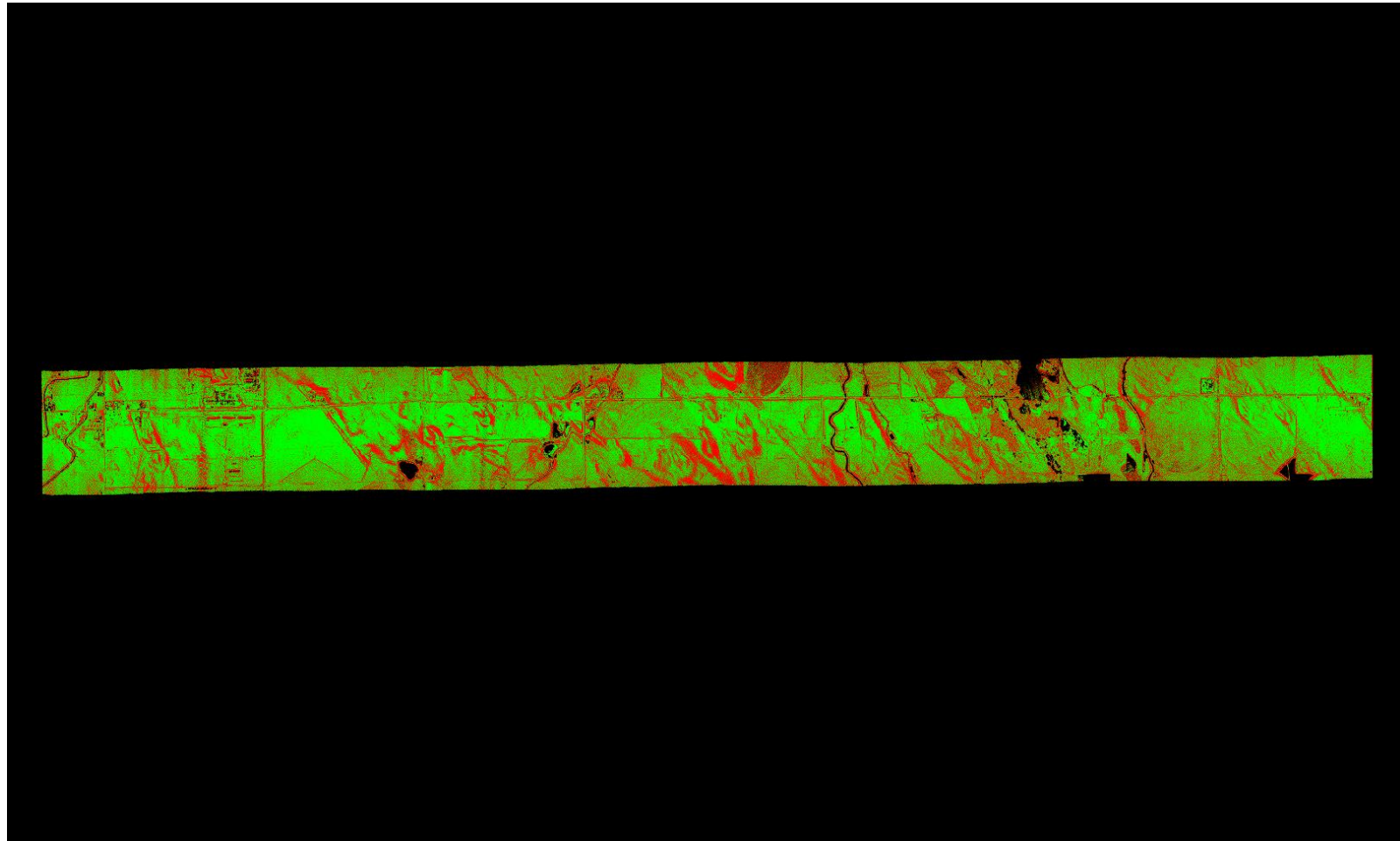


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1226_GRID.jp2](#)

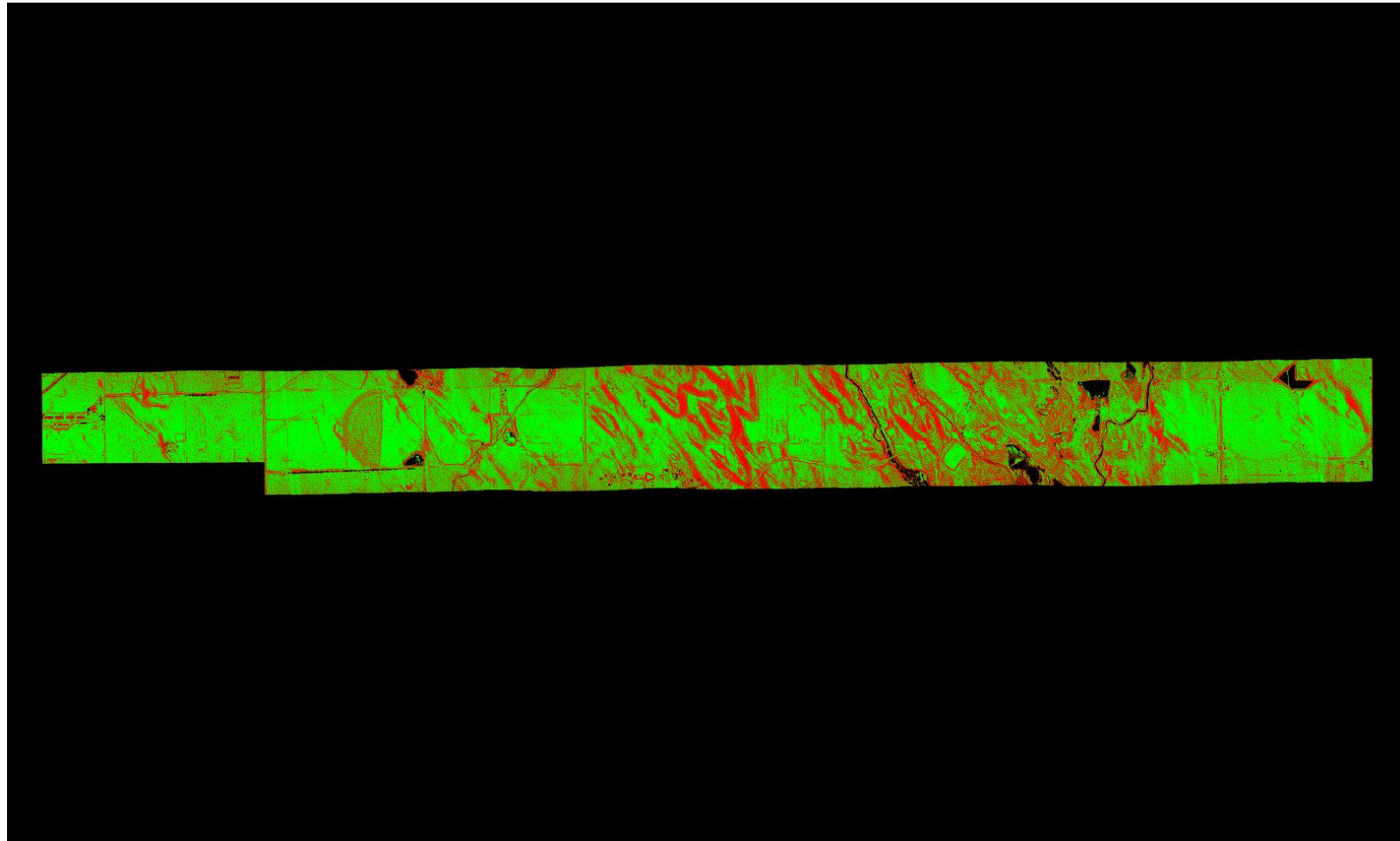


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_1227_GRID.jp2](#)

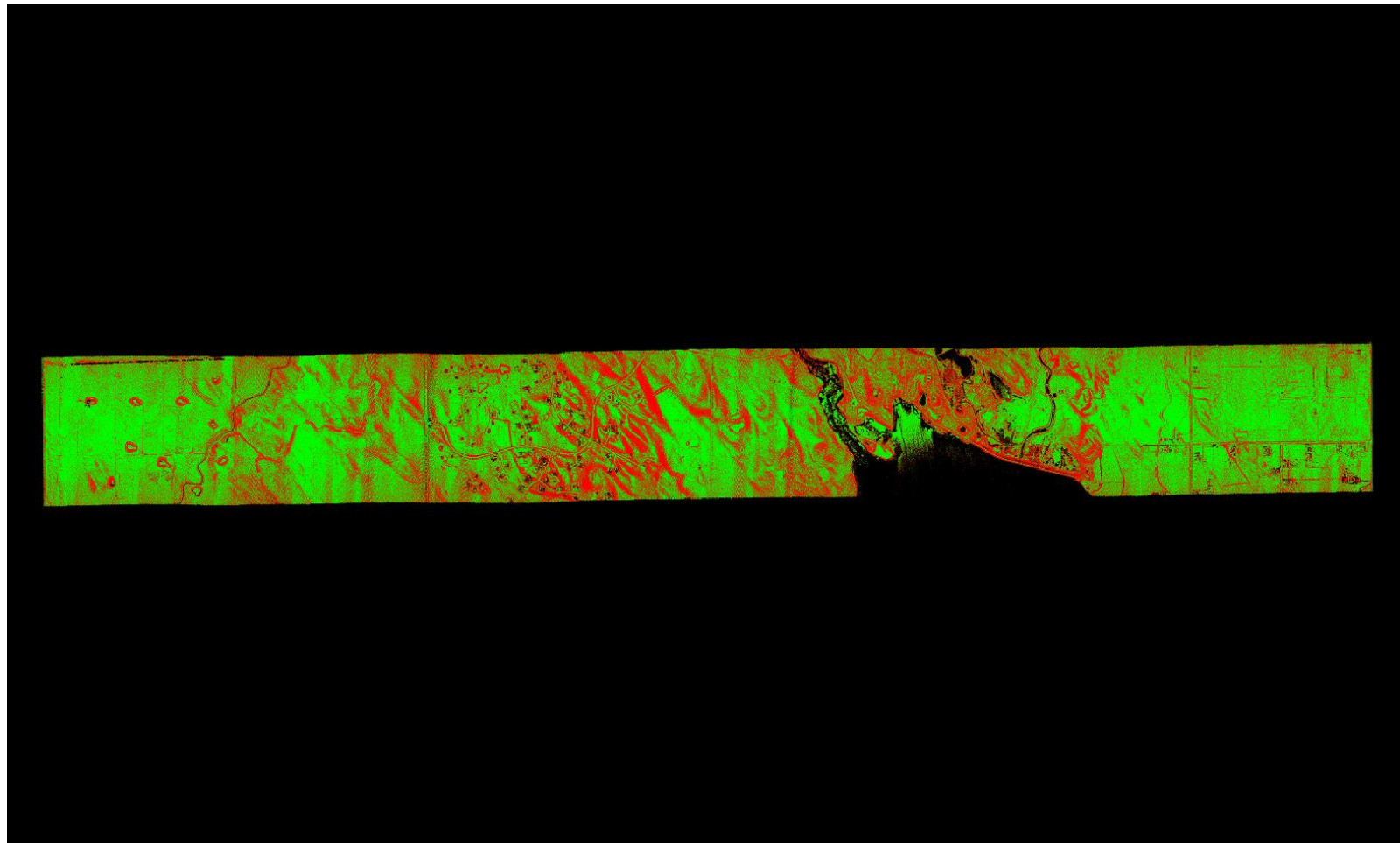


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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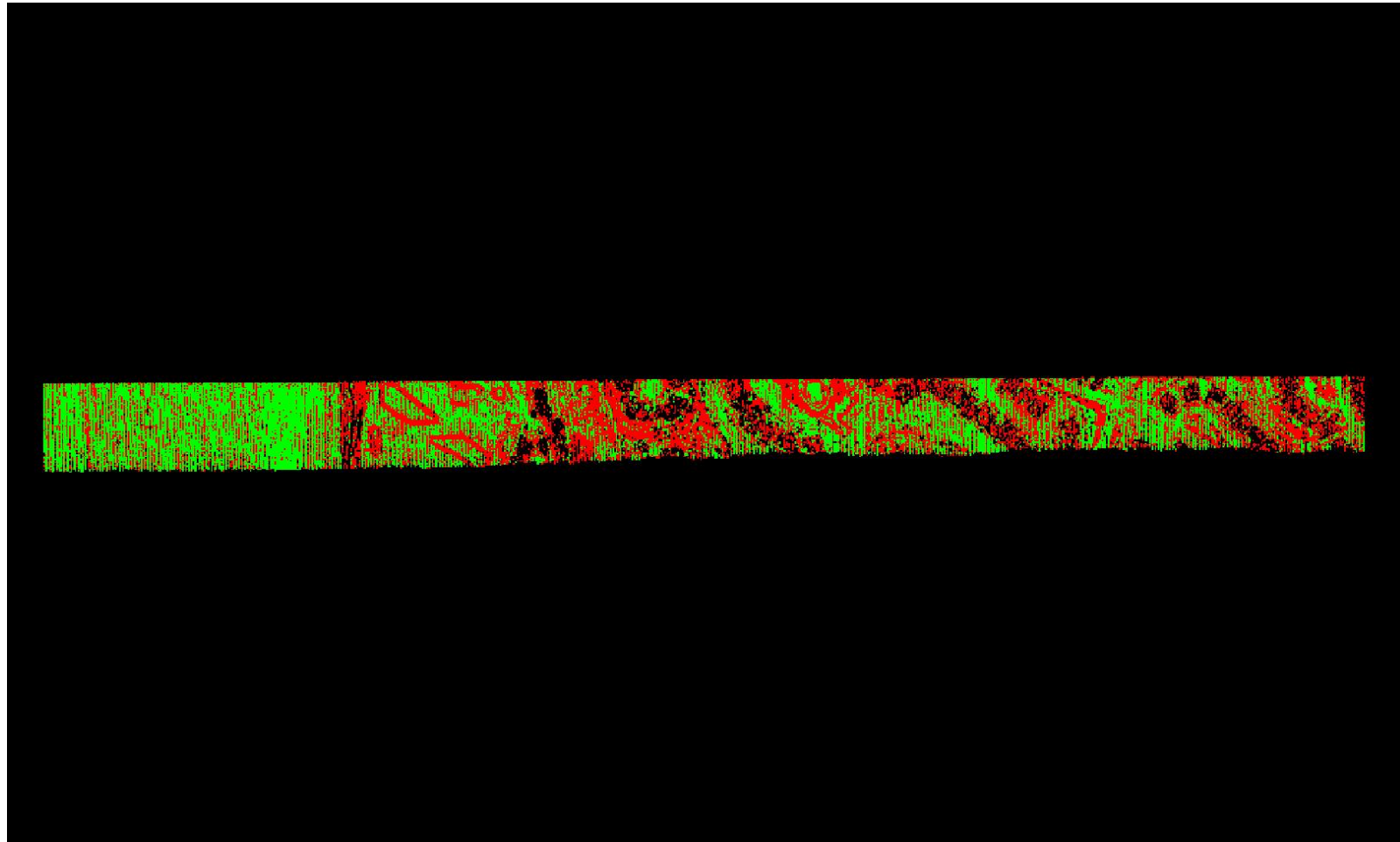


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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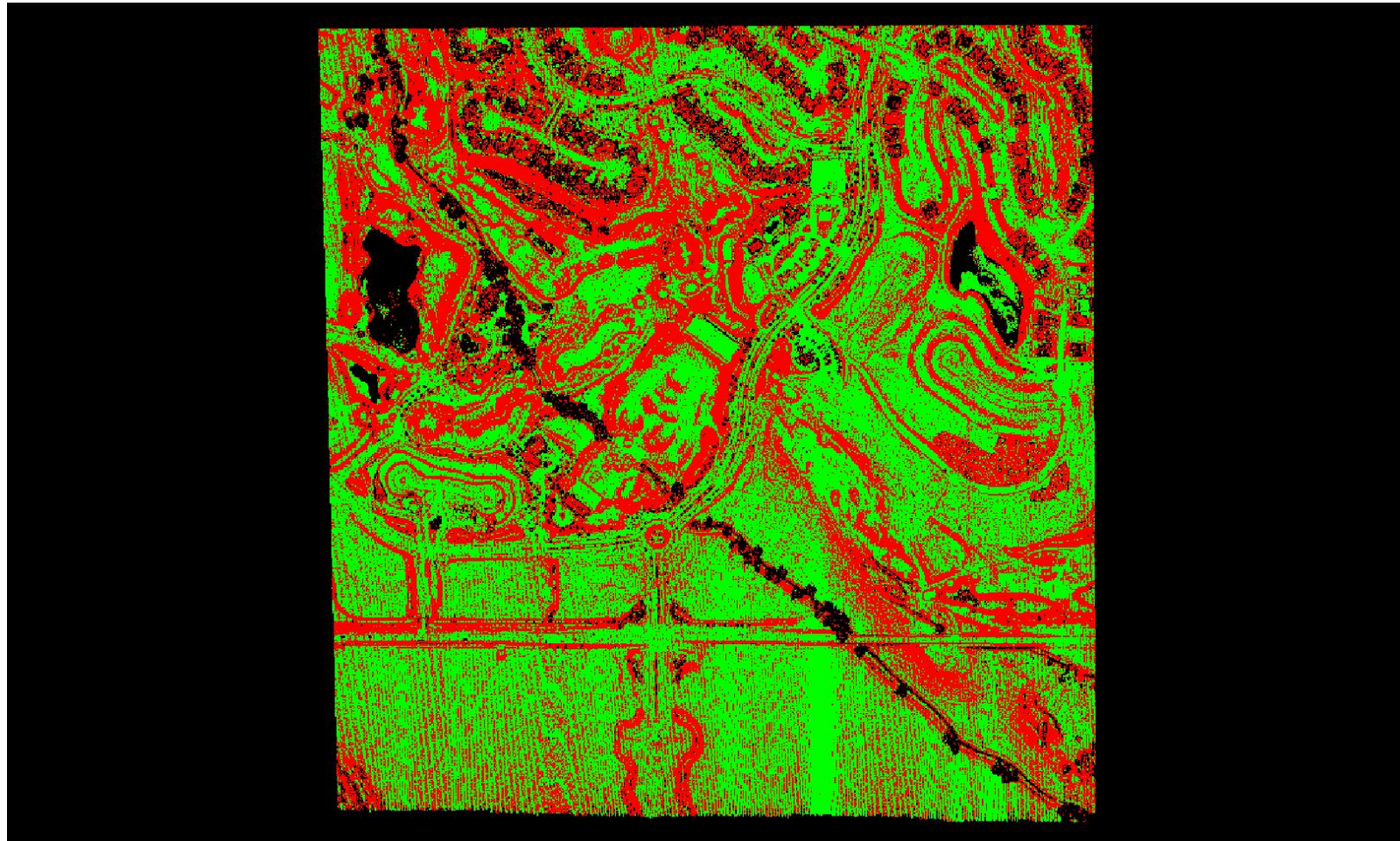


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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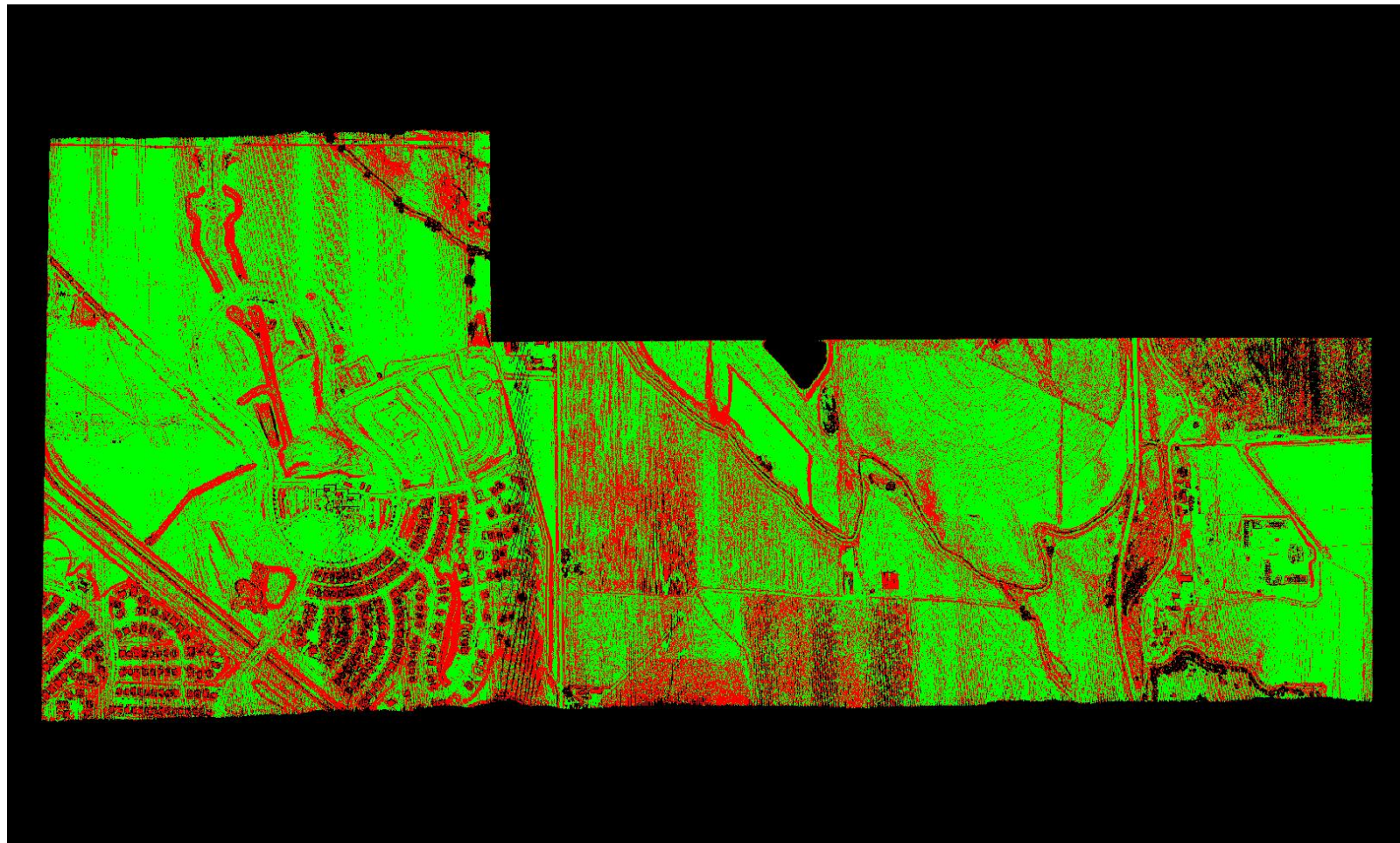


