

## Aerial LiDAR 2015

*published by City of Montreal*

“This dataset is a 3D topographic representation of the territory in the form of a cloud of points.

LiDAR (Light Detection and Ranging) technology makes it possible to topographically represent the earth's surface in three dimensions using a laser system mounted on board an aircraft. The very large number of 3D points raised (up to 400,000 per second) makes it possible to obtain a multitude of details at ground level and surface elements.

LiDAR technology quickly, easily and most importantly accurately provides elevation of ground detail and above ground features, even in the presence of dense vegetation.

The uses are: creation of a digital terrain model (DTM), creation of contour lines, volume calculation, planning, tree height calculation, mapping of building roofs, 3D modeling of cities, etc.”

Source: XEOS Imaging Inc.

### Methodology

Source :

- Airborne LiDAR (XEOS)

Treatment :

- Flight line calibration (XEOS)
- Classification, classes 1@8 (XEOS)

(Classification Value: Meaning)

- 1: Not assigned
- 2: Ground
- 3: Low vegetation
- 4: Average vegetation
- 5: Tall vegetation
- 6: Building
- 7: Low point
- 8: Reserved City Broadcast



- Data: point clouds
- Update: November 24 to December 8, 2015
- Formats: LAZ
- Cutting: tile

#### **DATA QUALIFICATION :**

- Planimetric georeference NAD83 SCRS (98)
- Altimetric georeference CGVD28 (NMM)
- Accuracy of modeled elements
  - planimetry:  $\pm 20$  cm
  - altimetry:  $\pm 20$  cm

#### **Additional information**

Publisher

- Geomatics Division

Temporal coverage

- 2015-11-24/2015-12-08