

## C-3 Report on Intensity Values

The USGS Lidar Base Specification Version 2.1 states: "Intensity values are required for each multiple discrete return. The intensity values recorded in the LAS files shall be normalized to 16 bit, as required by the LAS Specification version 1.4-R13 (ASPRS, 2011). Intensity normalization should be strictly linear. Common image stretches (minimum-maximum, standard deviations, percent clip, histogram, and so forth) are expressly forbidden."

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

[Data Source - Y:\Mapping\Projects\65220595\\_CO\\_SanLuisJuanMiguel\Production\Final\\_Client\\_Deliverables\Block1\\_Surveys\point\\_cloud\Swaths](#)

File	Minimum	Maximum	Mean	Median	Mode
00014.las	80	65,520	9,350	8,368	2,624
00015.las	640	34,176	10,584	9,808	2,608
00018.las	112	65,520	13,106	14,320	16,240
00021.las	608	65,520	19,209	18,960	18,400
00022.las	400	65,520	18,459	18,496	18,832
00024.las	304	65,520	17,961	17,936	16,080
00031.las	880	65,520	14,958	15,168	16,080
00032.las	208	65,520	18,160	18,384	18,656
00041.las	224	65,520	19,282	19,456	19,376
00043.las	496	65,520	8,578	6,880	2,624
00049.las	112	65,520	19,685	19,792	19,232
00051.las	352	65,520	16,530	17,056	17,152
00064.las	752	65,520	19,457	19,184	19,392
00065.las	512	65,520	14,618	14,720	15,392
00072.las	224	65,520	7,690	5,424	2,608
00075.las	112	65,520	15,473	15,536	16,624
00082.las	432	65,520	7,923	5,680	2,656
00099.las	672	65,520	17,111	17,008	16,144
00101.las	384	65,520	14,550	14,944	15,472
00107.las	1,168	65,520	15,847	15,856	16,992
00110.las	112	65,520	19,531	19,376	19,472
00113.las	208	65,520	8,555	6,576	2,592
00114.las	1,120	65,520	17,270	16,848	16,048
00117.las	208	65,520	16,589	15,760	14,128
00120.las	624	65,520	15,916	16,688	17,248

### *C-3 Report on Intensity Values - continued*

File	Minimum	Maximum	Mean	Median	Mode
00124.las	96	65,520	19,991	20,144	19,360
00125.las	208	65,520	8,375	5,968	2,608
00144.las	304	65,520	17,612	17,536	16,640
00146.las	112	65,520	13,987	14,144	14,720
00151.las	96	65,520	19,574	19,664	18,864
00156.las	96	65,520	9,683	9,296	2,672
00158.las	848	65,520	13,982	14,320	14,944
00161.las	48	65,520	8,726	7,408	2,624
00164.las	896	65,520	13,770	14,176	14,736
00166.las	96	65,520	19,849	20,000	19,952
00169.las	96	65,520	19,439	19,472	18,672
00171.las	496	65,520	18,996	19,072	19,392
00172.las	1,104	65,520	19,467	19,216	19,360
00173.las	880	65,520	18,912	18,880	18,384
00177.las	400	65,520	19,100	19,104	16,496
00179.las	960	65,520	17,084	16,336	15,472
00185.las	1,536	65,520	19,540	19,248	18,880
00186.las	96	65,520	11,425	12,096	15,856
00187.las	128	65,520	16,963	17,088	17,184
00188.las	1,408	65,520	19,243	19,168	19,424
00189.las	304	65,520	15,487	15,360	16,064
00192.las	432	42,944	9,300	7,808	2,576
00196.las	208	65,520	19,408	19,072	18,896
00198.las	432	65,520	10,392	9,680	2,624
00203.las	64	39,968	8,916	6,928	2,608
00210.las	112	65,520	19,398	19,440	19,168
00216.las	912	65,520	17,378	17,008	16,144
00219.las	432	65,520	7,947	5,776	2,688
00225.las	208	65,520	17,841	17,264	15,664
00229.las	528	65,520	13,998	14,448	15,744
00233.las	592	65,520	15,419	15,680	16,464
00235.las	480	65,520	17,011	16,416	16,112
00238.las	304	65,520	17,632	17,280	16,736
Overall Statistics	48	65,520	14,930	15,856	16,736

## C-3 Report on Intensity Values - continued

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

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