

Mining Work Monitoring Project using Pleiades Images of CNRL horizon, Canada

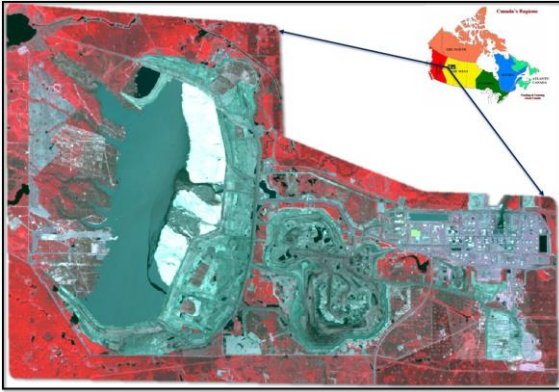


Fig.1 CNRL horizon Mine

Business Need:

In mining industry accurate monitoring of mines, is imperative in relation to productivity, safety, and legal compliance. The terrestrial photogrammetry techniques can illustrate 3D representation of terrain to provide the real status of mines in precise and periodic manner.

The business requirement was to make digital terrain models on monthly basis (from June-2015 to November-2015) to monitor the mining area.

Inputs Used:

- High resolution Stereo Pair Satellite Images (monthly basis):
 - June-2015
 - July-2015
 - August-2015
 - September-2015
 - October-2015
 - November-2015
- Ground Control Points

Business Solution:

The provided Stereo Pair Satellite Images were used to create the DTM of the area. The solutions can be pointed out as:

- Aerial Triangulation
- Break line & Mass Point
- Creation of DTM
- Creation of Otho-Rectified Image

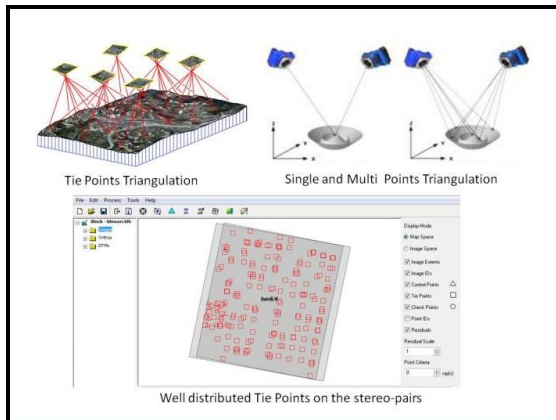


Fig2. Aerial Triangulation Process

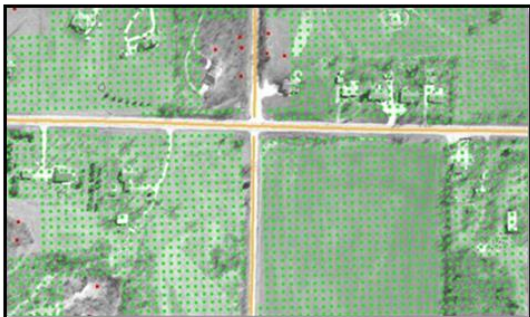
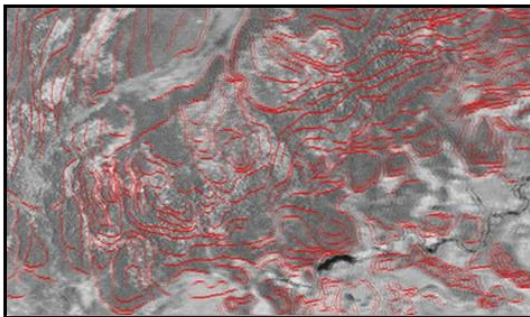
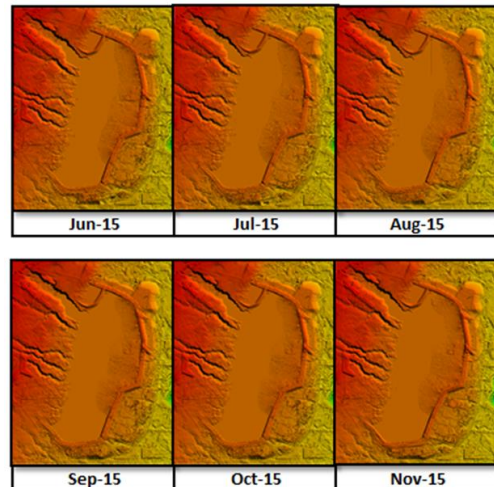


Fig3. Break lines and Height Grid



Project Shipment:

The following shipments were made-

- i) Digital Terrain Model
- ii) Otho-Rectified Image

