GSA 2013: Introduction to Terrestrial Laser Scanning (Ground-Based LiDAR) for Earth Science Research

789  Chris Crosby  November 5, 2013  Short Courses  585

This one-day short course will provide earth science faculty, students and professionals with an introduction to the principles of Terrestrial Laser Scanning (TLS - a.k.a., ground-based lidar). TLS enables the capture of very high-resolution three-dimensional images of geologic features, and has emerged as a powerful tool for applications ranging from outcrop mapping to documentation and analysis of active earth surface processes. The course will focus on TLS technology, data collection, processing and analysis workflows, and examples of science applications. The course will consist of a combination of lectures and hands-on demonstrations of TLS equipment and data processing procedures and workflows.

Presentations:
- Course welcome, lidar & TLS introduction, science applications (Crosby)
- TLS Parameters, Workflows and Field Methods (Okal)
- TLS data products and analysis (Crosby)
- UNAVCO TLS support resources, community lidar resources, future directions (Crosby)

Online URL: