UNAVCO Summary of Optech ILRIS-3D

801 Greg Koltz February 20, 2014 Optech 809

Retired October, 2012. No longer owned by UNAVCO

The ILRIS is a long range scanner (up to ~1500 m) and was UNAVCO's first TLS instrument, acquired in 2008. We specially outfitted this scanner for cold weather deployment and it was a tried and true instrument for polar applications. It was deployed in non polar environments as well.

Back to TLS Comparison Table	TLS System	Min. Range	Max. Range	Repeatability	Power Draw
	Optech ILRIS-3D	3 m	1,500 m	7 mm	75 W

Optech Resources

Technical Specs and Manual

- Optech ILRIS website
- ILRIS-3D Technical Specs (pdf) - Technical specifications for the ILRIS-3D.
- ILRIS-3D Operation Manual (pdf) - Covers topics such as basic set-up, operation and maintenance of the Optech ILRIS 3D Terrestrial Laser Scanner LiDAR system.

Software Manuals

PolyWorks

- InnovMetric PolyWorks V10 Beginner's Guide (pdf) - Contains the InnovMetric PolyWorks V10 Beginner's Guide.
- TLS Manual - PolyWorks IMAlign v10 (pdf) - Shows the procedure to follow to align multiple scans into one point cloud.
- TLS Manual - PolyWorks Error Map (pdf) - By following these guidelines useres can create

comparison maps or images to show differences in attributes within one scan (such as elevation differences).

Geo-referencing

- TLS Manual - Geo-referencing in IMINSPECT (pdf) - Instructions for geo-referencing in IMINSPECT.
- TLS Manual - Geo-referencing in PolyWorks IMAlign v9 (pdf) - Instructions for geo-referencing in IMAlign.

Matchview

- Matchview User Manual (pdf) - Explains to users how to align range data with a color digital camera image.

Calculating Pit Volume

- Calculating Pit Volume (pdf) - This document provides an example of how to calculate changes in volume by creating a mesh of the object or area in question.

Software and Calibrations

Software

- controller.exe
- controllerce.exe
- parser.zip

Calibrations

- Optech ILRIS-3D Offset, Geo-referencing, and Calibration Information

Online URL: https://kb.unavco.org/article/unavco-summary-of-optech-ilris-3d-801.html