Make sure that the format you use is supported by your third party tools. For example, TerraScan supports any projection format and the geographic format. TerraScan also supports an echo feature where you can hide/show any given return (Figure 7-33, Figure 7-34).

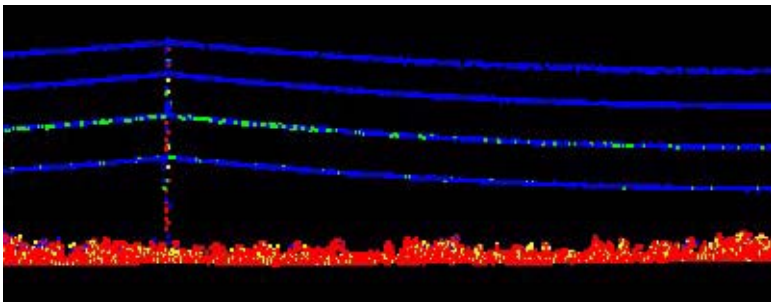

Figure 7-33: Profile View of All Returns

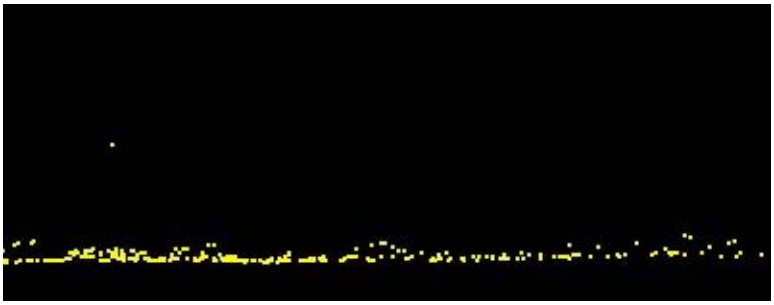

Figure 7-34: Profile View of Third and Last Return Only

For more information, refer to the LAS Specification document at the end of the manual.

7.5.14 Comprehensive Format

By selecting this computing mode, you will get a file in the selected folder with a .CMP extension. The name will be assigned automatically by REALM. The format is described below. It requires a great deal of disk space: for example, over 9 MB/sec for a 50-kHz ALTM system.

***Note**:*

- All positions (Laser Point and Aircraft) use the UTM projection, and the zone is not appended to the easting
- All angles are in radians
- Scanner angles and ranges are calibrated
- The aircraft position depends on the trajectory source. If you import an SBET, the aircraft position is actually the sensor position. If you import a GPS trajectory or use REALM GPS, then the aircraft position is actually the GPS antenna position.

Header: 718 Bytes

Description	Type	Size
Record Type	int16	2 bytes
Number of Record	int32	4 bytes
GPS Week Number	int16	2 bytes
Min Time	double	8 bytes
Max Time	double	8 bytes
UtmZone	int16	2 bytes
Min LP	3 x double	24 bytes
Max LP	3 x double	24 bytes
Number of Strips	int16	2 bytes
List of Strip Numbers	256 x int16	512 bytes
Filling Space	130 x char	130 bytes

Record: 207 Bytes

Description	Type	Size
GPS Time	double	8 bytes
Pulse Count	int8	1 byte
Last Pulse - ENH	3 x double	24 bytes
Third Pulse - ENH	3 x double	24 bytes
Second Pulse - ENH	3 x double	24 bytes
First Pulse - ENH	3 x double	24 bytes

Last pulse intensity	int16	2 bytes
Third pulse intensity	int16	2 bytes
Second pulse intensity	int16	2 bytes
First pulse intensity	int16	2 bytes
Last Pulse calibrated range	double	8 bytes
Third Pulse calibrated range	double	8 bytes
Second Pulse calibrated range	double	8 bytes
First Pulse calibrated range	double	8 bytes
Calibrated angle in radians	double	8 bytes
Roll in radians	double	8 bytes
Pitch in radians	double	8 bytes
Heading in radians	double	8 bytes
Aircraft position - ENH	3 x double	24 bytes
Strip number	int16	2 bytes
Digitizer synchronization bit	int8	1 byte
Reserved	--	3 bytes