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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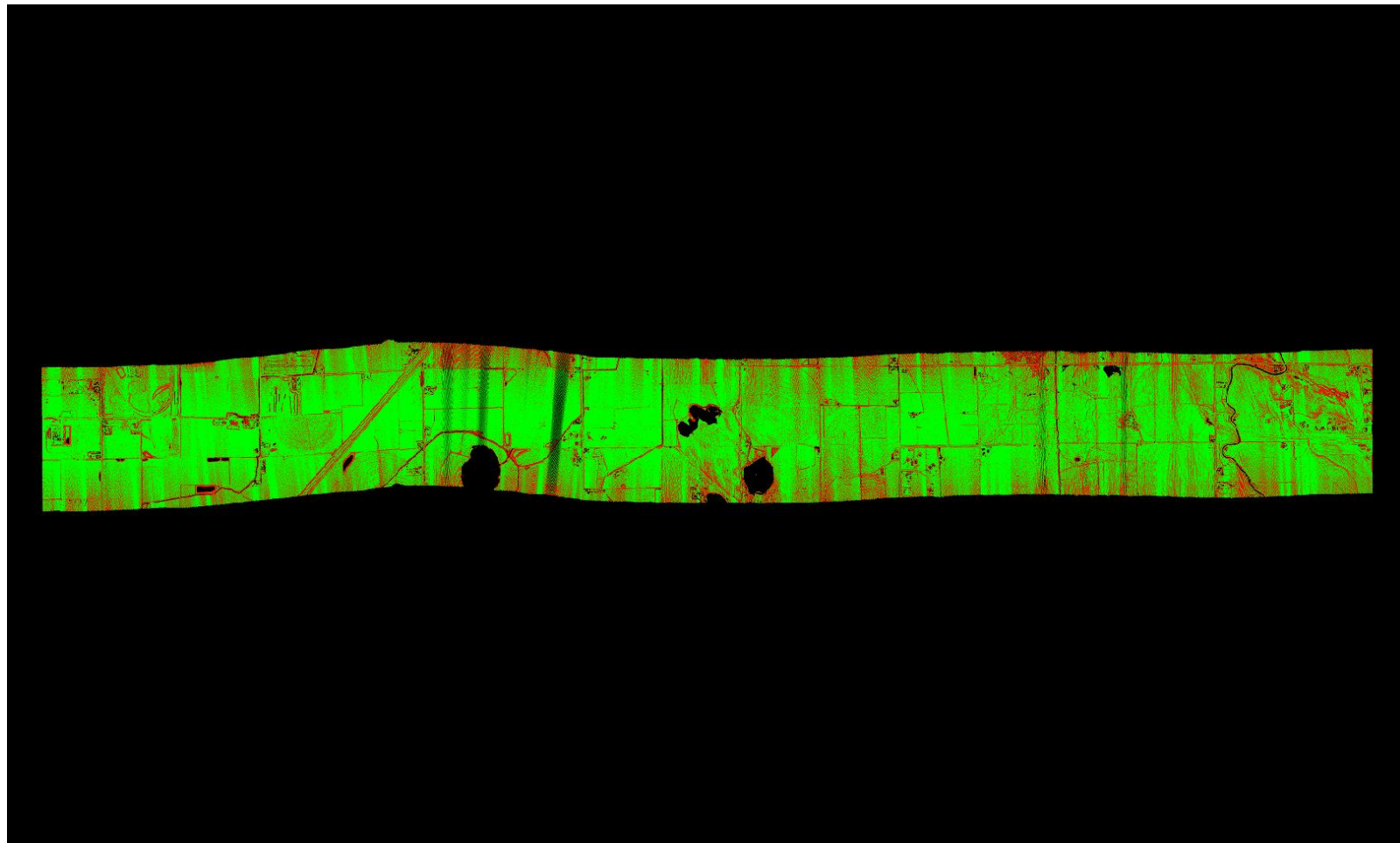


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

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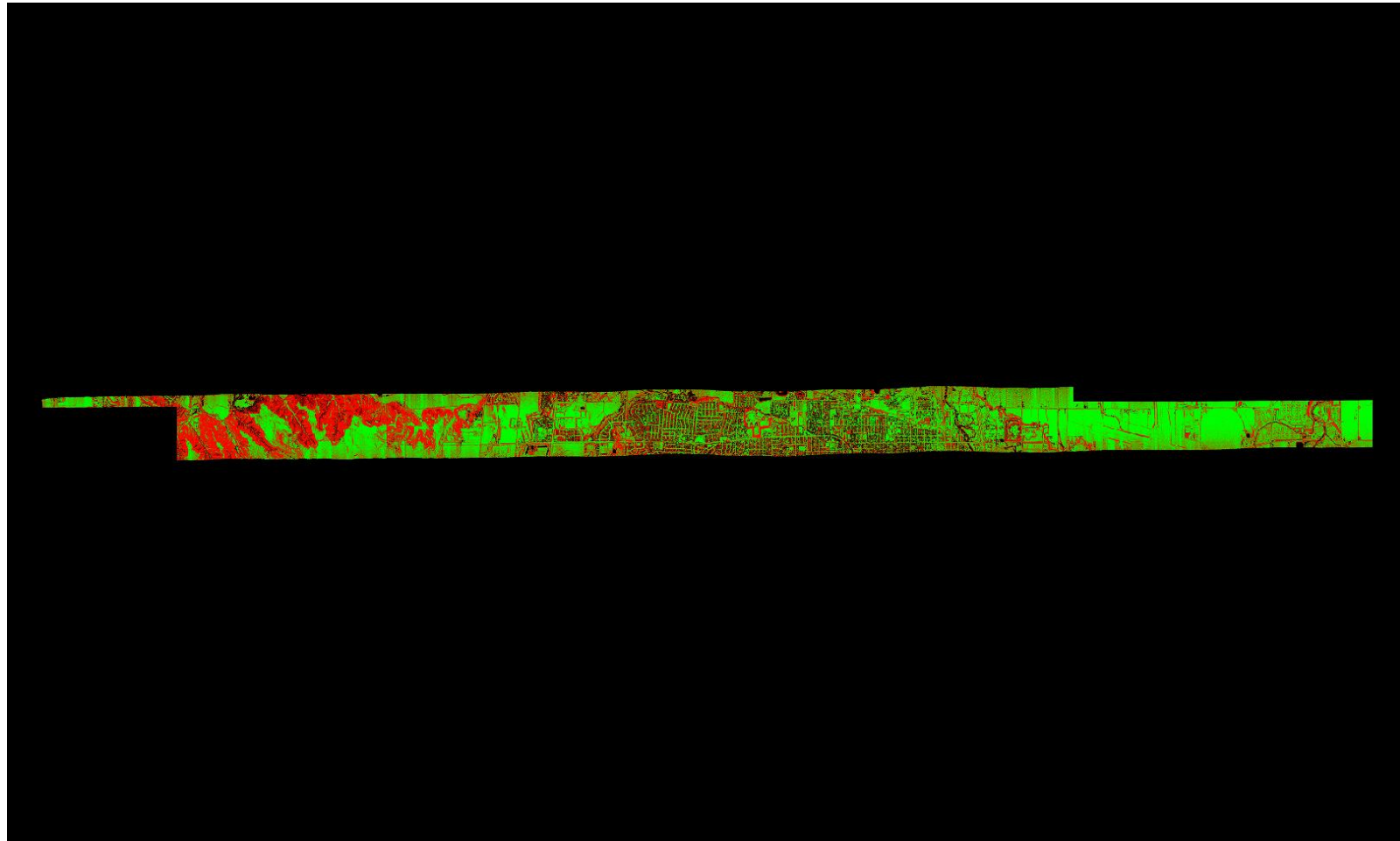


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_2012_GRID.jp2](#)

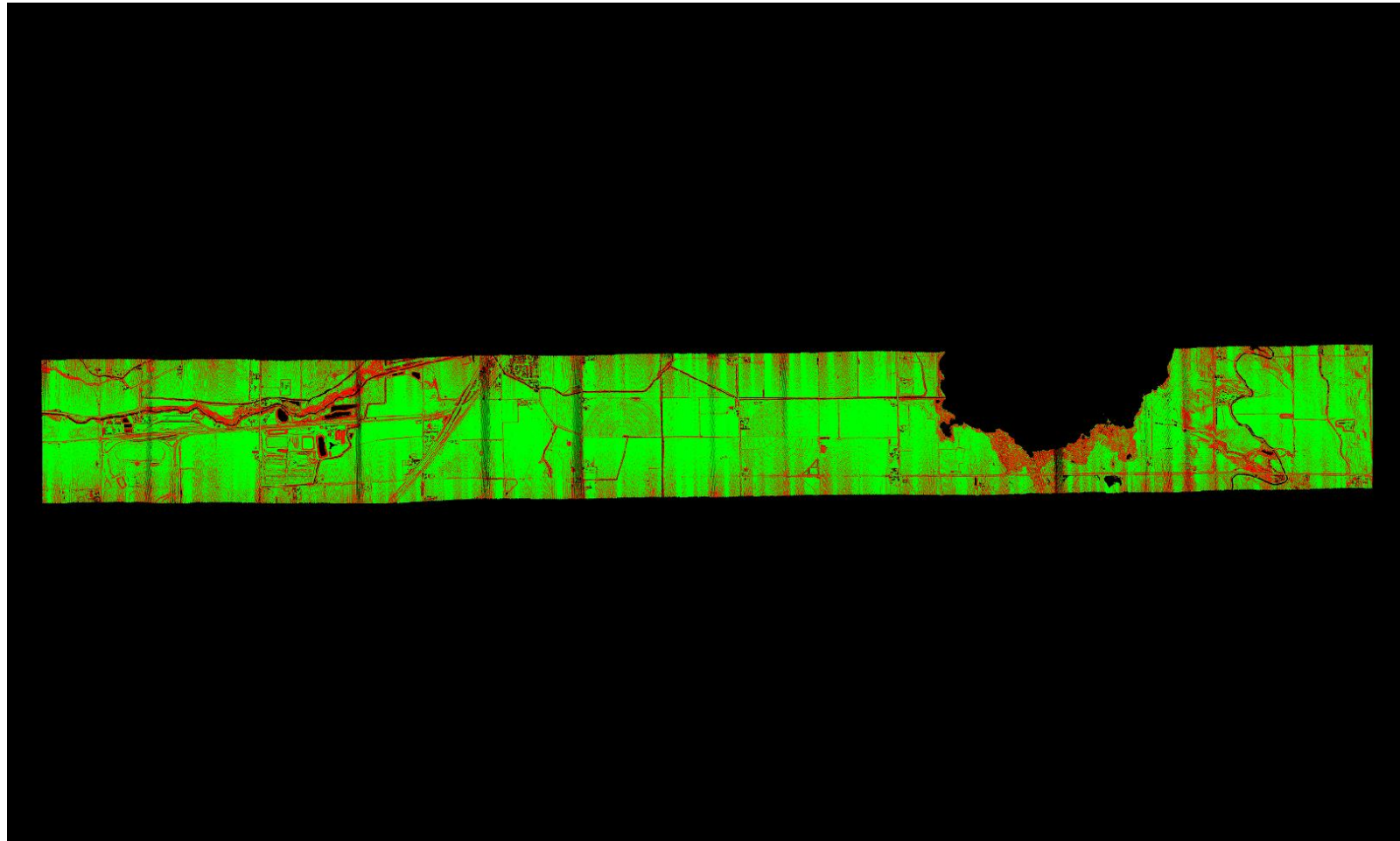


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_2041_GRID.jp2](#)

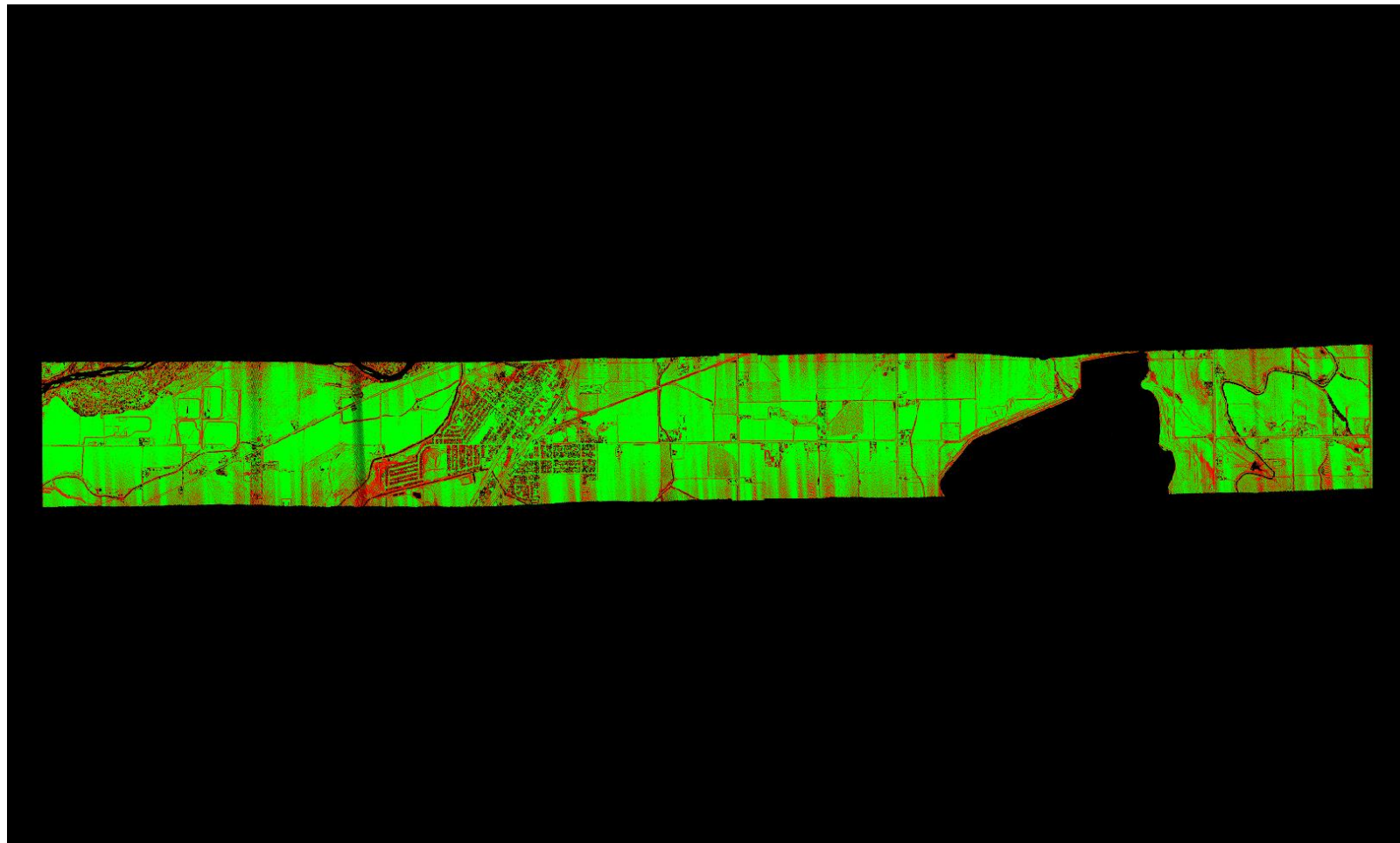


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_2048_GRID.jp2](#)

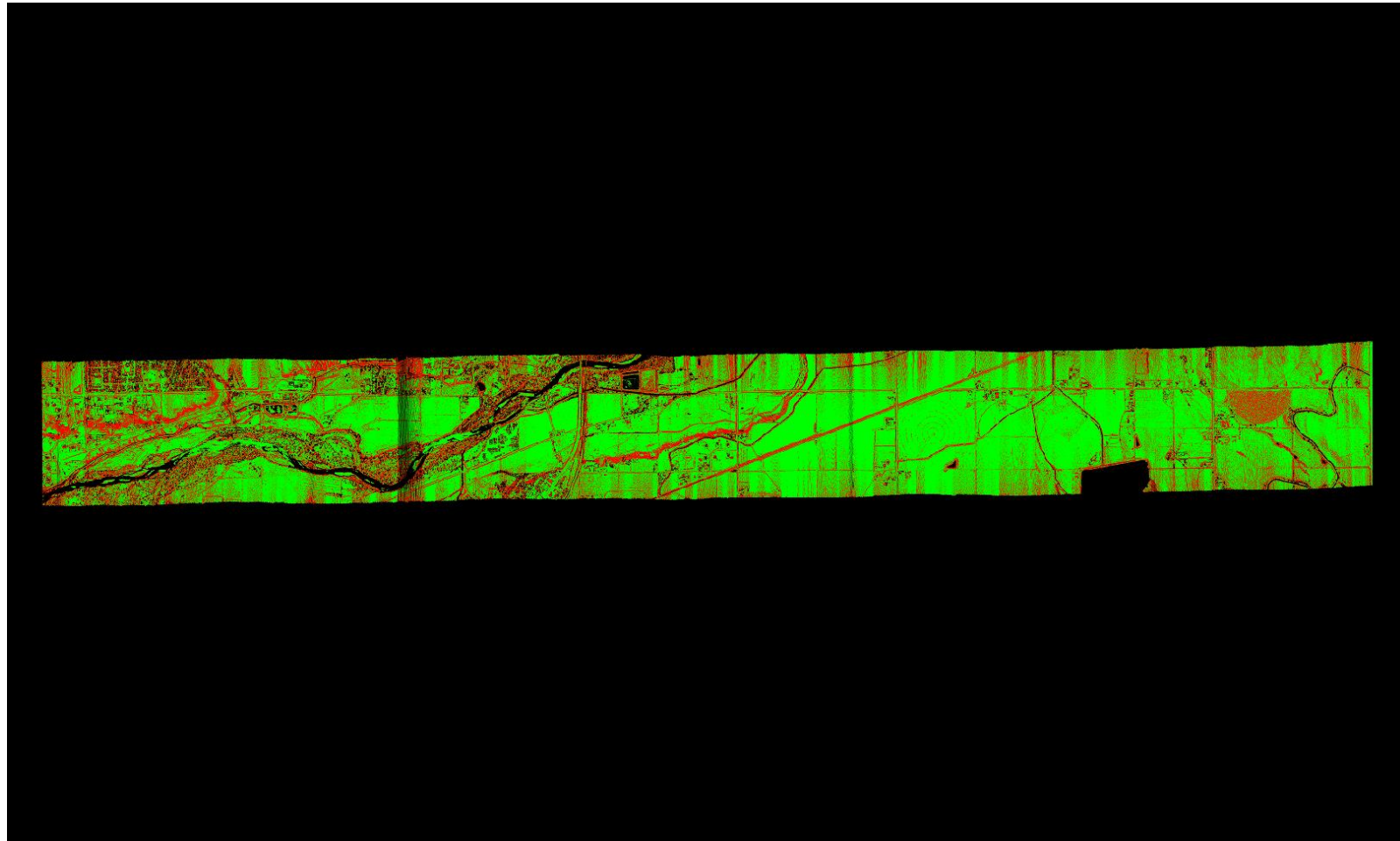


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_2049_GRID.jp2](#)

