

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\6522048201_ISGS_Wabash_and_Embarras\Production\Final_Client_Deliverables\Swath](#)

File	Minimum	Maximum	Mean	Median	Mode
00108.las	16	65,520	3,274	3,136	2,640
00110.las	16	65,520	2,430	2,624	448
00111.las	16	65,520	3,898	4,112	4,160
00112.las	16	65,520	4,152	4,304	4,432
00113.las	16	65,520	4,161	4,256	4,432
00114.las	16	65,520	3,997	4,176	4,240
00115.las	16	65,520	4,161	4,320	4,432
00116.las	16	65,520	4,247	4,400	4,528
00117.las	16	65,520	4,256	4,448	4,496
00118.las	16	65,520	4,299	4,480	4,544
00119.las	16	65,520	4,335	4,544	4,640
00120.las	16	65,520	4,301	4,528	4,640
00121.las	16	65,520	4,112	4,480	4,656
00122.las	16	65,520	3,996	4,464	448
00123.las	16	65,520	4,062	4,448	4,640
00125.las	16	65,520	4,110	4,432	4,528
00126.las	16	65,520	4,231	4,464	4,528
00127.las	16	65,520	4,247	4,528	4,640
00128.las	16	65,520	4,129	4,432	4,608
00129.las	16	65,520	2,890	2,768	2,352
00130.las	128	65,520	3,379	3,360	3,008
00132.las	16	65,520	3,118	3,040	2,736
00133.las	16	65,520	3,214	3,136	2,752
00134.las	16	65,520	3,296	3,280	3,072
00135.las	16	65,520	3,457	3,600	3,616

C-3 Report on Intensity Values - continued

File	Minimum	Maximum	Mean	Median	Mode
00136.las	16	65,520	3,635	3,824	4,048
00137.las	16	65,520	3,532	3,744	448
00138.las	16	65,520	3,659	3,904	4,144
00139.las	16	65,520	3,621	3,904	448
00140.las	16	65,520	3,545	3,888	448
00141.las	16	65,520	3,435	3,760	448
00142.las	16	65,520	3,508	3,856	448
00143.las	16	65,520	3,480	3,856	448
00144.las	16	65,520	3,976	4,048	4,048
00146.las	16	65,520	3,454	3,776	4,032
00147.las	16	65,520	3,204	3,776	448
00148.las	16	65,520	3,682	4,112	448
00149.las	16	65,520	3,759	4,240	448
00150.las	16	65,520	3,805	4,368	448
00151.las	16	65,520	3,820	4,384	448
00152.las	16	65,520	3,910	4,512	448
00153.las	16	65,520	3,988	4,592	448
00154.las	16	65,520	4,162	4,640	5,040
00155.las	16	65,520	4,238	4,656	5,056
00156.las	16	65,520	4,338	4,704	5,056
00158.las	16	65,520	4,181	4,512	4,912
00159.las	16	65,520	4,406	4,672	5,008
00160.las	16	65,520	4,484	4,800	5,168
00161.las	16	65,520	4,390	4,784	5,120
00162.las	16	65,520	4,371	4,784	5,120
00163.las	16	65,520	4,256	4,688	5,184
00165.las	32	65,520	3,846	4,240	4,976
00166.las	16	65,520	3,967	4,464	448
00167.las	16	65,520	4,178	4,672	5,328
00168.las	16	65,520	4,197	4,688	448
00169.las	16	65,520	4,194	4,672	448
00170.las	16	65,520	4,305	4,784	5,424
00171.las	16	65,520	4,532	5,008	5,584

C-3 Report on Intensity Values - continued

File	Minimum	Maximum	Mean	Median	Mode
00172.las	16	65,520	4,677	5,120	5,584
00173.las	32	61,984	3,652	4,032	4,624
00174.las	16	65,520	2,893	3,008	464
00175.las	16	65,520	2,836	2,976	448
00176.las	16	65,520	2,959	3,248	448
00177.las	16	65,520	2,967	3,296	448
00178.las	16	65,520	2,774	3,024	448
00179.las	16	65,520	2,806	3,040	448
00180.las	16	65,520	3,079	3,456	448
00181.las	16	65,520	2,987	3,344	448
00182.las	16	65,520	3,122	3,616	448
00183.las	16	65,520	3,163	3,632	448
00184.las	16	65,520	3,070	3,488	448
00185.las	16	65,520	2,339	2,464	448
00187.las	16	65,520	2,566	2,704	448
00188.las	16	65,520	2,704	2,832	448
00189.las	16	65,520	2,715	2,800	448
00190.las	16	65,520	2,610	2,656	448
00191.las	16	65,520	2,486	2,528	448
00192.las	16	65,520	2,448	2,464	448
00193.las	16	65,520	2,521	2,544	448
00194.las	16	65,520	2,630	2,688	464
00195.las	16	65,520	2,530	2,544	464
00196.las	16	65,520	2,767	2,560	2,256
00197.las	16	65,520	2,567	2,608	448
00198.las	16	65,520	2,683	2,784	448
00199.las	16	65,520	2,718	2,784	528
00200.las	16	65,520	2,764	2,848	448
00201.las	16	65,520	2,850	2,912	3,040
00202.las	16	65,520	2,941	2,944	3,008
Overall Statistics	16	65,520	3,514	3,824	448

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.

[Data Source - Y:\Mapping\Projects\6522048201_ISGS_Wabash_and_Embaras\Production\Final_Client_Deliverables\Swath](#)

