

# GSA 2014: Introduction to Terrestrial Laser Scanning for Earth Science Research and Education

809 Chris Crosby October 18, 2014 [Short Courses](#) 1409

## Course Description

This one-day course will provide faculty, students, and professionals with an introduction to Terrestrial Laser Scanning (TLS—aka ground-based LiDAR). TLS provides high-resolution three-dimensional images of geologic features, and has emerged as a powerful tool for applications ranging from outcrop mapping to analysis of earth surface processes. The course will focus on TLS technology, data collection, processing and analysis, and examples of science applications. A combination of lectures and hands-on demonstrations of TLS equipment and data processing will be used. Introduction to Terrestrial Laser Scanning (Ground-Based LiDAR) for Earth Science Research

When: Sat., 18 Oct., 8 a.m.–5 p.m.

Where: Harbour Centre Policy Room 1600

Cost: US\$41. Includes lunch.

Instructors: Christopher Crosby, UNAVCO; Marianne Okal, UNAVCO; Carlos Aiken, Univ. of Texas at Dallas  
Cosponsor: UNAVCO

## *Geological Society of America Annual Meeting Short Course, Vancouver, BC*

### **Introduction to Terrestrial Laser Scanning for Earth Science Research and Education**

Sat., 18 Oct. 2014, 8 a.m.–5 p.m.

Harbour Centre Policy Room 1600

*Instructors:* Christopher Crosby, UNAVCO; Marianne Okal, UNAVCO; Carlos Aiken, Univ. of Texas at Dallas

This one-day course will provide faculty, students, and professionals with an introduction to Terrestrial Laser Scanning (TLS—aka ground-based LiDAR). TLS provides high-resolution three-dimensional images of geologic features, and has emerged as a powerful tool for applications ranging from outcrop mapping to analysis of earth surface processes. The course will focus on TLS technology, data collection, processing and analysis, and examples of science applications. A combination of lectures and hands-on demonstrations of TLS equipment and data processing will be used.

*Presentations:*

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

Online URL:

<https://kb.unavco.org/article/gsa-2014-introduction-to-terrestrial-laser-scanning-for-earth-science-research-and-education-809.html>