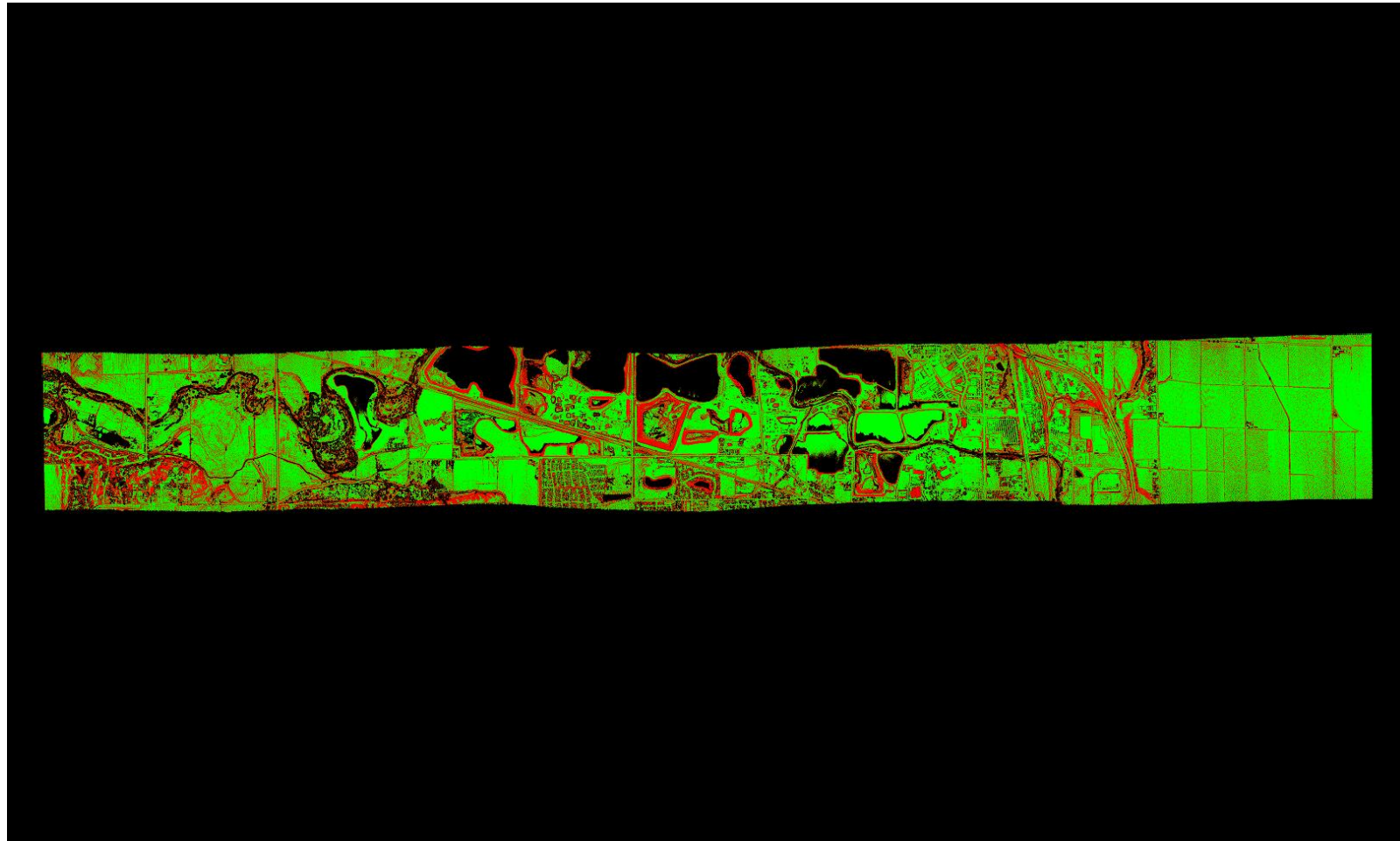


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_2103_GRID.jp2](#)

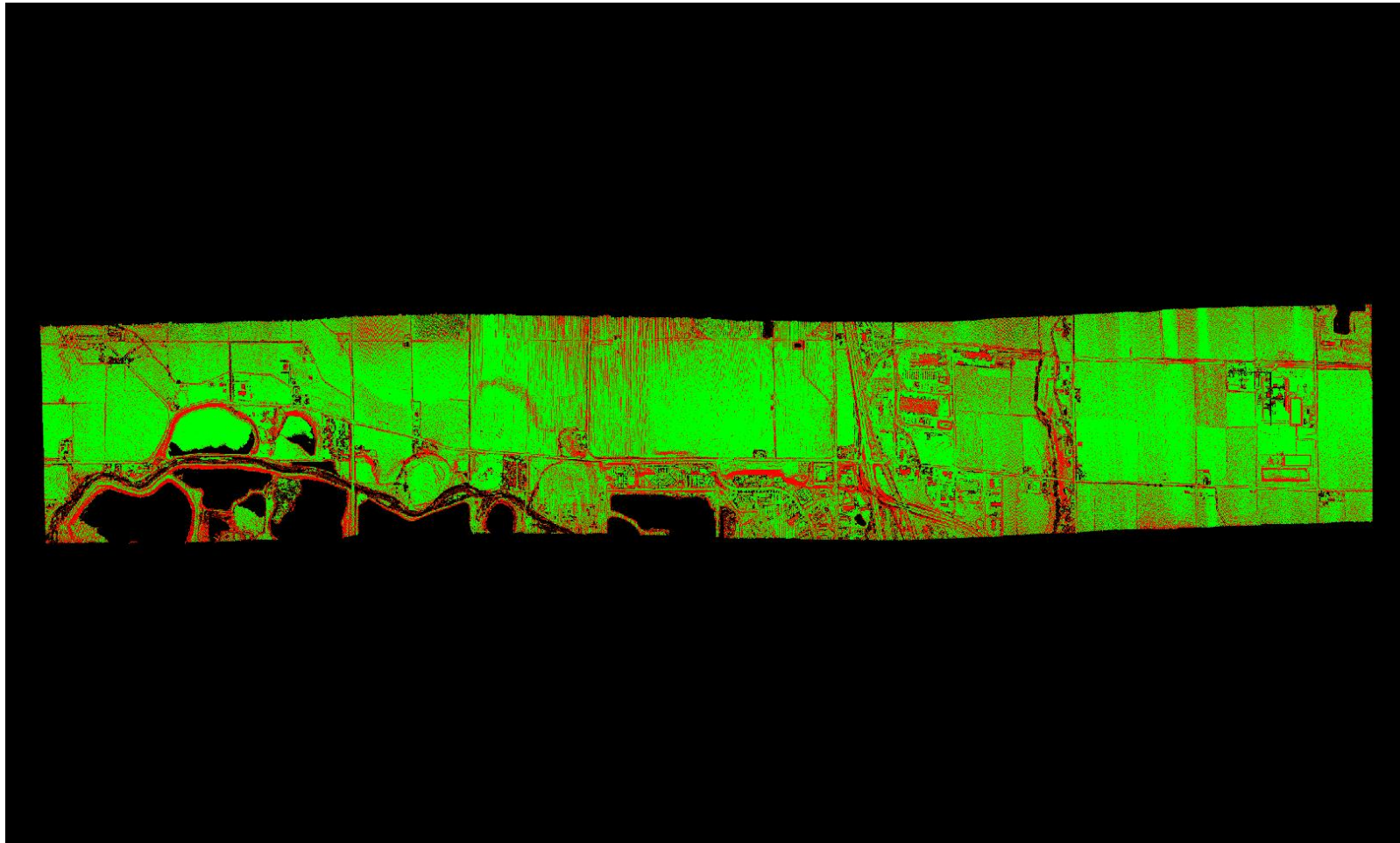


A maximum vertical separation cutoff has been applied to this graphic for the purpose of masking out disruptive features that do not show calibration issues between flight lines (e.g., trees, moving cars, etc.).

DPH-11.1.1 Report on Smooth Surface Repeatability (intraswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_1\Individual_2104_GRID.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.).

DPH-11.1.2.1 Report on Overlap Consistency (interswath)

The USGS Lidar Base Specification Version 1.2 states: "Overlap consistency is a measure of geometric alignment of two overlapping swaths; the principles used with swaths can be applied to overlapping lifts and projects as well. Overlap consistency is the fundamental measure of the quality of the calibration or boresight adjustment of the data from each lift, and is of particular importance as the match between the swaths of a single lift is a strong indicator of the overall geometric quality of the data, establishing the quality and accuracy limits of all downstream data and products.

Overlap consistency will be assessed at multiple locations within overlap in nonvegetated areas of only single returns. The overlap areas that will be tested are those between the following:

- (1) Adjacent, overlapping parallel swaths within a project,
- (2) Cross-tie swaths and the intersecting project swaths, and
- (3) Adjacent, overlapping lifts.

Each overlap area will be evaluated using a signed difference raster with a cell size equal to twice the ANPS, rounded up to the next integer. The difference rasters will be visually examined using a bicolor ramp from the negative acceptable limit to the positive acceptable limit. Although isolated excursions beyond the limits are expected and accepted, differences in the overlaps shall not exceed the limits listed in table 2 for the QL of information that is being collected. The difference rasters will be statistically summarized to verify that root mean square difference in z (RMSDz) values do not exceed the limits set forth in the table "Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3" (table 2) for the QL of information that is being collected. Consideration will be given for the effect of the expected isolated excursions over limits."

Table 2. Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3.

[cm, centimeter; RMSD_z, root mean square difference in z; ≤, less than or equal to; ±, plus or minus]

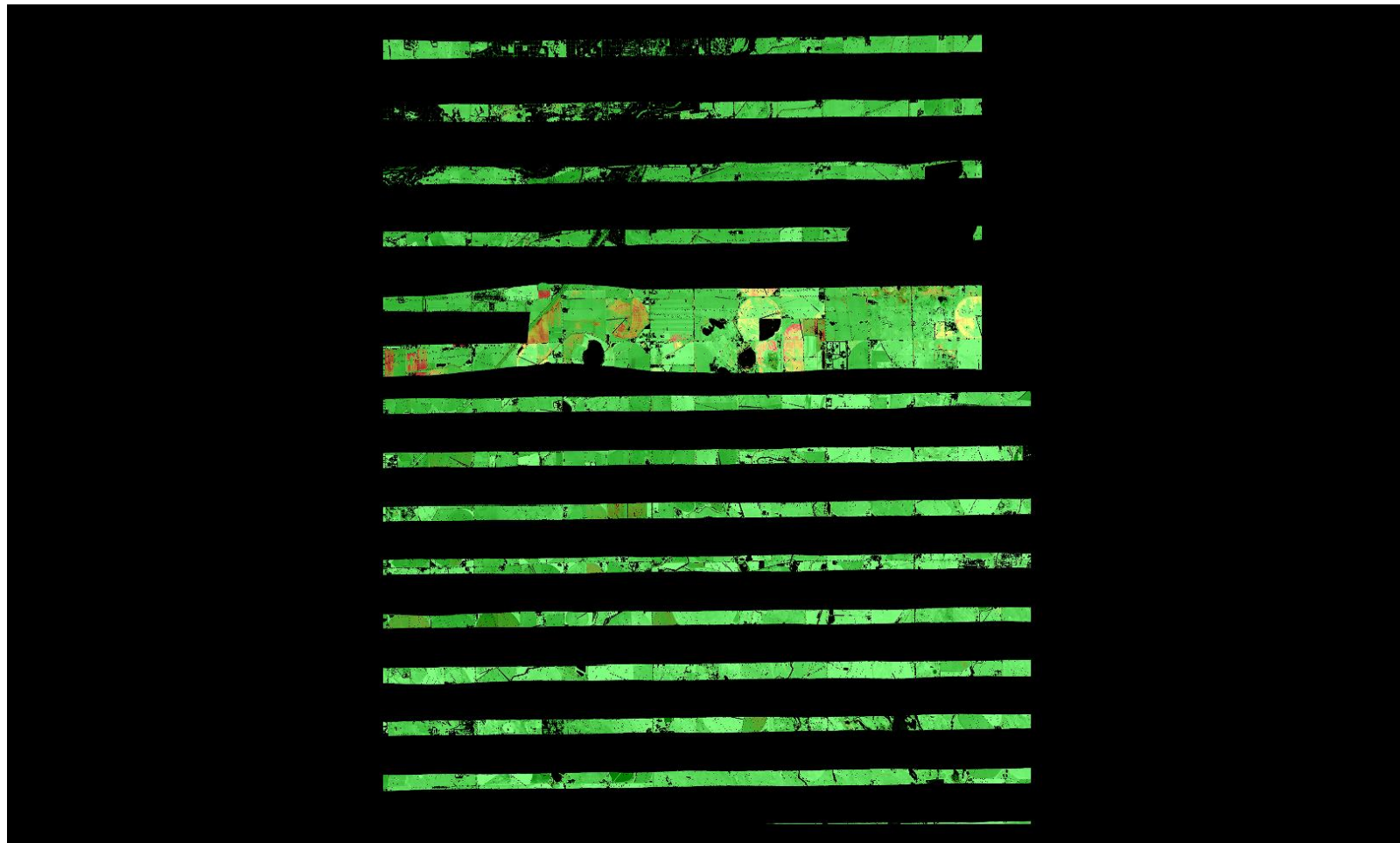
Quality Level (QL)	Swath overlap difference, RMSD _z (cm)	Swath overlap difference, maximum (cm)
QL0	≤4	±8
QL1	≤8	±16
QL2	≤8	±16
QL3	≤16	±32

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. Only overlap areas are shown in the raster. The relative accuracy RMSDz values are reported on the following page(s).

DPH-11.1.2.1 Report on Overlap Consistency (interswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_2\Area1\Boresighted_FlightlineSeparation_SingleFile_Measurable_GRID.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.).

DPH-11.1.2.2 Report on Overlap Consistency (interswath)

The USGS Lidar Base Specification Version 1.2 states: "Overlap consistency is a measure of geometric alignment of two overlapping swaths; the principles used with swaths can be applied to overlapping lifts and projects as well. Overlap consistency is the fundamental measure of the quality of the calibration or boresight adjustment of the data from each lift, and is of particular importance as the match between the swaths of a single lift is a strong indicator of the overall geometric quality of the data, establishing the quality and accuracy limits of all downstream data and products.

Overlap consistency will be assessed at multiple locations within overlap in nonvegetated areas of only single returns. The overlap areas that will be tested are those between the following:

- (1) Adjacent, overlapping parallel swaths within a project,
- (2) Cross-tie swaths and the intersecting project swaths, and
- (3) Adjacent, overlapping lifts.

Each overlap area will be evaluated using a signed difference raster with a cell size equal to twice the ANPS, rounded up to the next integer. The difference rasters will be visually examined using a bicolor ramp from the negative acceptable limit to the positive acceptable limit. Although isolated excursions beyond the limits are expected and accepted, differences in the overlaps shall not exceed the limits listed in table 2 for the QL of information that is being collected. The difference rasters will be statistically summarized to verify that root mean square difference in z (RMSDz) values do not exceed the limits set forth in the table "Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3" (table 2) for the QL of information that is being collected. Consideration will be given for the effect of the expected isolated excursions over limits."

Table 2. Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3.

[cm, centimeter; RMSD_z, root mean square difference in z; ≤, less than or equal to; ±, plus or minus]

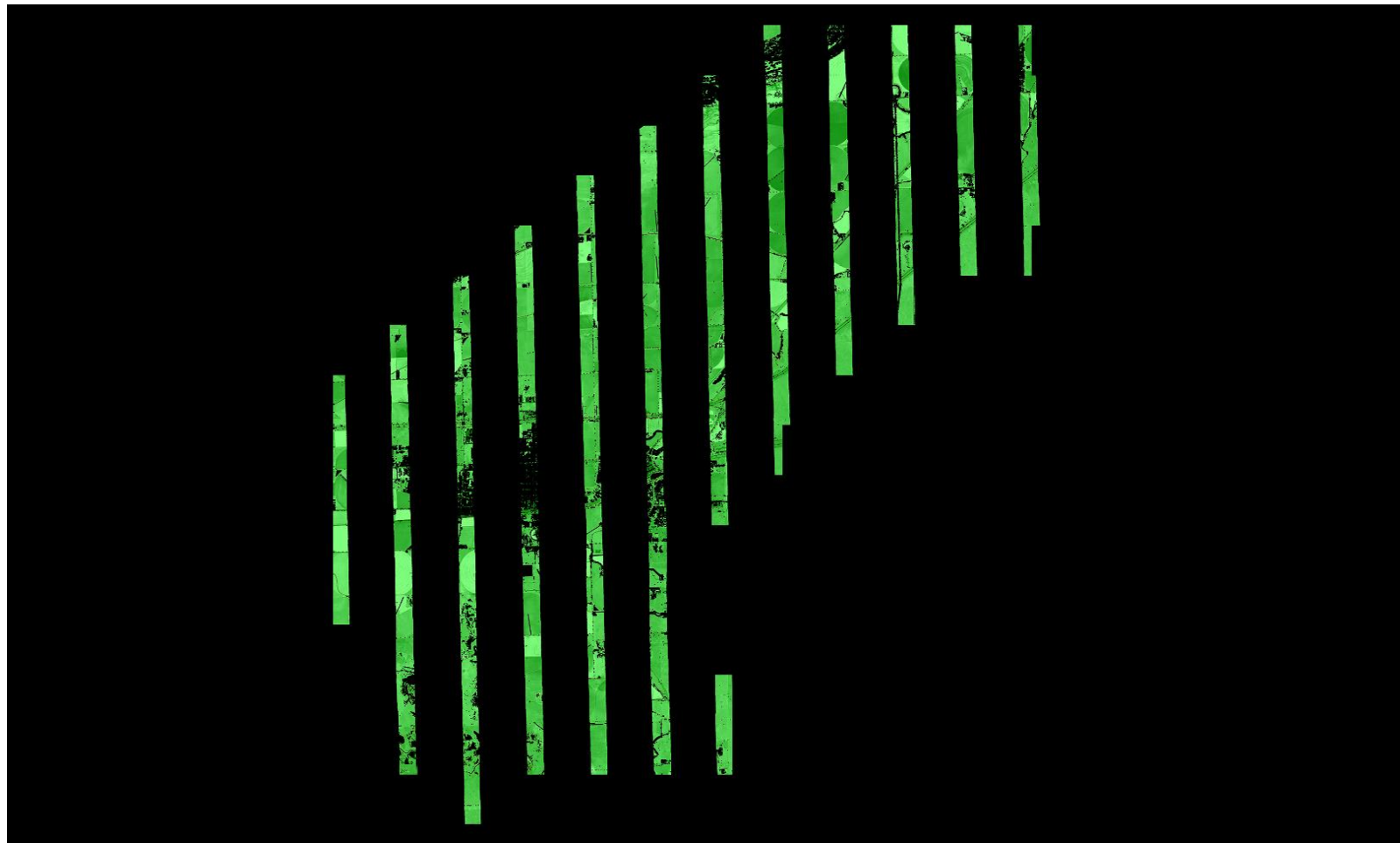
Quality Level (QL)	Swath overlap difference, RMSD _z (cm)	Swath overlap difference, maximum (cm)
QL0	≤4	±8
QL1	≤8	±16
QL2	≤8	±16
QL3	≤16	±32

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. Only overlap areas are shown in the raster. The relative accuracy RMSDz values are reported on the following page(s).

DPH-11.1.2.2 Report on Overlap Consistency (interswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_2\Area2\Boresighted_FlightlineSeparation_SingleFile_Measurable_GRID.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.).

DPH-11.1.2.3 Report on Overlap Consistency (interswath)

The USGS Lidar Base Specification Version 1.2 states: "Overlap consistency is a measure of geometric alignment of two overlapping swaths; the principles used with swaths can be applied to overlapping lifts and projects as well. Overlap consistency is the fundamental measure of the quality of the calibration or boresight adjustment of the data from each lift, and is of particular importance as the match between the swaths of a single lift is a strong indicator of the overall geometric quality of the data, establishing the quality and accuracy limits of all downstream data and products.

Overlap consistency will be assessed at multiple locations within overlap in nonvegetated areas of only single returns. The overlap areas that will be tested are those between the following:

- (1) Adjacent, overlapping parallel swaths within a project,
- (2) Cross-tie swaths and the intersecting project swaths, and
- (3) Adjacent, overlapping lifts.

Each overlap area will be evaluated using a signed difference raster with a cell size equal to twice the ANPS, rounded up to the next integer. The difference rasters will be visually examined using a bicolor ramp from the negative acceptable limit to the positive acceptable limit. Although isolated excursions beyond the limits are expected and accepted, differences in the overlaps shall not exceed the limits listed in table 2 for the QL of information that is being collected. The difference rasters will be statistically summarized to verify that root mean square difference in z (RMSDz) values do not exceed the limits set forth in the table "Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3" (table 2) for the QL of information that is being collected. Consideration will be given for the effect of the expected isolated excursions over limits."

Table 2. Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3.

[cm, centimeter; RMSD_z, root mean square difference in z; ≤, less than or equal to; ±, plus or minus]

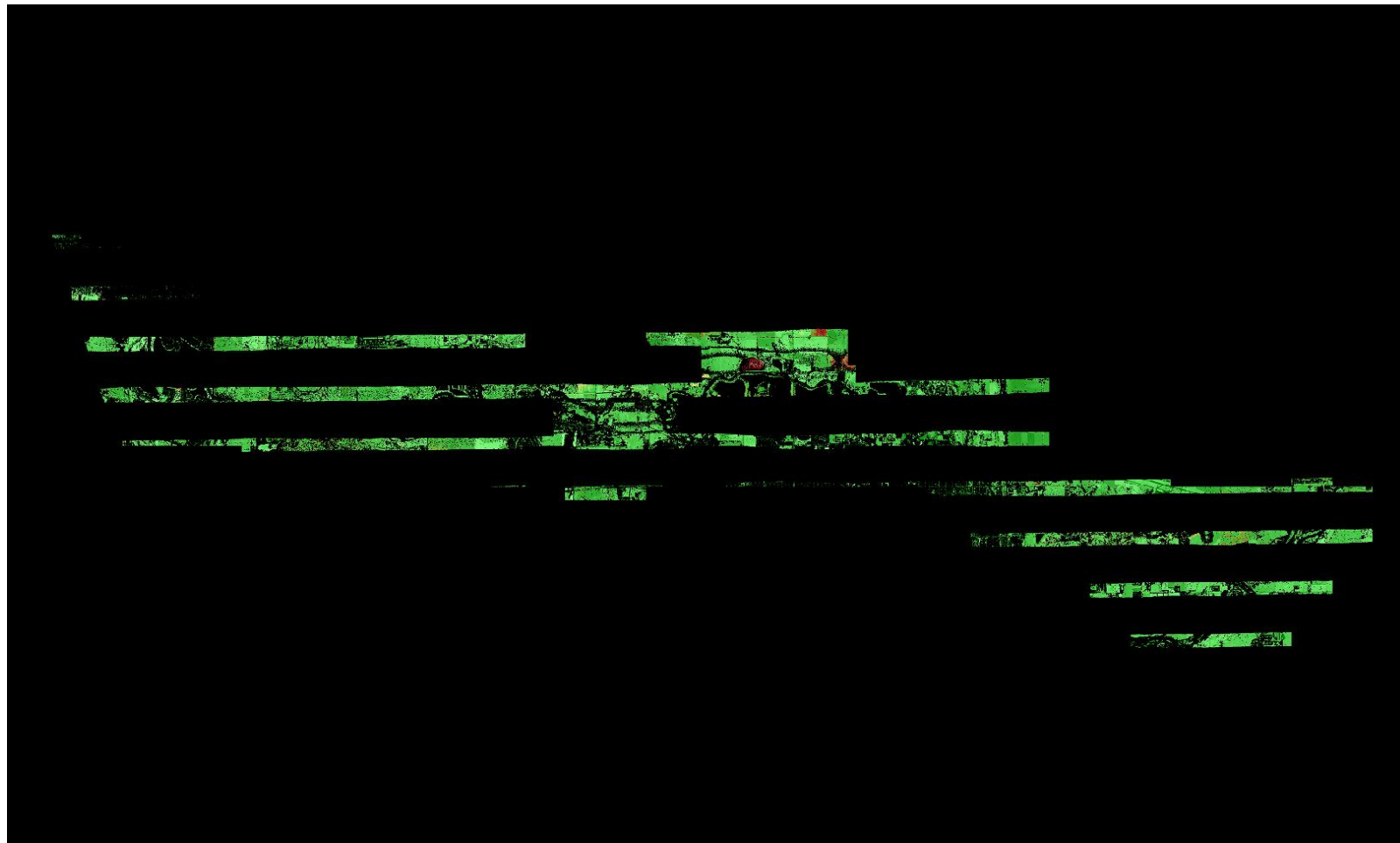
Quality Level (QL)	Swath overlap difference, RMSD _z (cm)	Swath overlap difference, maximum (cm)
QL0	≤4	±8
QL1	≤8	±16
QL2	≤8	±16
QL3	≤16	±32

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. Only overlap areas are shown in the raster. The relative accuracy RMSDz values are reported on the following page(s).

DPH-11.1.2.3 Report on Overlap Consistency (interswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_2\Area3\Boresighted_FlightlineSeparation_SingleFile_Measurable_GRID.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.).

DPH-11.1.2.4 Report on Overlap Consistency (interswath)

The USGS Lidar Base Specification Version 1.2 states: "Overlap consistency is a measure of geometric alignment of two overlapping swaths; the principles used with swaths can be applied to overlapping lifts and projects as well. Overlap consistency is the fundamental measure of the quality of the calibration or boresight adjustment of the data from each lift, and is of particular importance as the match between the swaths of a single lift is a strong indicator of the overall geometric quality of the data, establishing the quality and accuracy limits of all downstream data and products.

Overlap consistency will be assessed at multiple locations within overlap in nonvegetated areas of only single returns. The overlap areas that will be tested are those between the following:

- (1) Adjacent, overlapping parallel swaths within a project,
- (2) Cross-tie swaths and the intersecting project swaths, and
- (3) Adjacent, overlapping lifts.

Each overlap area will be evaluated using a signed difference raster with a cell size equal to twice the ANPS, rounded up to the next integer. The difference rasters will be visually examined using a bicolor ramp from the negative acceptable limit to the positive acceptable limit. Although isolated excursions beyond the limits are expected and accepted, differences in the overlaps shall not exceed the limits listed in table 2 for the QL of information that is being collected. The difference rasters will be statistically summarized to verify that root mean square difference in z (RMSDz) values do not exceed the limits set forth in the table "Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3" (table 2) for the QL of information that is being collected. Consideration will be given for the effect of the expected isolated excursions over limits."

Table 2. Relative vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3.

[cm, centimeter; RMSD_z, root mean square difference in z; ≤, less than or equal to; ±, plus or minus]

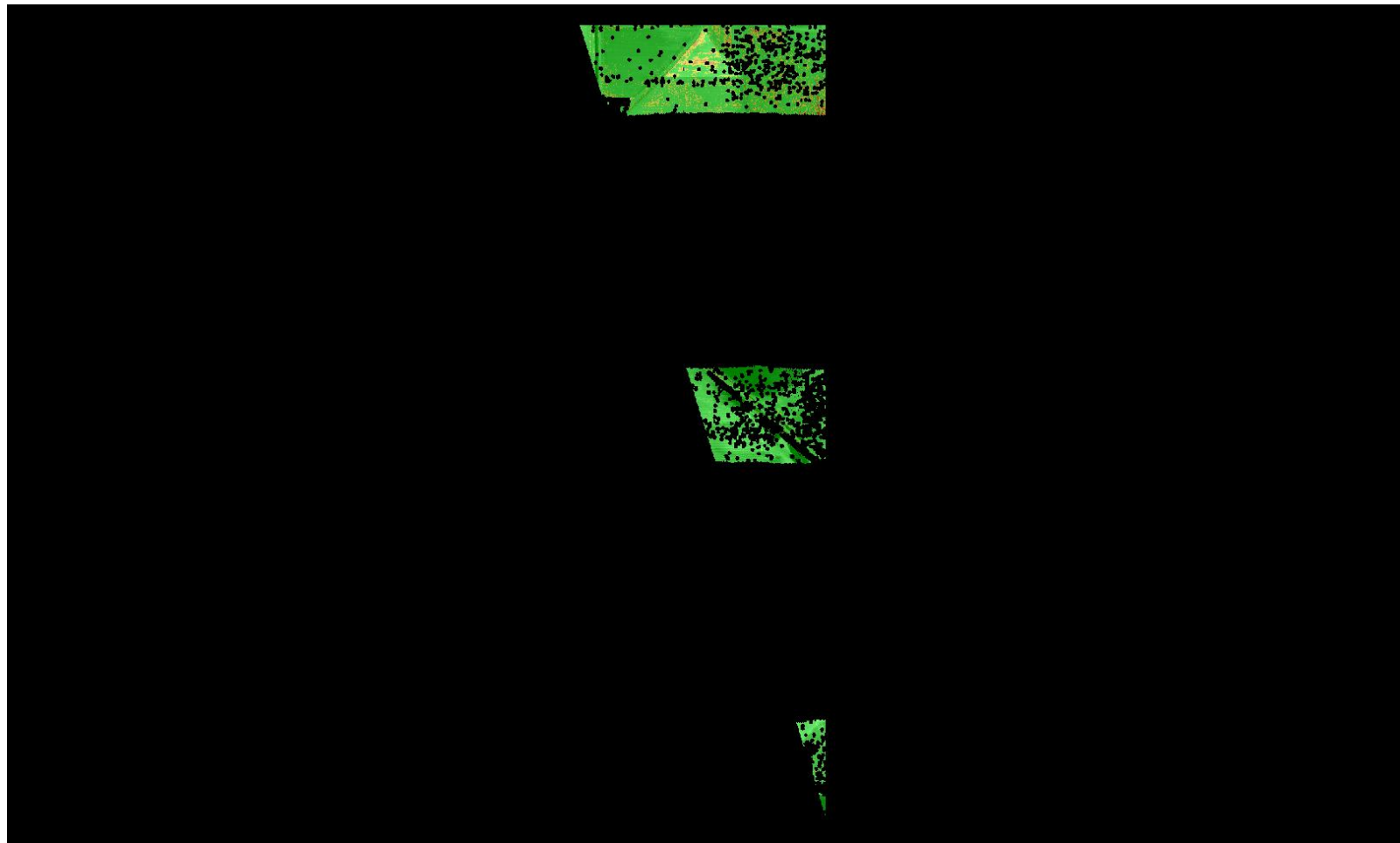
Quality Level (QL)	Swath overlap difference, RMSD _z (cm)	Swath overlap difference, maximum (cm)
QL0	≤4	±8
QL1	≤8	±16
QL2	≤8	±16
QL3	≤16	±32

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. Only overlap areas are shown in the raster. The relative accuracy RMSDz values are reported on the following page(s).

DPH-11.1.2.4 Report on Overlap Consistency (interswath) - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[D:\00_CWCB\Priority\QC\DPH_11_1_2\Area4\Boresighted_FlightlineSeparation_SingleFile_Measurable_GRID.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.).

DPH-11.2 Report on Check Points

The USGS Lidar Base Specification Version 1.2 states: "The Positional Accuracy Standards for Digital Geospatial Data (American Society for Photogrammetry and Remote Sensing, 2014) ties the required number of check points for vertical accuracy assessment to the areal extent of the project. Data producers are encouraged to carefully review the new and revised requirements in that document. Check points for NVA assessments shall be surveyed in clear, open areas (which typically produce only single lidar returns), devoid of vegetation and other vertical artifacts (such as boulders, large riser pipes, and vehicles). Ground that has been plowed or otherwise disturbed is not acceptable. The same check points may be used for NVA assessment of the point cloud and DEM. Check points for VVA assessments shall be surveyed in vegetated areas (typically characterized by multiple return lidar). Although the nature of vegetated areas makes absolute definition of a suitable test area difficult, these areas will meet the requirements below. As stated in the National Standards for Spatial Data Accuracy (NSSDA) (Federal Geographic Data Committee, 1998) and reiterated in the ASPRS Positional Accuracy Standards for Digital Geospatial Data (American Society for Photogrammetry and Remote Sensing, 2014), it is unrealistic to prescribe detailed requirements for check point locations, as many unpredictable factors will affect field operations and decisions, and the data producer must often have the freedom to use their best professional judgment. The quantity and location of check points shall meet the following requirements, unless alternative criteria are approved by the USGS–NGP in advance:

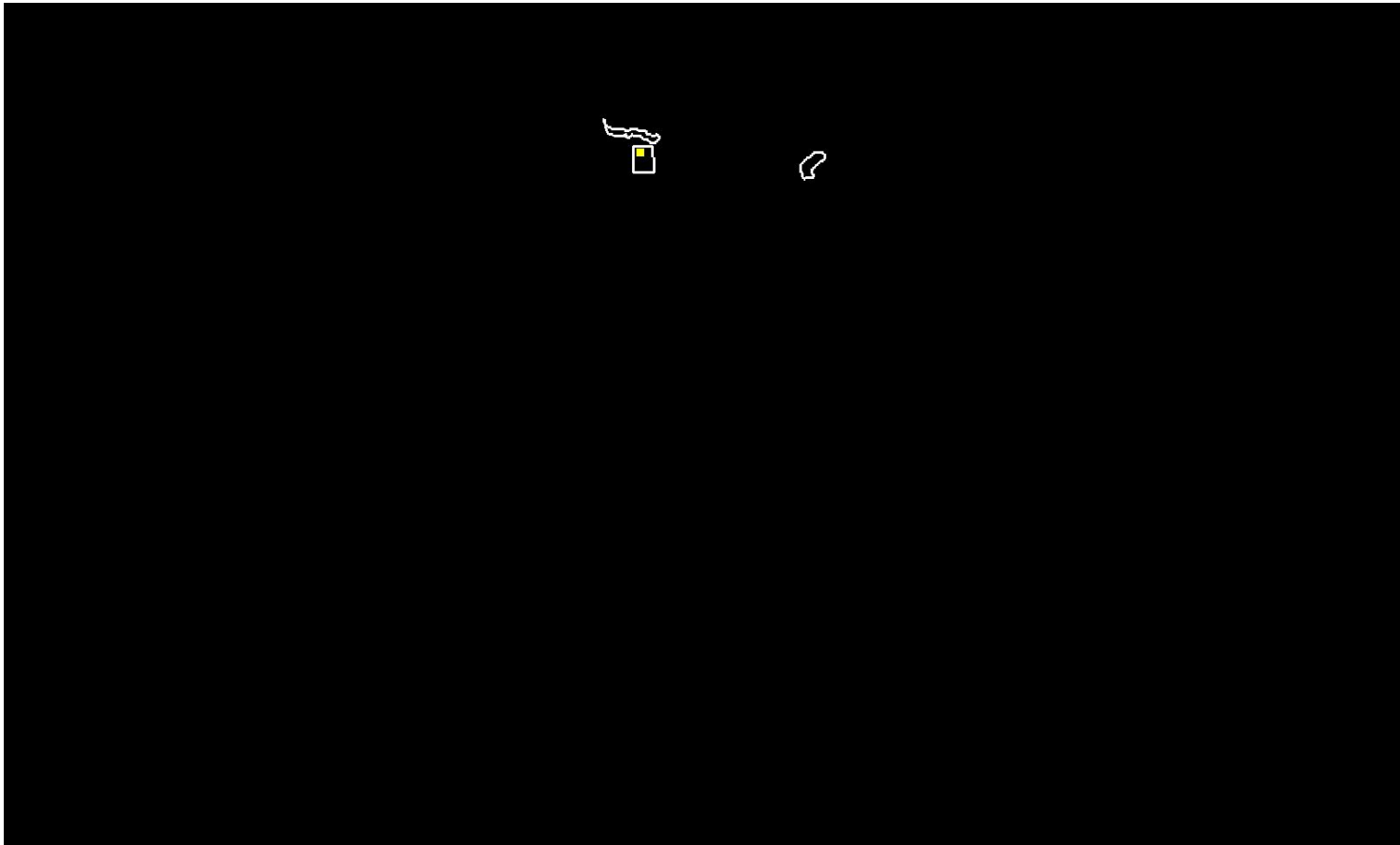
- The ASPRS-recommended total number of check points for a given project size shall be met.
- The ASPRS-recommended distribution of the total number of check points between NVA and VVA assessments shall be met.
- Check points within each assessment type (NVA and VVA) will be well-distributed across the entire project area. See the glossary at the end of this specification for a definition of "well-distributed."
- Within each assessment type, check points will be distributed among all constituent land cover types in approximate proportion to the areas of those land cover types (American Society for Photogrammetry and Remote Sensing, 2014)."

The purpose of this section is to show check points (NVA and VVA).

DPH-11.2 Report on Check Points - continued

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Survey_Control\02_Laser_Control\01_FINAL\StatePlane\CWCB_NVA_VVA_nad2011_COnorth_12b_usFeet.shp](#)

[Check Point Path - D:\00_CWCB\Priority\QC\DPH_11_2\CheckPoints.jpg](#)



Yellow points are NVA, green points are VVA.
White polygon is defined project area (DPA) boundary

DPH-11.2 Report on Check Points - continued

Total check points: 664

Check points in defined project area (DPA): 1

Total NVA check points in defined project area (DPA): 1

Total VVA check points in defined project area (DPA): 0

Total defined project area (DPA): 378.031 square KM

Density of check points in defined project area (DPA): 0.003 points per square KM

TABLE C.1 RECOMMENDED NUMBER OF CHECKPOINTS BASED ON AREA

Project Area (Square Kilometers)	Horizontal Accuracy Testing of Orthoimagery and Planimetrics	Vertical and Horizontal Accuracy Testing of Elevation Data sets		
	Total Number of Static 2D/3D Checkpoints (clearly-defined points)	Number of Static 3D Checkpoints in NVA*	Number of Static 3D Checkpoints in VVA	Total Number of Static 3D Checkpoints
≤500	20	20	5	25
501-750	25	20	10	30
751-1000	30	25	15	40
1001-1250	35	30	20	50
1251-1500	40	35	25	60
1501-1750	45	40	30	70
1751-2000	50	45	35	80
2001-2250	55	50	40	90
2251-2500	60	55	45	100

*Although vertical check points are normally not well defined, where feasible, the horizontal accuracy of lidar data sets should be tested by surveying approximately half of all NVA check points at the ends of point stripes or other point features that are visible and can be measured on lidar intensity returns.

Source: ASPRS Positional Accuracy Standards for Digital Geospatial Data (Edition 1, Version 1.0. - November 2014)

DPH-11.3 Report on Absolute Vertical Accuracy

The USGS Lidar Base Specification Version 1.2 states: "Absolute vertical accuracy of the lidar data and the derived DEM will be assessed and reported in accordance with the ASPRS Positional Accuracy Standards for Digital Geospatial Data (American Society for Photogrammetry and Remote Sensing, 2014). Two broad land cover types shall be assessed: vegetated and nonvegetated. Three absolute accuracy values shall be assessed and reported: NVA for the point cloud, NVA for the DEM, and VVA for the DEM. The minimum NVA and VVA requirements for all data, using the ASPRS methodology, are listed in the tables 'Absolute vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3' (table 4) and 'Absolute vertical accuracy for digital elevation models, Quality Level 0–Quality Level 3' (table 5). Both the NVA and VVA required values shall be met. For projects dominated by dense forests, the USGS–NGP may accept higher VVA values."

Table 4. Absolute vertical accuracy for lidar-swath data, Quality Level 0–Quality Level 3.

[RMSE_z, root mean square error in z; cm, centimeter; NVA, nonvegetated vertical accuracy; ≤, less than or equal to]

Quality Level (QL)	RMSE _z (nonvegetated) (cm)	NVA at 95-percent confidence level (cm)
QL0	≤5.0	≤9.8
QL1	≤10.0	≤19.6
QL2	≤10.0	≤19.6
QL3	≤20.0	≤39.2

Table 5. Absolute vertical accuracy for digital elevation models, Quality Level 0–Quality Level 3.

[RMSE_z, root mean square error in z; cm, centimeter; NVA, nonvegetated vertical accuracy; VVA, vegetated vertical accuracy; ≤, less than or equal to]

Quality Level (QL)	RMSE _z (nonvegetated) (cm)	NVA at 95-percent confidence level (cm)	VVA at 95th percentile (cm)
QL0	≤5.0	≤9.8	≤14.7
QL1	≤10.0	≤19.6	≤29.4
QL2	≤10.0	≤19.6	≤29.4
QL3	≤20.0	≤39.2	≤58.8

The purpose of this section is to report on the absolute vertical accuracy of the lidar data by testing for NVA (Nonvegetated Vertical Accuracy) and VVA (Vegetated Vertical Accuracy) against surveyed ground check points.

DPH-11.3 Report on Absolute Vertical Accuracy - continued

Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Survey_Control\02_Laser_Control\01_FINAL\StatePlane\CWCB_NV_A_VVA_nad2011_COnorth_12b_usFeet.shp

Units: Meter (/US Survey Feet)

Vertical Accuracy Class tested: 10-cm

Check Points in defined project area (DPA):	1
Check Points with Lidar Coverage	1
Check Points with Lidar Coverage (NVA)	1
Check Points with Lidar Coverage (VVA)	0
Average Z Error (NVA)	0.011/0.035
Maximum Z Error (NVA)	0.011/0.035
Median Z Error (NVA)	0.011/0.035
Minimum Z Error (NVA)	0.011/0.035
Non-vegetated Vertical Accuracy (NVA) RMSE(z) (DEM) ²	0.011/0.034 PASS
Non-vegetated Vertical Accuracy (NVA) at the 95% Confidence Level (DEM) +/- ²	0.021/0.068 PASS

This data set was tested to meet ASPRS Positional Accuracy Standard for Digital Geospatial Data (2014) for a 10-cm RMSEz Vertical Accuracy Class. Actual NVA accuracy was found to be RMSEz = 1.057cm, equating to +/- 2.071cm at the 95% confidence level.

¹ This value is calculated from TIN-based testing of the raw swath lidar point cloud data.

² This value is calculated from RAM-based grid testing of the classified tiled lidar data. The grid cells are sized according to the Quality Level selected, and are defined in the USGS NGP Lidar Base Specification Version 1.2 (page 15, Table 7).

