1. Field Set Up

2. Scanner Set Up

3. RiScan Pro – Pre-Scan Set Up

4. Scan Position Set Up

5. Collecting Data

6. Finding and Fine-Scanning Tie Points

7. Shutting Down and Moving Scanner

8. Scan Registration

9. High Resolution-Area of Interest Scan

10. Tie Point Convergence Inspection (trouble shooting)

11. General Trouble Shooting in the Field
This manual was developed by UNAVCO staff to document our best-practices for Riegl terrestrial laser scanner field operation, data collection, and initial data processing. This document is for a tie-point based workflow, using the Riegli VZ400 (but should also be largely applicable to the Z620 and VZ1000 scanners as well).

This document should be detailed enough to guide a user through the standard data collection workflow, and we recommend it as a resource for UNAVCO community members working with UNAVCO Riegl scanners.

*Riegl TLS Field Operation Manual and Workflow* (PDF)

Sections:

1. Field Set Up

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12. End of the Day Wrap-Up

13. Appendix A: GPS

14. Appendix B: Schematic for Battery Connection in Series
15. Appendix C: Visualizing Merged Scans

16. Appendix D: Georeferencing Point Clouds

17. Appendix E: Colorizing and Aligning Scans with Digital Photos