

## C-3 Report on Intensity Values

The USGS Lidar Base Specification Version 1.3 states: "Intensity values are required for each multiple discrete return. The values recorded in the LAS files shall be normalized to 16 bit, as required by the LAS Specification version 1.4-R13 (ASPRS, 2011). It warrants re-emphasis that intensity normalization is 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\65220171\\_USGS-TX\\_West\\_Texas\Production\Final\\_Client\\_Deliverables\Lot6\\_utm13\point\\_cloud\Swaths](#)

File	Minimum	Maximum	Mean	Median	Mode
01002.las	48	65,520	5,427	5,408	5,184
01003.las	48	65,520	5,392	5,376	5,264
01004.las	48	65,520	5,641	5,536	5,200
02053.las	352	65,520	5,111	4,976	4,736
02061.las	64	65,520	5,805	5,728	5,408
02076.las	384	65,520	6,281	6,352	6,464
02085.las	368	65,520	5,573	5,616	5,840
02091.las	336	65,520	5,554	5,616	6,240
02094.las	368	12,688	5,364	5,376	5,376
02100.las	112	65,520	5,135	5,072	4,944
02109.las	304	65,520	5,774	5,808	6,016
02127.las	240	16,768	3,749	3,904	4,432
02131.las	112	65,520	5,078	5,136	4,944
02135.las	336	65,520	6,175	6,304	6,560
02144.las	336	65,520	5,551	5,584	5,776
02148.las	384	65,520	5,608	5,696	5,904
02150.las	352	65,520	5,316	5,312	4,912
02153.las	416	61,040	4,999	5,040	4,976
02161.las	336	65,520	5,273	5,184	5,184
02165.las	48	65,520	6,168	6,144	5,792
02192.las	96	65,520	6,689	6,720	6,864
02195.las	240	16,960	3,976	4,096	4,368
02199.las	160	65,520	5,114	5,072	4,752
02201.las	256	65,520	5,674	5,584	5,424
02204.las	320	65,520	6,096	6,256	6,672

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

File	Minimum	Maximum	Mean	Median	Mode
02212.las	384	65,520	5,584	5,680	6,288
02213.las	288	65,520	5,584	5,680	6,144
02222.las	400	12,688	4,647	4,720	4,896
02231.las	160	65,520	5,236	5,136	5,024
02237.las	48	65,520	6,187	6,176	6,080
02263.las	160	65,520	6,633	6,624	6,576
02270.las	96	65,520	5,313	5,328	4,976
02275.las	352	65,520	6,324	6,432	6,656
02294.las	416	26,256	4,276	4,352	4,368
02303.las	224	65,520	5,178	5,024	4,784
02330.las	272	65,520	6,437	6,480	6,592
02337.las	144	65,520	5,533	5,600	5,456
02339.las	320	65,520	5,932	5,856	5,888
02352.las	112	65,520	5,614	5,664	5,824
02367.las	368	65,520	4,862	4,832	4,656
02393.las	224	65,520	6,160	6,240	6,256
02399.las	256	65,520	5,675	5,728	5,552
02401.las	336	65,520	5,955	5,824	5,600
02411.las	416	65,520	5,731	5,760	5,792
02427.las	48	65,520	5,121	5,040	4,656
02440.las	160	65,520	5,507	5,456	5,328
02451.las	192	65,520	5,663	5,680	5,408
02457.las	304	65,520	5,755	5,808	5,840
02459.las	160	65,520	6,116	5,952	5,776
02469.las	112	65,520	5,912	5,920	6,016
02485.las	64	65,520	5,332	5,280	5,200
02509.las	256	65,520	5,502	5,520	5,328
02514.las	368	65,520	5,806	5,824	5,920
02516.las	368	65,520	6,242	6,160	6,080
02525.las	112	65,520	6,044	6,064	6,160
02565.las	208	65,520	5,451	5,456	4,944
02570.las	288	65,520	5,751	5,760	5,920
02572.las	272	65,520	6,429	6,384	6,304

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

File	Minimum	Maximum	Mean	Median	Mode
02616.las	128	65,520	5,690	5,824	5,904
02621.las	304	65,520	5,691	5,680	5,776
02623.las	336	65,520	6,633	6,624	6,592
02664.las	80	65,520	5,786	5,984	6,144
02669.las	304	65,520	5,647	5,600	5,392
02671.las	336	65,520	6,784	6,816	6,864
02690.las	48	65,520	5,884	5,872	5,760
02711.las	112	65,520	5,862	6,032	6,144
02716.las	336	65,520	5,707	5,680	5,392
02717.las	320	65,520	6,975	6,992	6,880
02725.las	64	65,520	6,164	6,208	6,368
02756.las	96	65,520	5,728	5,760	5,552
02762.las	320	57,136	7,124	7,120	7,136
02770.las	336	65,520	6,193	6,336	6,720
02804.las	320	65,520	7,330	7,296	7,200
02812.las	64	65,520	6,024	6,160	6,432
02851.las	384	65,520	6,088	6,208	6,560
02886.las	128	65,520	6,238	6,320	6,496
03031.las	496	16,832	6,474	6,608	6,736
Overall Statistics	48	65,520	5,869	5,888	5,792

## 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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