

High Resolution Topography & 3D Imaging I: Introduction to Terrestrial Laser Scanning

Christopher Crosby (UNAVCO)
Marianne Okal (UNAVCO)

GSA Course 502, Seattle, October 20th, 2017



UNAVCO



Introduction to TLS = lectures, hands-on demonstrations of TLS equipment, and data exploration.

Overview of the basic principles of TLS with emphasis on application examples, theory, practical considerations.

Will **not** provide you with detailed training in specific software or hardware.

Goal = solid intro to TLS and a foundation for future learning. We also hope that it will inspire you to explore the technology and to apply it to new applications.



Agenda (google “UNAVCO kb GSA 2017”)

- 8:00 AM Welcome & Course Introduction, about UNAVCO
- 8:30 AM Intro to laser scanning, Applications Examples (Crosby)
- 9:30 AM *Break*
- 9:50 AM Overview of Data Acquisition Concepts & TLS Workflow (Okal)
- 11:00 AM Hands on demos w/ scanner (1/2 group)
Overview of Data Processing and Analysis (1/2 group - classroom)
- 12:15 PM *LUNCH*
- 1:15 PM Hands on demos w/ scanner (1/2 group)
Overview of Data Processing and Analysis (1/2 group - classroom)
- 2:30 PM *Break*
- 2:50 PM Future trends, community support resources, educational resources.
Afternoon session Q&A and concluding thoughts.
- 3:50 PM Review scan data
- 4:20 PM Participants fill out GSA and UNAVCO ECE course evaluations
- 4:30 PM Adjourn

Yesterday it worked
Today it is not working
Windows is like that

Out of memory.
We wish to hold the whole sky,
But we never will.

Windows has crashed.
I am the Blue Screen of Death.
No one hears your screams.

A crash reduces
your expensive computer
to a simple stone.

Serious error.
All data have disappeared
Screen. Mind. Both are blank.

A file that big?
It might be very useful.
But now it is gone.

ABORTED effort:
Close all that you have.
You ask way too much.

To have no errors
Would be life without meaning
No struggle, no joy

Chaos reigns within.
REFLECT, REPENT, REBOOT.
Order shall return.

Introductions

- ***Name & affiliation?***
- ***Your interest in lidar & application area?***
- ***Previous lidar or high resolution topography experience?***