DPH-11.3 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to report the results of measuring the lidar point cloud swath data against surveyed ground NVA (nonvegetated vertical accuracy) check points. All XY coordinates and Z values reported are in the selected data units.

NVA (lidar swath data)

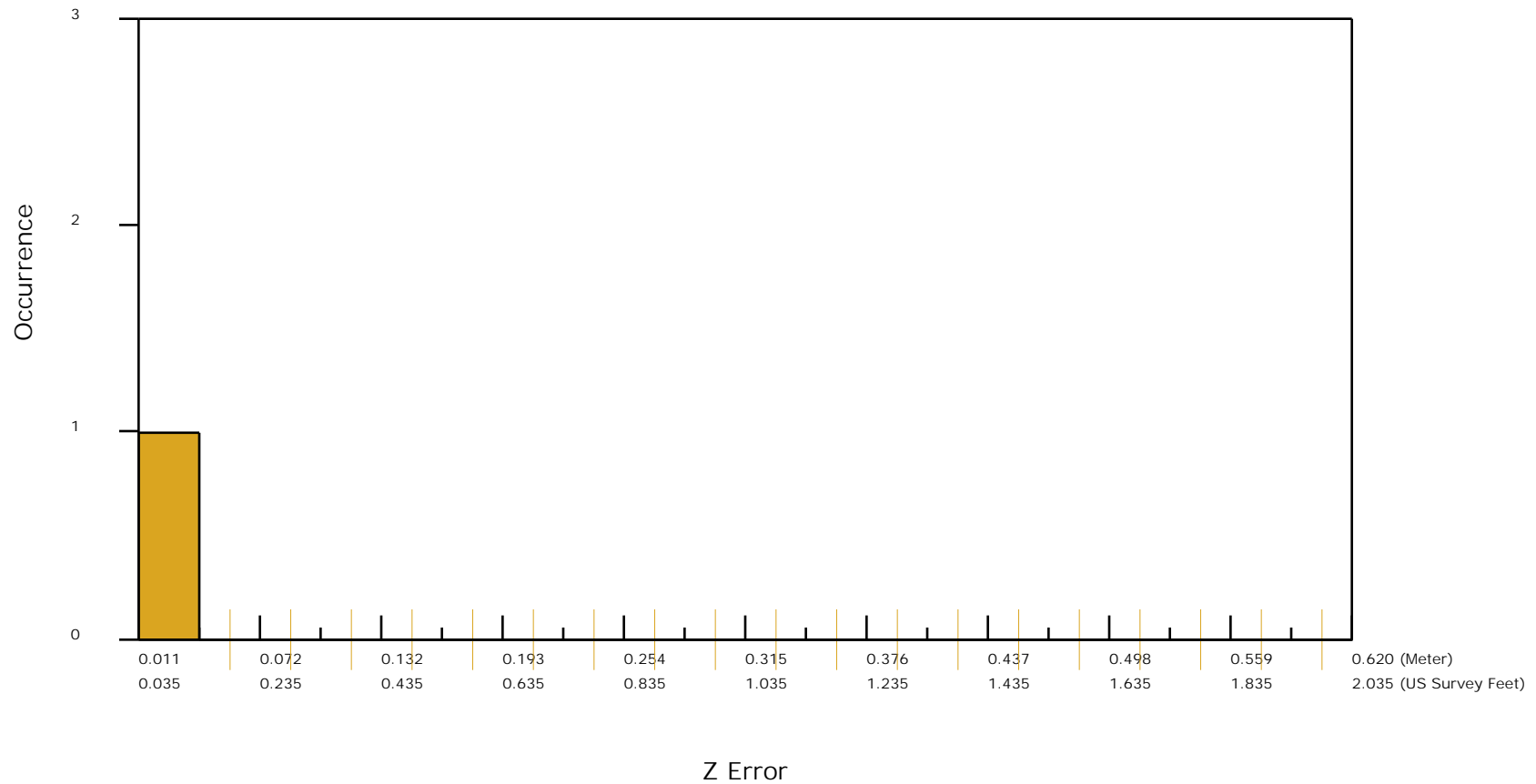
ID	X	Y	Coverage	Z	Z From Lidar	Z Error	Minimum Z	Median Z	Maximum Z	Intensity	Scan Angle Rank	Returns	Description	Comments
4219	3220673.561	1369573.712	Yes	4689.279	4689.314	0.035	4689.298	4689.315	4689.334	2202	2567	1,1,1	LIPT	

DPH-11.3 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to show a frequency distribution chart of the non-vegetated vertical accuracy (NVA) of the lidar point cloud data measured against surveyed ground check points.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

NVA (lidar swath data)



DPH-11.3 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to report the results of measuring the classified (tiled) DEM data against surveyed ground NVA (nonvegetated vertical accuracy) check points. All XY coordinates and Z values reported are in the selected data units.

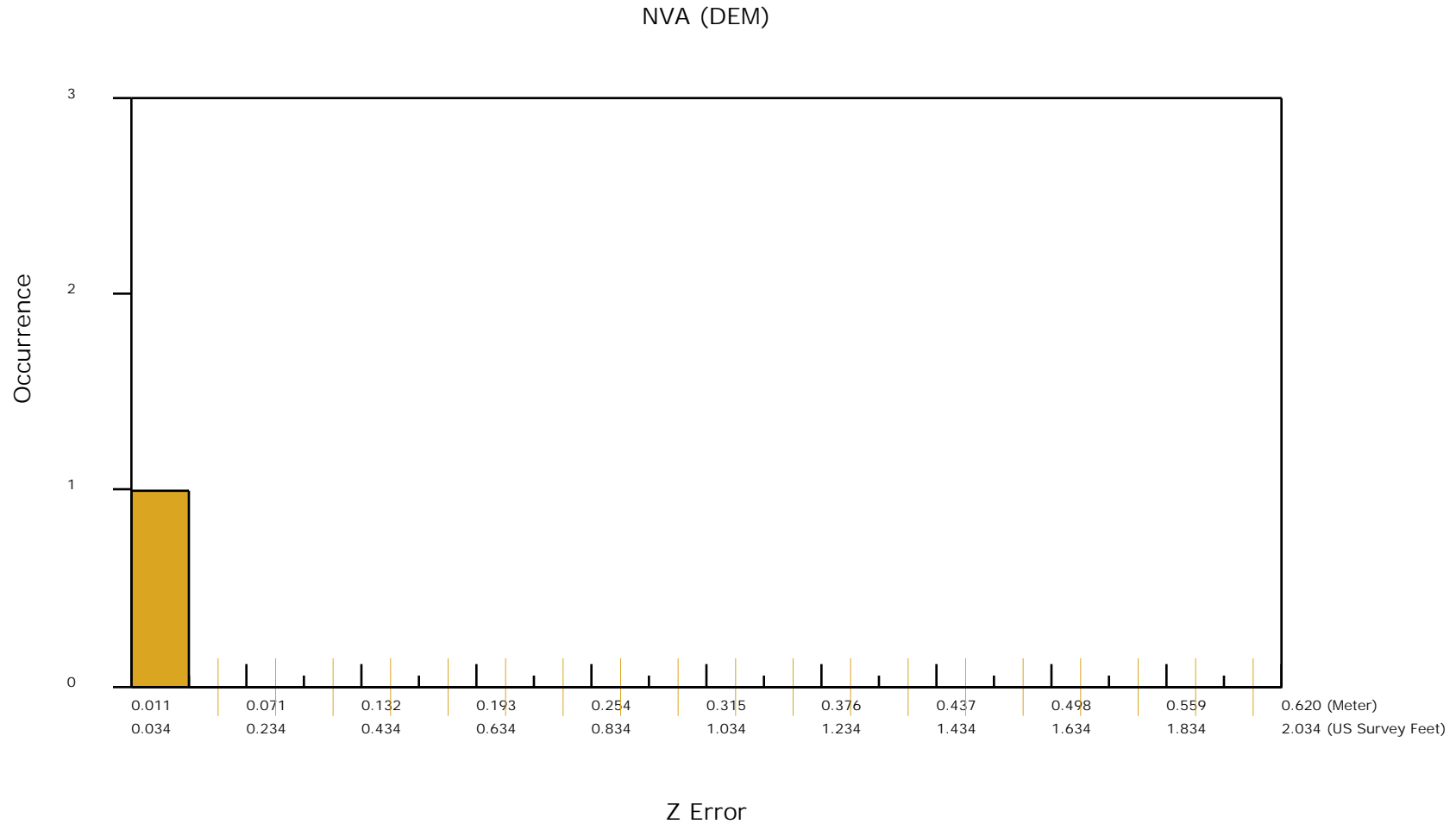
NVA (DEM)

ID	X	Y	Coverage	Z	Z From Lidar	Z Error	Description	Comments
4219	3220673.561	1369573.712	Yes	4689.279	4689.313	0.034	LIPT	

DPH-11.3 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to show a frequency distribution chart of the non-vegetated vertical accuracy (NVA) of the DEM data measured against surveyed ground check points.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

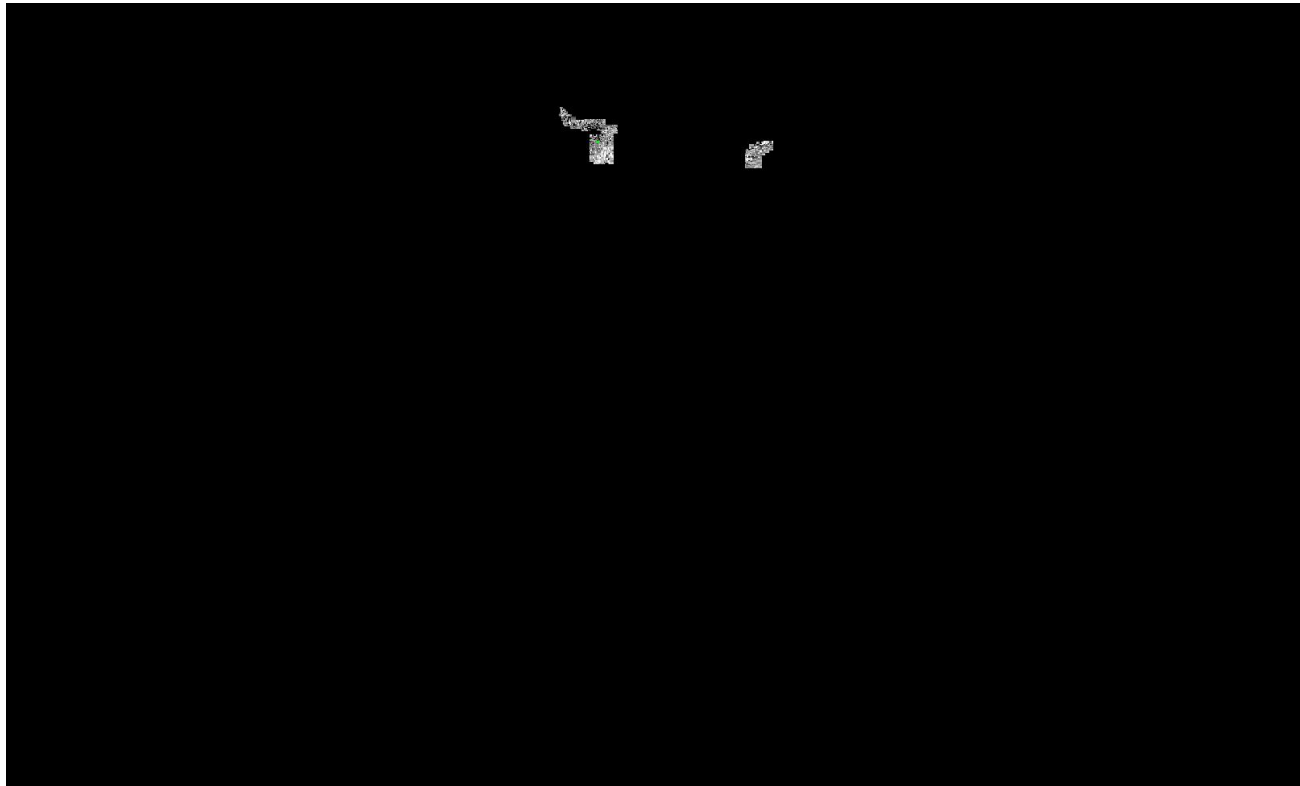


DPH-11.3 Report on Absolute Vertical Accuracy - continued

The purpose of this section is to show a graphic of lidar swath data points colored by intensity with NVA check points rendered "thematically" showing the green and red squares sized by Z error.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths)

[Result Path - D:\00_CWCB\Priority\QC\DPH_11_3\ColorByIntensity_ControlPoints_NVA.jpg](D:\00_CWCB\Priority\QC\DPH_11_3\ColorByIntensity_ControlPoints_NVA.jpg)



■ Green represents where the lidar surface is above the check point (positive elevation error).

■ Red represents where the lidar surface is below the check point (negative elevation error).

The size of the square symbol represents the absolute value magnitude of error.

DPH-12 Report on Use of the LAS Withheld Flag (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "Outliers, blunders, noise points, geometrically unreliable points near the extreme edge of the swath, and other points the data producer deems unusable are to be identified using the Withheld Flag, as defined in the LAS Specification version 1.4 (American Society for Photogrammetry and Remote Sensing, 2011). The Withheld Flag is primarily used to denote points identified during preprocessing or through automated post-processing routines as geometrically unusable. Noise points subsequently identified during manual classification and quality assurance/quality control (QA/QC) are typically assigned the appropriate standard LAS classification values for noise—Class 7 is used for Low Noise and Class 18 is used for High Noise."

The purpose of this section is to list the presence and quantities of points flagged as Withheld for all lidar swath data files.

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

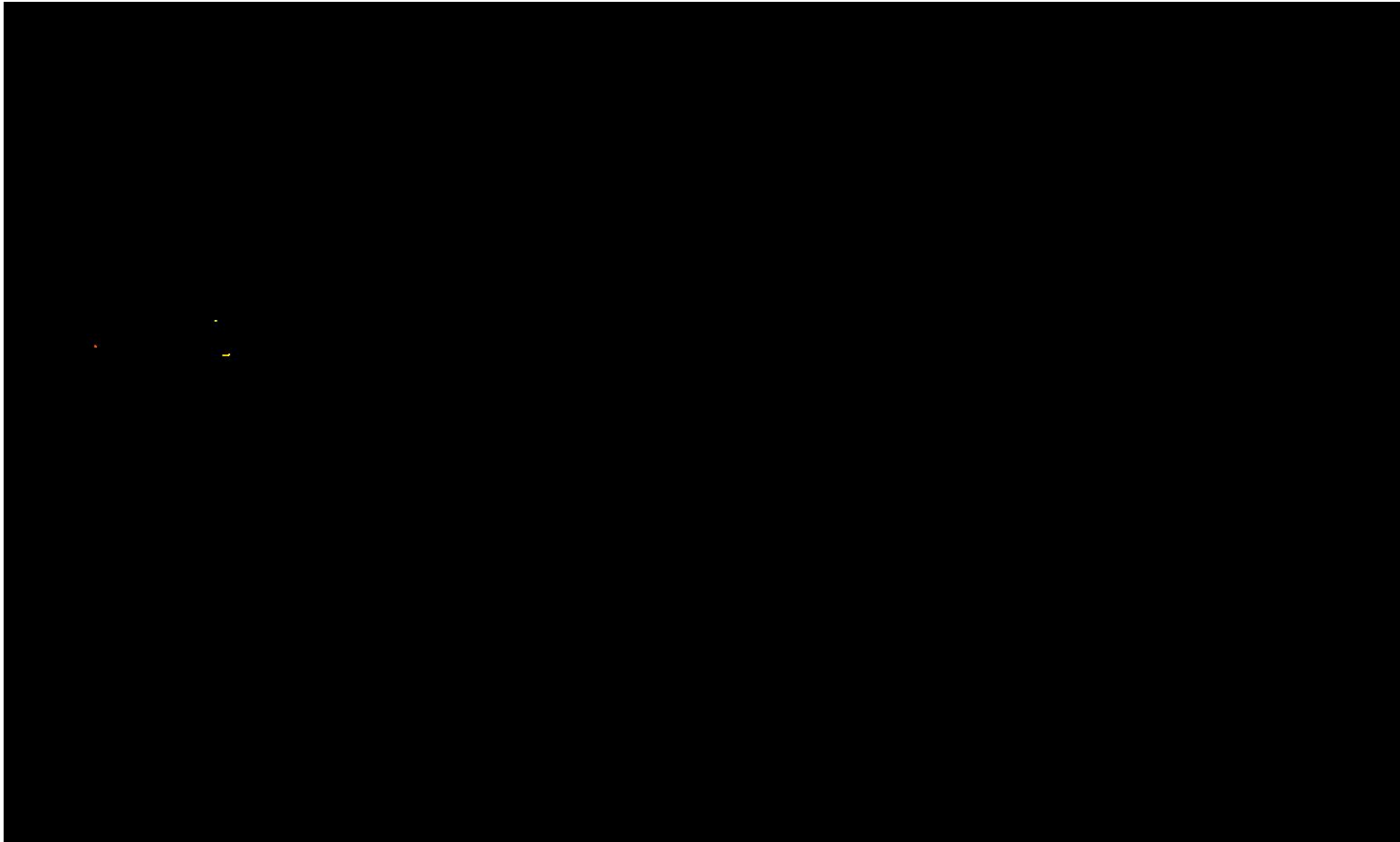
Total Withheld points in class 119 (all swaths)	285786
<hr/>	
Total Withheld points (all classes, all swaths)	285786

DPH-12 Report on Use of the LAS Withheld Flag (Swath Data) - continued

The purpose of this section is to show the presence and extent of points flagged as Withheld for all lidar swath data files.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_12\Boresighted.jpg](#)



DPH-12 Report on Use of the LAS Withheld Flag (Tiled Data)

The purpose of this section is to list the presence and quantities of points flagged as Withheld for all lidar tiled data files.

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Product
ion\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

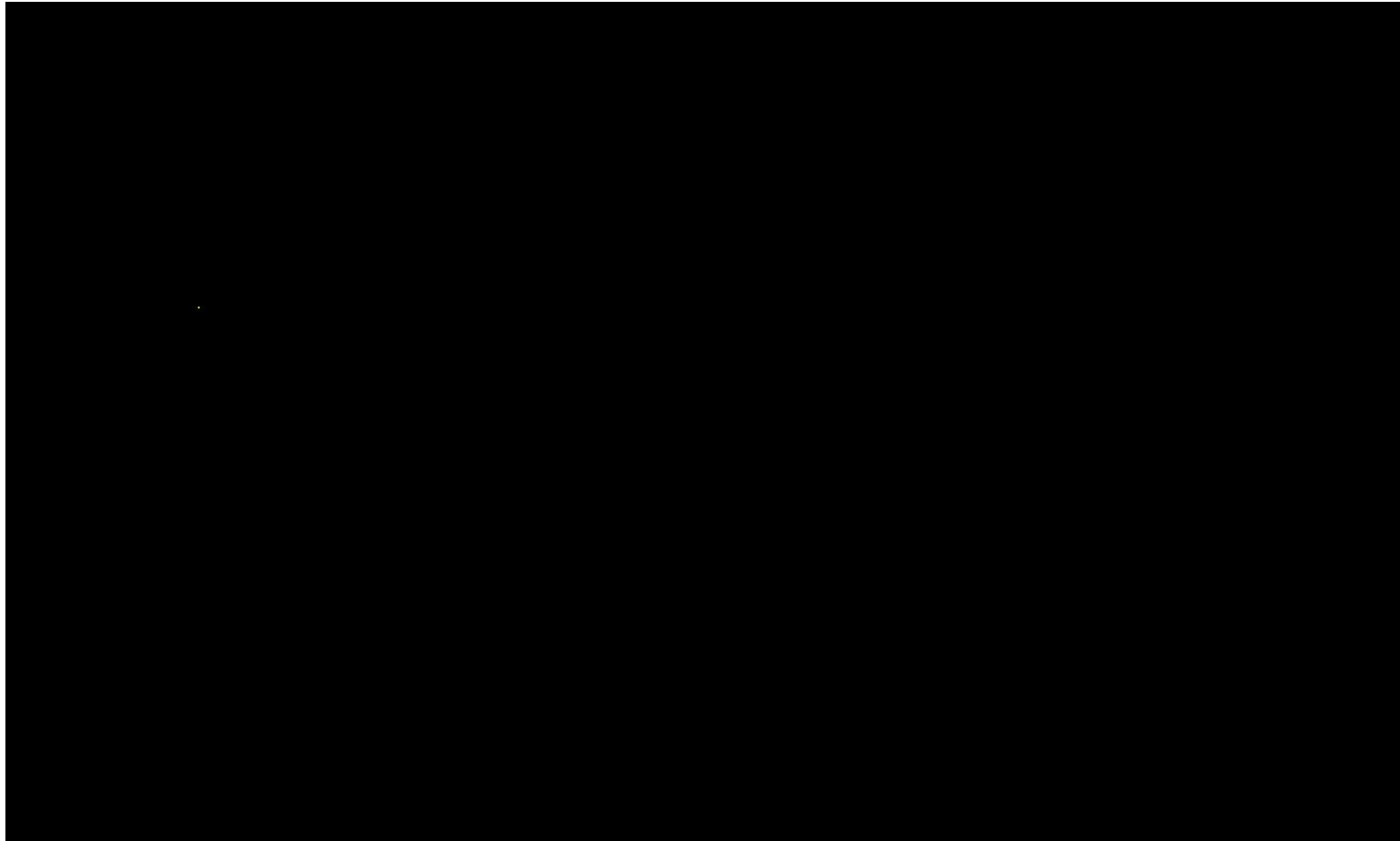
Total Withheld points in class 119 (all tiles)	28002
<hr/>	
Total Withheld points (all classes, all tiles)	28002

DPH-12 Report on Use of the LAS Withheld Flag (Tiled Data)

The purpose of this section is to show the presence and extent of points flagged as Withheld for all lidar tiled data files.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\DPH_12\Classified.jpg](D:\00_CWCB\Priority\QC\DPH_12\Classified.jpg)



DPH-13 Report on Use of the LAS Overlap Flag (Swath Data)

The USGS Lidar Base Specification Version 1.2 states: "The LAS Specification version 1.4 (American Society for Photogrammetry and Remote Sensing, 2011) includes a new overlap flag. Although strictly speaking, the term "overlap" means all lidar points lying within any overlapping areas of two or more swaths, the flag is intended to identify overage points, which are only a subset of overlap points. See the glossary for more information on the difference between overlap and overage. Having overage points identified allows for their easy exclusion from subsequent processes where the increased density and elevation variability they introduce is unwanted (for example, DEM generation). Overage points have commonly been identified using Class 12, precluding other valuable classification (for example, bare earth, water). The overlap flag provides a discrete method to identify overage points while preserving the ability to classify the points in the normal way. Overage points shall be identified using the LAS overlap flag in all point cloud deliverables."

