

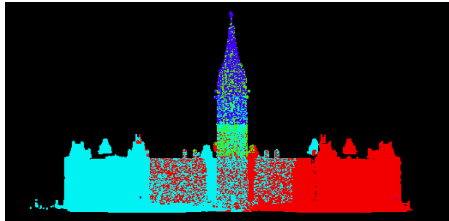
# Quick Terrain Modeler™

## Application Notes: Optech ILRIS Scan Processing Workflow

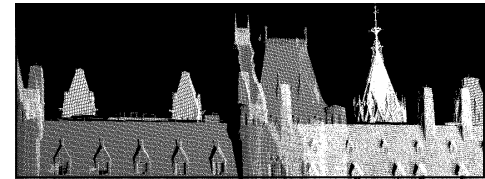
### Overview:

Quick Terrain Modeler is a powerful, simple software tool that streamlines the processing of Optech ILRIS scanner data. Quick Terrain Modeler's utility in the ILRIS process flow consists of the basic steps shown below. In addition, Quick Terrain Modeler enables users to visualize ILRIS-generated point clouds up to 100 million points without thinning or decimation.

Step 1: The first step in the process is to scan with the Optech ILRIS 3D, with or without the 36D automatic pan/tilt base. Users must parse the surveys with Optech's Parser software and generate an IXF file. Individual scans are in individual scan coordinates.



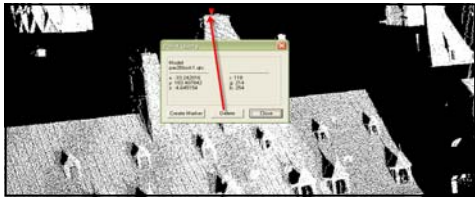
Scan/Parse



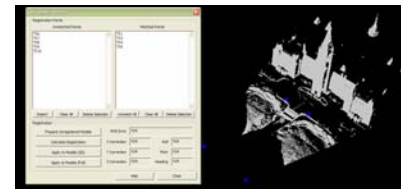
Align

Step 2: Import the IXF file into Quick Terrain Modeler. Use manual scan alignment to align scans from different positions, or use automatic scan alignment (no anchors or manual intervention) to align 36D scans. Export to QTC Point Cloud. Aligned scans are in project coordinates.

Step 3: Georegister models in one of two ways. The first method is to correlate a text file of georegistration points to known targets. The second method is to correlate a text file of georegistration points to the ILRIS scanner origins. Georegistered models will be in an absolute coordinate system.



Georegister

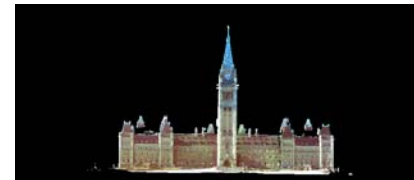


Edit/Clean

Step 4: Use Quick Terrain Modeler's editing functions to clean scans by removing unwanted points in groups or individually.

Step 5: If desired, merge the aligned, edited, and georegistered scans into a single point cloud model. This model can be analyzed in Quick Terrain Modeler, added to airborne data, and/or distributed with the free Quick Terrain Reader.

Merge



Export

Step 6: Export data to other applications (e.g., Menci ZMap) for additional processing, rectification, vectorization, volumetric analysis, etc. Quick Terrain Modeler has a variety of flexible export formats including ASCII, binary, multipoint shape file, and others.

### Quick Terrain Modeler Requirements

Windows Operating System  
512MB RAM  
Graphics Card with OpenGL  
No underlying CAD or GIS required

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