C-2 Report on Multiple Discrete Returns

The USGS Lidar Base Specification Version 1.3 states: "Deriving and delivering multiple discrete returns is required in all conventional lidar data collection efforts. Data collection shall be capable of at least three returns per pulse. Full waveform collection is acceptable and is 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 data. Empty return columns can indicate a collection or processing problem dealing with lidar return attribute information.

<u>File</u>	First return	Second return	Third return	Other returns	Total points
Total	33,083,005,922	411,294,236	30,739,657	3,098,633 33,	528,138,448