The purpose of this section is to list the presence and quantities of points flagged as Overlap for all lidar swath data files.

[Boresighted Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\Swaths](#)

Total Overlap points (all classes, all swaths)

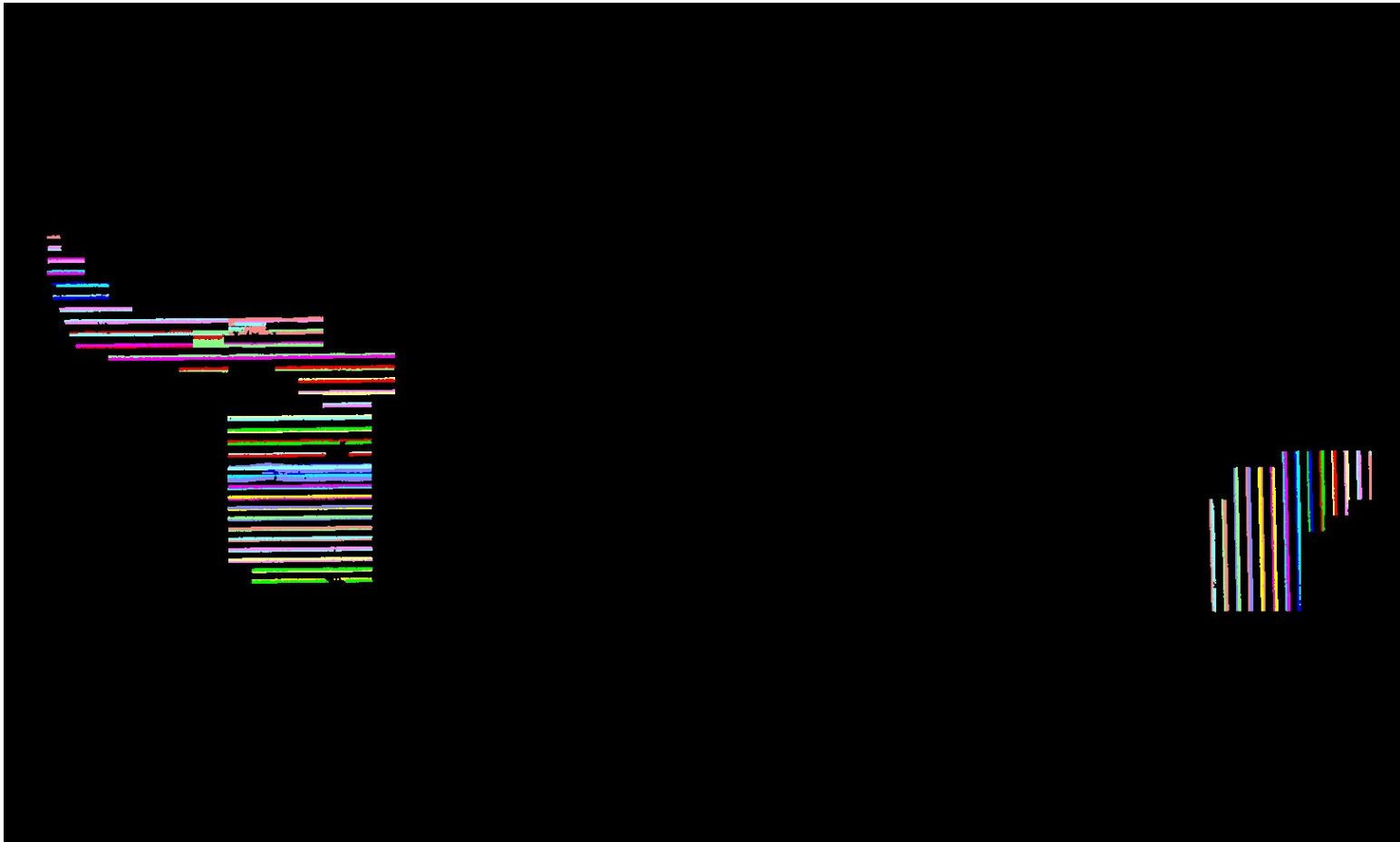
595195070

DPH-13 Report on Use of the LAS Overlap Flag (Swath Data) - continued

The purpose of this section is to show the presence and extent of points flagged as Overlap for all lidar swath data files.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\Swaths](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_13\Boresighted.jpg](#)



DPH-13 Report on Use of the LAS Overlap Flag (Tiled Data)

The purpose of this section is to list the presence and quantities of points flagged as Overlap for all lidar tiled data files.

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

Total Overlap points (all classes, all tiles)

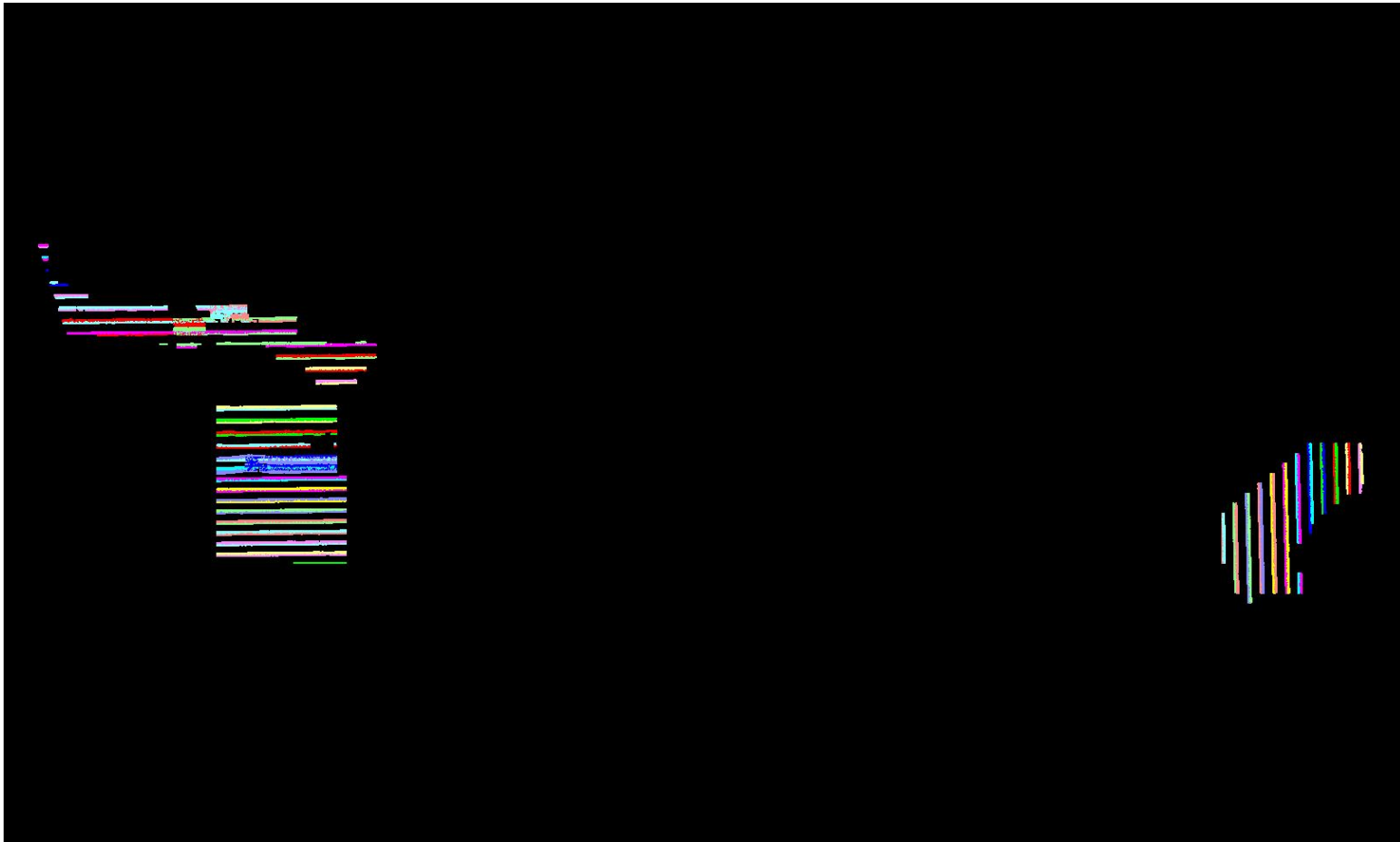
414377629

DPH-13 Report on Use of the LAS Overlap Flag (Tiled Data) - continued

The purpose of this section is to show the presence and extent of points flagged as Overlap for all lidar tiled data files.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_13\Classified.jpg](#)



DPH-14 Report on Point Classification

The USGS Lidar Base Specification Version 1.2 states: "The minimum scheme required for lidar point clouds is listed in the table 'Minimum classified pointcloud classification scheme' (table 6). All points not identified as Withheld (WH) shall be classified. "

Table 6. Minimum classified point cloud classification scheme.

Code	Description
1	Processed, but unclassified.
2	Bare earth.
7	Low noise.
9	Water.
10	Ignored ground (near a breakline).
17	Bridge decks.
18	High noise.

The purpose of this section is to report total numbers of points for each class within the tile based LAS files.

DPH-14 Report on Point Classification - 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 exist in unintended classes.

[Classified Files - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority\point_cloud\tilecls](#)

Class	Total	MKP	WH	Class	Total	MKP	WH	Class	Total	MKP	WH	Class	Total	MKP	WH
0	00	00	00	64	00	00	00	128	00	00	00	192	00	00	00
1	119,552,579	00	00	65	00	00	00	129	00	00	00	193	00	00	00
2	1,090,060,721	00	00	66	00	00	00	130	00	00	00	194	00	00	00
3	00	00	00	67	00	00	00	131	00	00	00	195	00	00	00
4	00	00	00	68	00	00	00	132	00	00	00	196	00	00	00
5	00	00	00	69	00	00	00	133	00	00	00	197	00	00	00
6	00	00	00	70	00	00	00	134	00	00	00	198	00	00	00
7	16,990	00	00	71	00	00	00	135	00	00	00	199	00	00	00
8	00	00	00	72	00	00	00	136	00	00	00	200	00	00	00
9	4,246,188	00	00	73	00	00	00	137	00	00	00	201	00	00	00
10	387,031	00	00	74	00	00	00	138	00	00	00	202	00	00	00
11	00	00	00	75	00	00	00	139	00	00	00	203	00	00	00
12	00	00	00	76	00	00	00	140	00	00	00	204	00	00	00
13	00	00	00	77	00	00	00	141	00	00	00	205	00	00	00
14	00	00	00	78	00	00	00	142	00	00	00	206	00	00	00
15	00	00	00	79	00	00	00	143	00	00	00	207	00	00	00
16	00	00	00	80	00	00	00	144	00	00	00	208	00	00	00
17	226,055	00	00	81	00	00	00	145	00	00	00	209	00	00	00
18	7,146	00	00	82	00	00	00	146	00	00	00	210	00	00	00
19	00	00	00	83	00	00	00	147	00	00	00	211	00	00	00
20	00	00	00	84	00	00	00	148	00	00	00	212	00	00	00
21	00	00	00	85	00	00	00	149	00	00	00	213	00	00	00
22	00	00	00	86	00	00	00	150	00	00	00	214	00	00	00
23	00	00	00	87	00	00	00	151	00	00	00	215	00	00	00
24	00	00	00	88	00	00	00	152	00	00	00	216	00	00	00
25	00	00	00	89	00	00	00	153	00	00	00	217	00	00	00
26	00	00	00	90	00	00	00	154	00	00	00	218	00	00	00
27	00	00	00	91	00	00	00	155	00	00	00	219	00	00	00
28	00	00	00	92	00	00	00	156	00	00	00	220	00	00	00
29	00	00	00	93	00	00	00	157	00	00	00	221	00	00	00
30	00	00	00	94	00	00	00	158	00	00	00	222	00	00	00
31	00	00	00	95	00	00	00	159	00	00	00	223	00	00	00
32	00	00	00	96	00	00	00	160	00	00	00	224	00	00	00
33	00	00	00	97	00	00	00	161	00	00	00	225	00	00	00
34	00	00	00	98	00	00	00	162	00	00	00	226	00	00	00
35	00	00	00	99	00	00	00	163	00	00	00	227	00	00	00
36	00	00	00	100	00	00	00	164	00	00	00	228	00	00	00
37	00	00	00	101	00	00	00	165	00	00	00	229	00	00	00
38	00	00	00	102	00	00	00	166	00	00	00	230	00	00	00
39	00	00	00	103	00	00	00	167	00	00	00	231	00	00	00
40	00	00	00	104	00	00	00	168	00	00	00	232	00	00	00
41	00	00	00	105	00	00	00	169	00	00	00	233	00	00	00
42	00	00	00	106	00	00	00	170	00	00	00	234	00	00	00
43	00	00	00	107	00	00	00	171	00	00	00	235	00	00	00
44	00	00	00	108	00	00	00	172	00	00	00	236	00	00	00
45	00	00	00	109	00	00	00	173	00	00	00	237	00	00	00
46	00	00	00	110	00	00	00	174	00	00	00	238	00	00	00
47	00	00	00	111	00	00	00	175	00	00	00	239	00	00	00
48	00	00	00	112	00	00	00	176	00	00	00	240	00	00	00
49	00	00	00	113	00	00	00	177	00	00	00	241	00	00	00
50	00	00	00	114	00	00	00	178	00	00	00	242	00	00	00
51	00	00	00	115	00	00	00	179	00	00	00	243	00	00	00
52	00	00	00	116	00	00	00	180	00	00	00	244	00	00	00
53	00	00	00	117	00	00	00	181	00	00	00	245	00	00	00
54	00	00	00	118	00	00	00	182	00	00	00	246	00	00	00
55	00	00	00	119	28,002	00	28,002	183	00	00	00	247	00	00	00
56	00	00	00	120	00	00	00	184	00	00	00	248	00	00	00
57	00	00	00	121	00	00	00	185	00	00	00	249	00	00	00
58	00	00	00	122	00	00	00	186	00	00	00	250	00	00	00
59	00	00	00	123	00	00	00	187	00	00	00	251	00	00	00
60	00	00	00	124	00	00	00	188	00	00	00	252	00	00	00
61	00	00	00	125	00	00	00	189	00	00	00	253	00	00	00
62	00	00	00	126	00	00	00	190	00	00	00	254	00	00	00
63	00	00	00	127	00	00	00	191	00	00	00	255	00	00	00

Bold – point counts in 'Minimum classified point cloud classification scheme' (see table on previous page)

– point counts in Classes beyond the minimum

– disallowed point counts per USGS spec

– not all Class 0 points flagged as Withheld

DPH-15.1 Report on Classification Accuracy

The USGS Lidar Base Specification Version 1.2 states: "Following classification processing, no nonwithheld points will remain in Class 0.

- For QL3 data, within any 1 square km, no more than 2 percent of nonwithheld points will have demonstrable errors in the classification value.
- For QL2 data, within any 1 square km, no more than 1 percent of nonwithheld points will have demonstrable errors in the classification value.
- For QL1 and QL0 data, within any 1 square km, no more than 0.5 percent of nonwithheld points will have demonstrable errors in the classification value.
- 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 percentage thresholds."

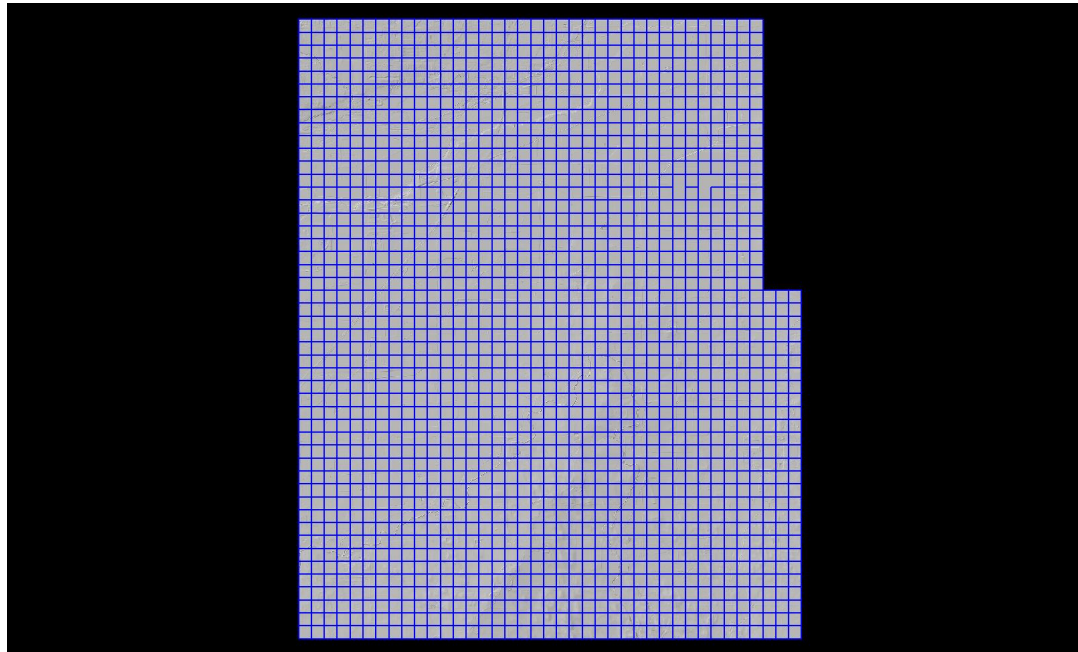
The USGS-NGP may relax these requirements to accommodate collections in areas where classification is particularly difficult.

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 inspection.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_15_16\Area1\Hillshade_SingleFile.jp2](#)

[Tile Shapefile - D:\00_CWCB\Priority\QC\DPH_15_16\Area1\tile.shp](#)



DPH-15.2 Report on Classification Accuracy

The USGS Lidar Base Specification Version 1.2 states: "Following classification processing, no nonwithheld points will remain in Class 0.

- For QL3 data, within any 1 square km, no more than 2 percent of nonwithheld points will have demonstrable errors in the classification value.
- For QL2 data, within any 1 square km, no more than 1 percent of nonwithheld points will have demonstrable errors in the classification value.
- For QL1 and QL0 data, within any 1 square km, no more than 0.5 percent of nonwithheld points will have demonstrable errors in the classification value.
- 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 percentage thresholds."

