What equipment is used for collection?

North West Geomatics uses Leica sensors and Cessna aircraft for acquisition. The Leica LiDAR sensor is the ALS50, with a pulse rate of 37,000hz and scan rate of 30hz. The Cessna 406 flies at an altitude of 6,000 ft during acquisition missions.

Airborne Imaging uses Optech sensors and Piper Navajo aircraft. The Optech 3100 LiDAR sensor has 100kHz capability, but for most terrain in Alberta and NE BC, Airborne uses 50-70,000hz and a scan rate of 35Hz. The Piper Navajo is a twin engine plane and acquires data at approximately 160knots and 4,000 ft above ground during missions.

What software is used to process the data?

Data is edited and processed using commercial and proprietary software:
- Terrascan for filtering the point clouds
- TerraModeller and proprietary software for product creation

What is the resolution?

LiDAR data are available at 2-meter postings. Acquisition point density is approximately 1.14 meters.

What is the degree of accuracy (horizontal & vertical)?

Vertical:	30cm
Horizontal:	50cm

How are the data referenced?

All data are referenced to the Canadian Base Network and vertical data are reduced using the HT v2 geoid model.

What projections are supported?

Currently, all LiDAR data are on the NAD83 datum and projected to UTM.

Where do you have coverage?

Valtus is actively aggregating content for all of Alberta, and areas in northeast and east British Columbia, and western Saskatchewan. Detailed coverage maps are available at:
http://www.valtus.com/products/coverage-maps-and-shapefiles/

If you don't have the area I want, how can I get it?

Valtus works with several LiDAR and imagery acquisition companies. Although our core business is in the distribution of an off-the-shelf database, we do manage project-specific acquisitions throughout North America. If you are looking for data not available through the Spatial Data Store today, please call Valtus at (403) 295-0694.

Are both bare earth and full feature data available? Do I get both when I purchase the area?

Yes, both types are available and you can choose to order one or the other or both. To order both Full Earth and Bare Earth of the same tile, simply select "both" from the Surface Type drop down menu.

Can I purchase the raw data?

At this time, Valtus does not offer the .LAS data and at this time, we do not have an anticipated date as to when we might do so.

What delivery formats are available?

ASCII XYZ, ESRI Arc Binary, Surfer, Binary and ER Mapper. We also offer the option to order a completed hillshade of your area, which are available in jpeg, tiff and geotiff formats.

How many different delivery formats can I request in one order?

There is a 500 tile limit on the number of tiles per order. Ordering delivery formats is on a tile by tile basis and there is no limit as to the number of different delivery formats per order. To receive one tile in multiple formats, you would simply "ctrl" and click the desired formats. For orders being placed by uploading a shapefile, you can also request multiple output formats for your order by simply pressing and holding the Ctrl key while selecting the desired formats.

What is the price? What are the minimum order and tile sizes?

LiDAR can be purchased by uploading a shapefile of your Area of Interest using the 'Search by Shapefile' option in the Valtus Store. This allows you to "clip" the data to your specific area. The minimum order when ordering by shapefile is 1 square kilometer or $440.

Volume pricing discounts do apply; please refer to the pricing matrix below.

Total Order Size (sq kms)	Price (sq km)
4-100	$440
104-260	$340
264 - 500	$280
504-1,000	$225
1,004-2,500	$200
2,504-5,000	$170
5,004–10,000	$130
10,004-25,000	$90
25,004+	$60

For quotes on larger (bulk) orders or "off-line" orders, please contact Valtus at (403) 295-0694.