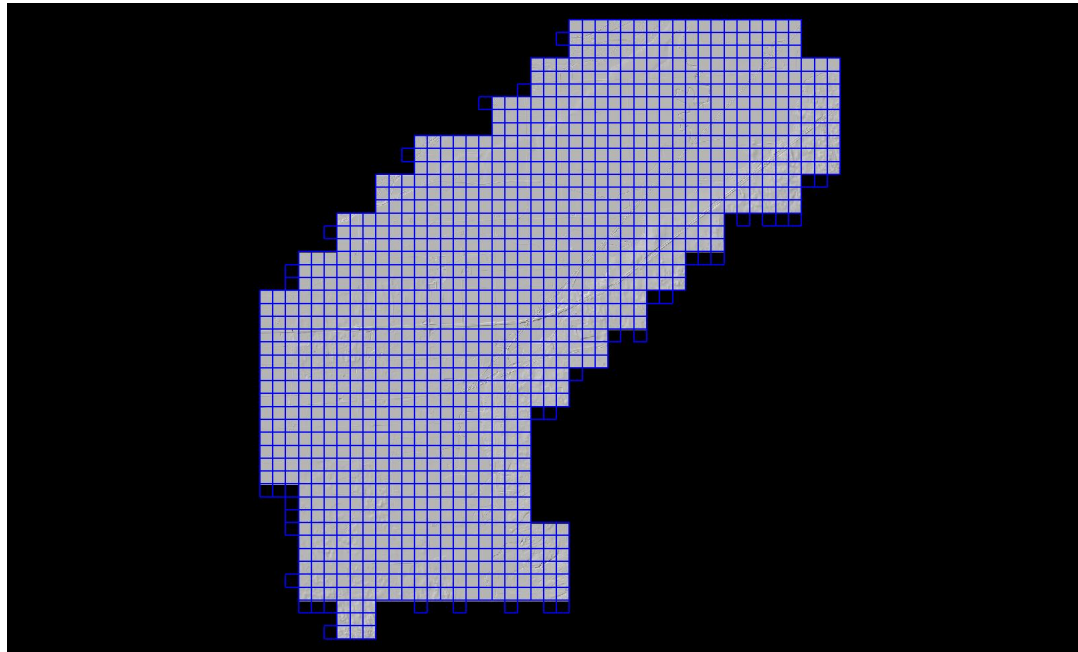
The USGS-NGP may relax these requirements to accommodate collections in areas where classification is particularly difficult.

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 inspection.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_15_16\Area2\Hillshade_SingleFile.jp2](#)

[Tile Shapefile - D:\00_CWCB\Priority\QC\DPH_15_16\Area2\tile.shp](#)



DPH-15.3 Report on Classification Accuracy

The USGS Lidar Base Specification Version 1.2 states: "Following classification processing, no nonwithheld points will remain in Class 0.

- For QL3 data, within any 1 square km, no more than 2 percent of nonwithheld points will have demonstrable errors in the classification value.
- For QL2 data, within any 1 square km, no more than 1 percent of nonwithheld points will have demonstrable errors in the classification value.
- For QL1 and QL0 data, within any 1 square km, no more than 0.5 percent of nonwithheld points will have demonstrable errors in the classification value.
- 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 percentage thresholds."

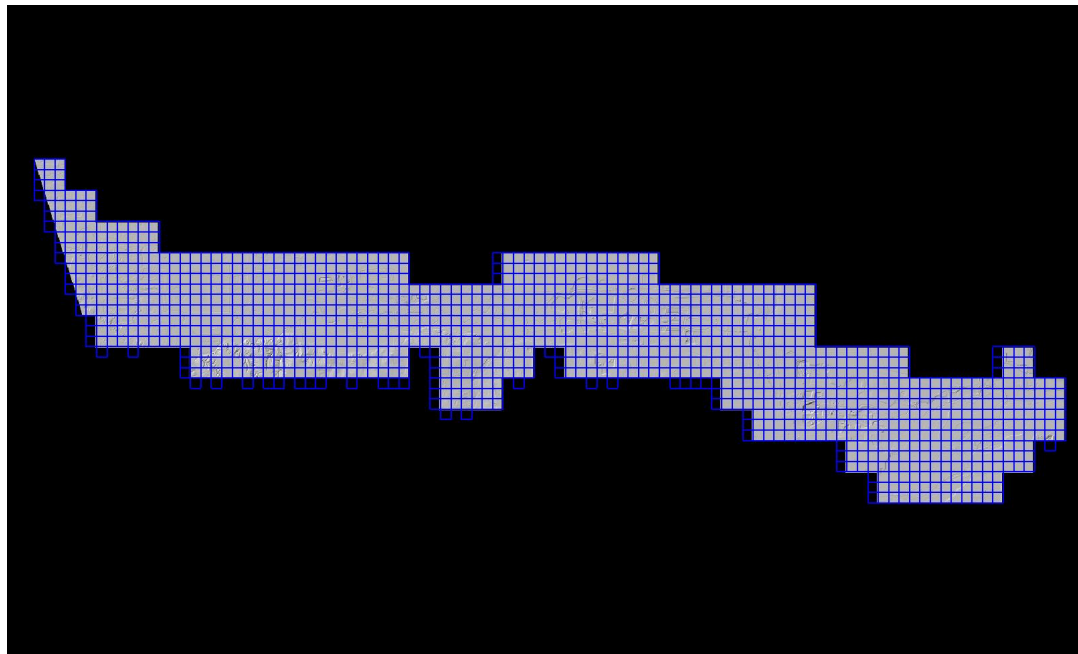
The USGS-NGP may relax these requirements to accommodate collections in areas where classification is particularly difficult.

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 inspection.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_15_16\Area3\Hillshade_SingleFile.jp2](#)

[Tile Shapefile - D:\00_CWCB\Priority\QC\DPH_15_16\Area3\tile.shp](#)



DPH-15.4 Report on Classification Accuracy

The USGS Lidar Base Specification Version 1.2 states: "Following classification processing, no nonwithheld points will remain in Class 0.

- For QL3 data, within any 1 square km, no more than 2 percent of nonwithheld points will have demonstrable errors in the classification value.
- For QL2 data, within any 1 square km, no more than 1 percent of nonwithheld points will have demonstrable errors in the classification value.
- For QL1 and QL0 data, within any 1 square km, no more than 0.5 percent of nonwithheld points will have demonstrable errors in the classification value.
- 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 percentage thresholds."

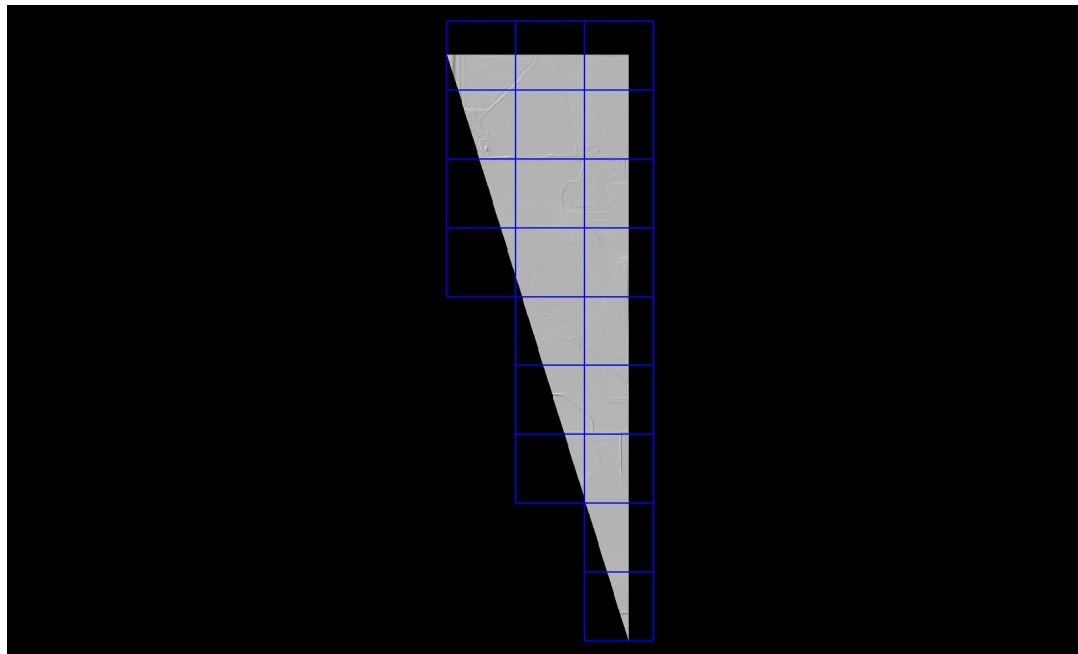
The USGS-NGP may relax these requirements to accommodate collections in areas where classification is particularly difficult.

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 inspection.

[Data Source - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_15_16\Area4\Hillshade_SingleFile.jp2](#)

[Tile Shapefile - D:\00_CWCB\Priority\QC\DPH_15_16\Area4\tile.shp](#)



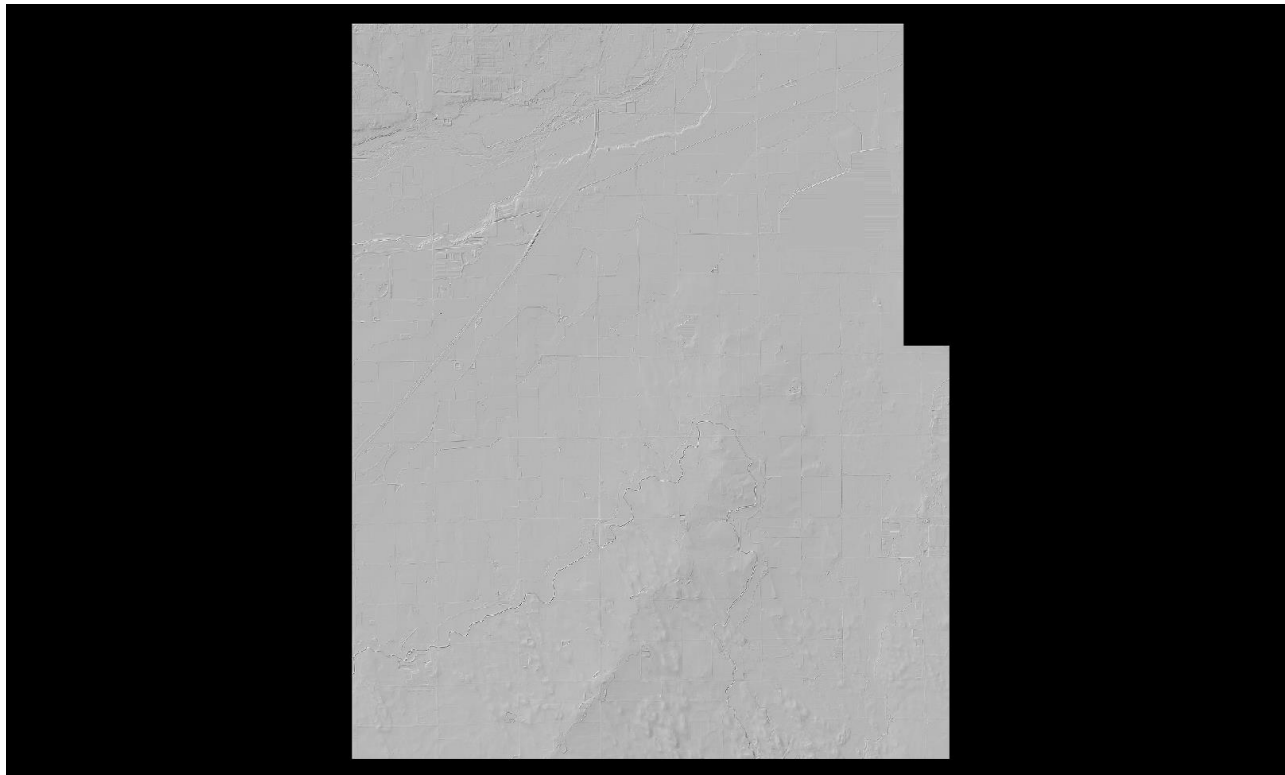
DPH-16.1 Report on Classification Consistency

The USGS Lidar Base Specification Version 1.2 states: "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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_15_16\Area1\Hillshade_SingleFile.jp2](#)



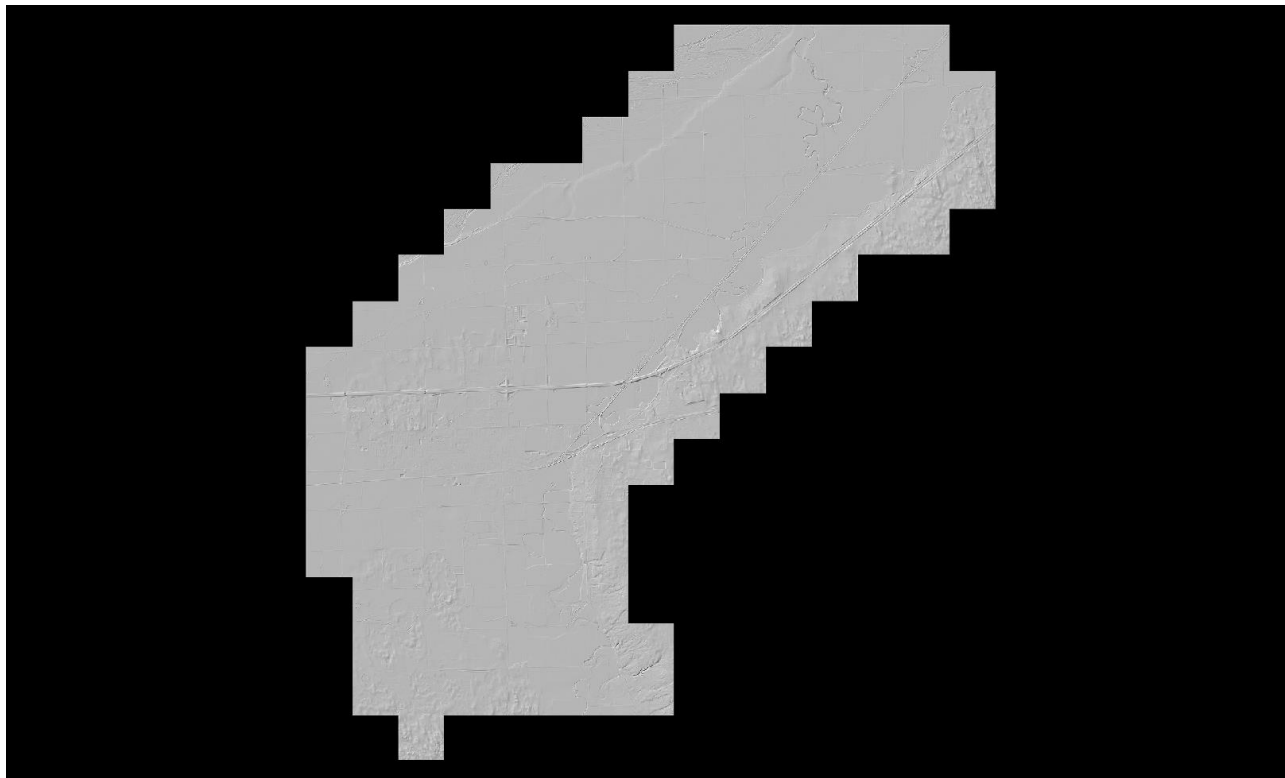
DPH-16.2 Report on Classification Consistency

The USGS Lidar Base Specification Version 1.2 states: "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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_15_16\Area2\Hillshade_SingleFile.jp2](#)



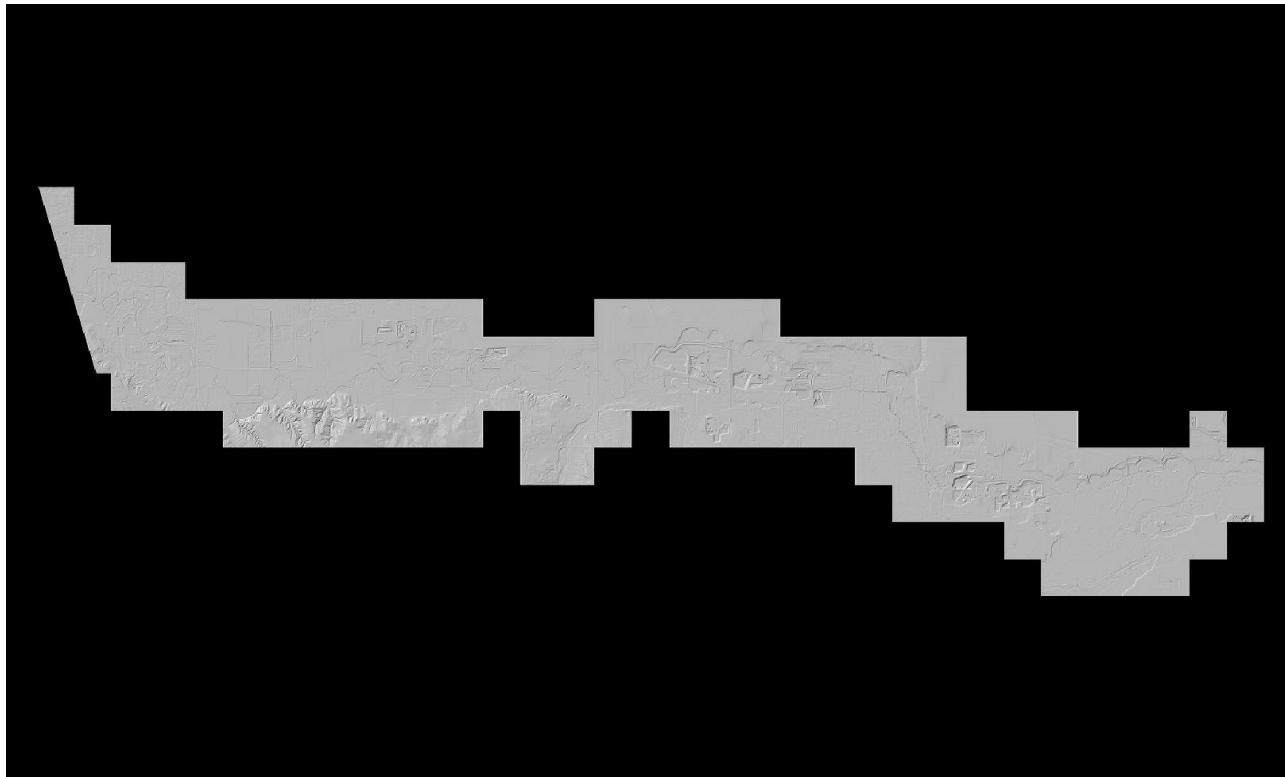
DPH-16.3 Report on Classification Consistency

The USGS Lidar Base Specification Version 1.2 states: "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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls)

[Result Path - D:\00_CWCB\Priority\QC\DPH_15_16\Area3\Hillshade_SingleFile.jp2](D:\00_CWCB\Priority\QC\DPH_15_16\Area3\Hillshade_SingleFile.jp2)



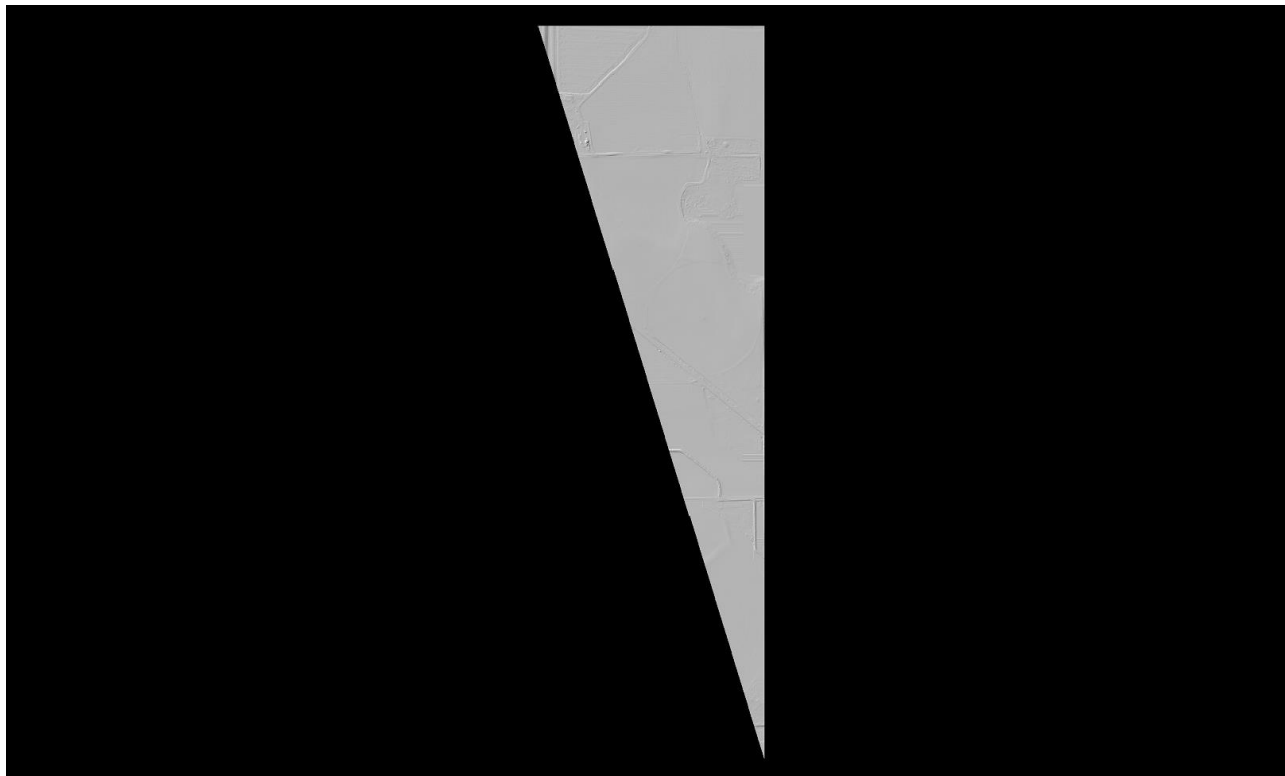
DPH-16.4 Report on Classification Consistency

The USGS Lidar Base Specification Version 1.2 states: "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 - Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Production\Final_Client_Deliverables\Priority_point_cloud\tilecls](#)

[Result Path - D:\00_CWCB\Priority\QC\DPH_15_16\Area4\Hillshade_SingleFile.jp2](#)



DPH-17 Report on Tiles

The USGS Lidar Base Specification Version 1.2 states: "A single non-overlapping project tiling scheme will be established and agreed upon by the data producer and the USGS–NGP before collection. This scheme will be used for all tiled deliverables: The tiling scheme shall use the same coordinate reference system and units as the data. The tile size shall be an integer multiple of the cell size for raster deliverables. The tiles shall be indexed in x and y to an integer multiple of the x and y dimensions of the tile. The tiled deliverables shall edge-match seamlessly and without gaps. The tiled deliverables shall conform to the project tiling scheme without added overlap."

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

[Tile File: Y:\Mapping\Projects\65219844_CWCB_Eastern_Colorado\Admin\PM_Shapes\Final_bdy_tiles\SP\CO_N_QL2\tiles_Pilot_QL2_CO_N_457total.shp](#)

Units: US Survey Feet

Tile	Width	Height	Overlap
LD31531420	3000.000	3000.000	False
LD31531423	3000.000	3000.000	False
LD31531426	3000.000	3000.000	False
LD31561408	3000.000	3000.000	False
LD31561411	3000.000	3000.000	False
LD31561414	3000.000	3000.000	False
LD31561417	3000.000	3000.000	False
LD31591405	3000.000	3000.000	False
LD31591408	3000.000	3000.000	False
LD31591411	3000.000	3000.000	False
LD31591414	3000.000	3000.000	False
LD31621402	3000.000	3000.000	False
LD31621405	3000.000	3000.000	False
LD31621408	3000.000	3000.000	False
LD31621411	3000.000	3000.000	False
LD31651402	3000.000	3000.000	False
LD31651405	3000.000	3000.000	False
LD31651408	3000.000	3000.000	False
LD31651411	3000.000	3000.000	False
LD31681402	3000.000	3000.000	False
LD31681405	3000.000	3000.000	False
LD31681408	3000.000	3000.000	False
LD31711399	3000.000	3000.000	False
LD31711402	3000.000	3000.000	False
LD31711405	3000.000	3000.000	False
LD31711408	3000.000	3000.000	False
LD31741399	3000.000	3000.000	False
LD31741402	3000.000	3000.000	False
LD31741405	3000.000	3000.000	False
LD31741408	3000.000	3000.000	False
LD31771399	3000.000	3000.000	False
LD31771402	3000.000	3000.000	False
LD31771405	3000.000	3000.000	False
LD31771408	3000.000	3000.000	False
LD31801399	3000.000	3000.000	False
LD31801402	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD31801405	3000.000	3000.000	False
LD31801408	3000.000	3000.000	False
LD31831399	3000.000	3000.000	False
LD31831402	3000.000	3000.000	False
LD31831405	3000.000	3000.000	False
LD31831408	3000.000	3000.000	False
LD31861399	3000.000	3000.000	False
LD31861402	3000.000	3000.000	False
LD31861405	3000.000	3000.000	False
LD31861408	3000.000	3000.000	False
LD31891399	3000.000	3000.000	False
LD31891402	3000.000	3000.000	False
LD31891405	3000.000	3000.000	False
LD31891408	3000.000	3000.000	False
LD31921402	3000.000	3000.000	False
LD31921405	3000.000	3000.000	False
LD31951396	3000.000	3000.000	False
LD31951399	3000.000	3000.000	False
LD31951402	3000.000	3000.000	False
LD31951405	3000.000	3000.000	False
LD31981396	3000.000	3000.000	False
LD31981399	3000.000	3000.000	False
LD31981402	3000.000	3000.000	False
LD31981405	3000.000	3000.000	False
LD32011399	3000.000	3000.000	False
LD32011402	3000.000	3000.000	False
LD32011405	3000.000	3000.000	False
LD32011408	3000.000	3000.000	False
LD32041402	3000.000	3000.000	False
LD32041405	3000.000	3000.000	False
LD32041408	3000.000	3000.000	False
LD32071333	3000.000	3000.000	False
LD32071336	3000.000	3000.000	False
LD32071339	3000.000	3000.000	False
LD32071342	3000.000	3000.000	False
LD32071345	3000.000	3000.000	False
LD32071348	3000.000	3000.000	False
LD32071351	3000.000	3000.000	False
LD32071354	3000.000	3000.000	False
LD32071357	3000.000	3000.000	False
LD32071360	3000.000	3000.000	False
LD32071363	3000.000	3000.000	False
LD32071366	3000.000	3000.000	False
LD32071369	3000.000	3000.000	False
LD32071372	3000.000	3000.000	False
LD32071375	3000.000	3000.000	False
LD32071378	3000.000	3000.000	False
LD32071399	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD32071402	3000.000	3000.000	False
LD32071405	3000.000	3000.000	False
LD32071408	3000.000	3000.000	False
LD32101333	3000.000	3000.000	False
LD32101336	3000.000	3000.000	False
LD32101339	3000.000	3000.000	False
LD32101342	3000.000	3000.000	False
LD32101345	3000.000	3000.000	False
LD32101348	3000.000	3000.000	False
LD32101351	3000.000	3000.000	False
LD32101354	3000.000	3000.000	False
LD32101357	3000.000	3000.000	False
LD32101360	3000.000	3000.000	False
LD32101363	3000.000	3000.000	False
LD32101366	3000.000	3000.000	False
LD32101369	3000.000	3000.000	False
LD32101372	3000.000	3000.000	False
LD32101375	3000.000	3000.000	False
LD32101378	3000.000	3000.000	False
LD32101399	3000.000	3000.000	False
LD32101402	3000.000	3000.000	False
LD32101405	3000.000	3000.000	False
LD32101408	3000.000	3000.000	False
LD32131333	3000.000	3000.000	False
LD32131336	3000.000	3000.000	False
LD32131339	3000.000	3000.000	False
LD32131342	3000.000	3000.000	False
LD32131345	3000.000	3000.000	False
LD32131348	3000.000	3000.000	False
LD32131351	3000.000	3000.000	False
LD32131354	3000.000	3000.000	False
LD32131357	3000.000	3000.000	False
LD32131360	3000.000	3000.000	False
LD32131363	3000.000	3000.000	False
LD32131366	3000.000	3000.000	False
LD32131369	3000.000	3000.000	False
LD32131372	3000.000	3000.000	False
LD32131375	3000.000	3000.000	False
LD32131378	3000.000	3000.000	False
LD32131399	3000.000	3000.000	False
LD32131402	3000.000	3000.000	False
LD32131405	3000.000	3000.000	False
LD32131408	3000.000	3000.000	False
LD32161333	3000.000	3000.000	False
LD32161336	3000.000	3000.000	False
LD32161339	3000.000	3000.000	False
LD32161342	3000.000	3000.000	False
LD32161345	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD32161348	3000.000	3000.000	False
LD32161351	3000.000	3000.000	False
LD32161354	3000.000	3000.000	False
LD32161357	3000.000	3000.000	False
LD32161360	3000.000	3000.000	False
LD32161363	3000.000	3000.000	False
LD32161366	3000.000	3000.000	False
LD32161369	3000.000	3000.000	False
LD32161372	3000.000	3000.000	False
LD32161375	3000.000	3000.000	False
LD32161378	3000.000	3000.000	False
LD32161399	3000.000	3000.000	False
LD32161402	3000.000	3000.000	False
LD32161405	3000.000	3000.000	False
LD32191333	3000.000	3000.000	False
LD32191336	3000.000	3000.000	False
LD32191339	3000.000	3000.000	False
LD32191342	3000.000	3000.000	False
LD32191345	3000.000	3000.000	False
LD32191348	3000.000	3000.000	False
LD32191351	3000.000	3000.000	False
LD32191354	3000.000	3000.000	False
LD32191357	3000.000	3000.000	False
LD32191360	3000.000	3000.000	False
LD32191363	3000.000	3000.000	False
LD32191366	3000.000	3000.000	False
LD32191369	3000.000	3000.000	False
LD32191372	3000.000	3000.000	False
LD32191375	3000.000	3000.000	False
LD32191378	3000.000	3000.000	False
LD32191399	3000.000	3000.000	False
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LD32191405	3000.000	3000.000	False
LD32221333	3000.000	3000.000	False
LD32221336	3000.000	3000.000	False
LD32221339	3000.000	3000.000	False
LD32221342	3000.000	3000.000	False
LD32221345	3000.000	3000.000	False
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LD32221351	3000.000	3000.000	False
LD32221354	3000.000	3000.000	False
LD32221357	3000.000	3000.000	False
LD32221360	3000.000	3000.000	False
LD32221363	3000.000	3000.000	False
LD32221366	3000.000	3000.000	False
LD32221369	3000.000	3000.000	False
LD32221372	3000.000	3000.000	False
LD32221375	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD32221378	3000.000	3000.000	False
LD32221396	3000.000	3000.000	False
LD32221399	3000.000	3000.000	False
LD32221402	3000.000	3000.000	False
LD32221405	3000.000	3000.000	False
LD32251333	3000.000	3000.000	False
LD32251336	3000.000	3000.000	False
LD32251339	3000.000	3000.000	False
LD32251342	3000.000	3000.000	False
LD32251345	3000.000	3000.000	False
LD32251348	3000.000	3000.000	False
LD32251351	3000.000	3000.000	False
LD32251354	3000.000	3000.000	False
LD32251357	3000.000	3000.000	False
LD32251360	3000.000	3000.000	False
LD32251363	3000.000	3000.000	False
LD32251366	3000.000	3000.000	False
LD32251369	3000.000	3000.000	False
LD32251372	3000.000	3000.000	False
LD32251375	3000.000	3000.000	False
LD32251378	3000.000	3000.000	False
LD32251393	3000.000	3000.000	False
LD32251396	3000.000	3000.000	False
LD32251399	3000.000	3000.000	False
LD32251402	3000.000	3000.000	False
LD32251405	3000.000	3000.000	False
LD32281333	3000.000	3000.000	False
LD32281336	3000.000	3000.000	False
LD32281339	3000.000	3000.000	False
LD32281342	3000.000	3000.000	False
LD32281345	3000.000	3000.000	False
LD32281348	3000.000	3000.000	False
LD32281351	3000.000	3000.000	False
LD32281354	3000.000	3000.000	False
LD32281357	3000.000	3000.000	False
LD32281360	3000.000	3000.000	False
LD32281363	3000.000	3000.000	False
LD32281366	3000.000	3000.000	False
LD32281369	3000.000	3000.000	False
LD32281372	3000.000	3000.000	False
LD32281375	3000.000	3000.000	False
LD32281378	3000.000	3000.000	False
LD32281393	3000.000	3000.000	False
LD32281396	3000.000	3000.000	False
LD32281399	3000.000	3000.000	False
LD32281402	3000.000	3000.000	False
LD32281405	3000.000	3000.000	False
LD32311333	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD32311336	3000.000	3000.000	False
LD32311339	3000.000	3000.000	False
LD32311342	3000.000	3000.000	False
LD32311345	3000.000	3000.000	False
LD32311348	3000.000	3000.000	False
LD32311351	3000.000	3000.000	False
LD32311354	3000.000	3000.000	False
LD32311357	3000.000	3000.000	False
LD32311360	3000.000	3000.000	False
LD32311363	3000.000	3000.000	False
LD32311366	3000.000	3000.000	False
LD32311369	3000.000	3000.000	False
LD32311372	3000.000	3000.000	False
LD32311375	3000.000	3000.000	False
LD32311378	3000.000	3000.000	False
LD32311393	3000.000	3000.000	False
LD32311396	3000.000	3000.000	False
LD32311399	3000.000	3000.000	False
LD32341333	3000.000	3000.000	False
LD32341336	3000.000	3000.000	False
LD32341339	3000.000	3000.000	False
LD32341342	3000.000	3000.000	False
LD32341345	3000.000	3000.000	False
LD32341348	3000.000	3000.000	False
LD32341351	3000.000	3000.000	False
LD32341354	3000.000	3000.000	False
LD32341357	3000.000	3000.000	False
LD32341360	3000.000	3000.000	False
LD32341363	3000.000	3000.000	False
LD32341366	3000.000	3000.000	False
LD32341369	3000.000	3000.000	False
LD32341372	3000.000	3000.000	False
LD32341375	3000.000	3000.000	False
LD32341378	3000.000	3000.000	False
LD32341390	3000.000	3000.000	False
LD32341393	3000.000	3000.000	False
LD32341396	3000.000	3000.000	False
LD32341399	3000.000	3000.000	False
LD32371333	3000.000	3000.000	False
LD32371336	3000.000	3000.000	False
LD32371339	3000.000	3000.000	False
LD32371342	3000.000	3000.000	False
LD32371345	3000.000	3000.000	False
LD32371348	3000.000	3000.000	False
LD32371351	3000.000	3000.000	False
LD32371354	3000.000	3000.000	False
LD32371357	3000.000	3000.000	False
LD32371360	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD32371363	3000.000	3000.000	False
LD32371366	3000.000	3000.000	False
LD32371369	3000.000	3000.000	False
LD32371372	3000.000	3000.000	False
LD32371375	3000.000	3000.000	False
LD32371378	3000.000	3000.000	False
LD32371387	3000.000	3000.000	False
LD32371390	3000.000	3000.000	False
LD32371393	3000.000	3000.000	False
LD32371396	3000.000	3000.000	False
LD32371399	3000.000	3000.000	False
LD32401333	3000.000	3000.000	False
LD32401336	3000.000	3000.000	False
LD32401339	3000.000	3000.000	False
LD32401342	3000.000	3000.000	False
LD32401345	3000.000	3000.000	False
LD32401348	3000.000	3000.000	False
LD32401351	3000.000	3000.000	False
LD32401354	3000.000	3000.000	False
LD32401357	3000.000	3000.000	False
LD32401360	3000.000	3000.000	False
LD32401363	3000.000	3000.000	False
LD32401366	3000.000	3000.000	False
LD32401369	3000.000	3000.000	False
LD32401372	3000.000	3000.000	False
LD32401375	3000.000	3000.000	False
LD32401378	3000.000	3000.000	False
LD32401387	3000.000	3000.000	False
LD32401390	3000.000	3000.000	False
LD32401393	3000.000	3000.000	False
LD32401396	3000.000	3000.000	False
LD32431333	3000.000	3000.000	False
LD32431336	3000.000	3000.000	False
LD32431339	3000.000	3000.000	False
LD32431342	3000.000	3000.000	False
LD32431345	3000.000	3000.000	False
LD32431348	3000.000	3000.000	False
LD32431351	3000.000	3000.000	False
LD32431354	3000.000	3000.000	False
LD32431357	3000.000	3000.000	False
LD32431387	3000.000	3000.000	False
LD32431390	3000.000	3000.000	False
LD32431393	3000.000	3000.000	False
LD32431396	3000.000	3000.000	False
LD32461387	3000.000	3000.000	False
LD32461390	3000.000	3000.000	False
LD32461393	3000.000	3000.000	False
LD32461396	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD32491390	3000.000	3000.000	False
LD32491393	3000.000	3000.000	False
LD32491396	3000.000	3000.000	False
LD32491399	3000.000	3000.000	False
LD32521393	3000.000	3000.000	False
LD32521396	3000.000	3000.000	False
LD35101333	3000.000	3000.000	False
LD35101336	3000.000	3000.000	False
LD35101339	3000.000	3000.000	False
LD35101342	3000.000	3000.000	False
LD35101345	3000.000	3000.000	False
LD35131324	3000.000	3000.000	False
LD35131327	3000.000	3000.000	False
LD35131330	3000.000	3000.000	False
LD35131333	3000.000	3000.000	False
LD35131336	3000.000	3000.000	False
LD35131339	3000.000	3000.000	False
LD35131342	3000.000	3000.000	False
LD35131345	3000.000	3000.000	False
LD35131348	3000.000	3000.000	False
LD35161321	3000.000	3000.000	False
LD35161324	3000.000	3000.000	False
LD35161327	3000.000	3000.000	False
LD35161330	3000.000	3000.000	False
LD35161333	3000.000	3000.000	False
LD35161336	3000.000	3000.000	False
LD35161339	3000.000	3000.000	False
LD35161342	3000.000	3000.000	False
LD35161345	3000.000	3000.000	False
LD35161348	3000.000	3000.000	False
LD35161351	3000.000	3000.000	False
LD35191324	3000.000	3000.000	False
LD35191327	3000.000	3000.000	False
LD35191330	3000.000	3000.000	False
LD35191333	3000.000	3000.000	False
LD35191336	3000.000	3000.000	False
LD35191339	3000.000	3000.000	False
LD35191342	3000.000	3000.000	False
LD35191345	3000.000	3000.000	False
LD35191348	3000.000	3000.000	False
LD35191351	3000.000	3000.000	False
LD35191354	3000.000	3000.000	False
LD35221324	3000.000	3000.000	False
LD35221327	3000.000	3000.000	False
LD35221330	3000.000	3000.000	False
LD35221333	3000.000	3000.000	False
LD35221336	3000.000	3000.000	False
LD35221339	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD35221342	3000.000	3000.000	False
LD35221345	3000.000	3000.000	False
LD35221348	3000.000	3000.000	False
LD35221351	3000.000	3000.000	False
LD35221354	3000.000	3000.000	False
LD35221357	3000.000	3000.000	False
LD35251324	3000.000	3000.000	False
LD35251327	3000.000	3000.000	False
LD35251330	3000.000	3000.000	False
LD35251333	3000.000	3000.000	False
LD35251336	3000.000	3000.000	False
LD35251339	3000.000	3000.000	False
LD35251342	3000.000	3000.000	False
LD35251345	3000.000	3000.000	False
LD35251348	3000.000	3000.000	False
LD35251351	3000.000	3000.000	False
LD35251354	3000.000	3000.000	False
LD35251357	3000.000	3000.000	False
LD35281324	3000.000	3000.000	False
LD35281327	3000.000	3000.000	False
LD35281330	3000.000	3000.000	False
LD35281333	3000.000	3000.000	False
LD35281336	3000.000	3000.000	False
LD35281339	3000.000	3000.000	False
LD35281342	3000.000	3000.000	False
LD35281345	3000.000	3000.000	False
LD35281348	3000.000	3000.000	False
LD35281351	3000.000	3000.000	False
LD35281354	3000.000	3000.000	False
LD35281357	3000.000	3000.000	False
LD35281360	3000.000	3000.000	False
LD35311324	3000.000	3000.000	False
LD35311327	3000.000	3000.000	False
LD35311339	3000.000	3000.000	False
LD35311342	3000.000	3000.000	False
LD35311345	3000.000	3000.000	False
LD35311348	3000.000	3000.000	False
LD35311351	3000.000	3000.000	False
LD35311354	3000.000	3000.000	False
LD35311357	3000.000	3000.000	False
LD35311360	3000.000	3000.000	False
LD35311363	3000.000	3000.000	False
LD35341342	3000.000	3000.000	False
LD35341345	3000.000	3000.000	False
LD35341348	3000.000	3000.000	False
LD35341351	3000.000	3000.000	False
LD35341354	3000.000	3000.000	False
LD35341357	3000.000	3000.000	False

DPH-17 Report on Tiles - continued

<u>Tile</u>	<u>Width</u>	<u>Height</u>	<u>Overlap</u>
LD35341360	3000.000	3000.000	False
LD35341363	3000.000	3000.000	False
LD35341366	3000.000	3000.000	False
LD35371345	3000.000	3000.000	False
LD35371348	3000.000	3000.000	False
LD35371351	3000.000	3000.000	False
LD35371354	3000.000	3000.000	False
LD35371357	3000.000	3000.000	False
LD35371360	3000.000	3000.000	False
LD35371363	3000.000	3000.000	False
LD35371366	3000.000	3000.000	False
LD35401348	3000.000	3000.000	False
LD35401351	3000.000	3000.000	False
LD35401354	3000.000	3000.000	False
LD35401357	3000.000	3000.000	False
LD35401360	3000.000	3000.000	False
LD35401363	3000.000	3000.000	False
LD35401366	3000.000	3000.000	False
LD35431351	3000.000	3000.000	False
LD35431354	3000.000	3000.000	False
LD35431357	3000.000	3000.000	False
LD35431360	3000.000	3000.000	False
LD35431363	3000.000	3000.000	False
LD35431366	3000.000	3000.000	False
LD35461354	3000.000	3000.000	False
LD35461357	3000.000	3000.000	False
LD35461360	3000.000	3000.000	False
LD35461363	3000.000	3000.000	False
LD35461366	3000.000	3000.000	False
LD35491354	3000.000	3000.000	False
LD35491357	3000.000	3000.000	False
LD35491360	3000.000	3000.000	False
LD35491363	3000.000	3000.000	False
LD35491366	3000.000	3000.000	False
LD35521357	3000.000	3000.000	False
LD35521360	3000.000	3000.000	False
LD35521363	3000.000	3000.000	False