Course Description:

This is a hands-on course designed for Principal Investigators, scientists and graduate students who use UNAVCO GPS equipment for surveying purposes.

The course covers all phases of a survey project using GPS survey equipment. An overview of the GPS system and basic survey principles will be covered. Students will conduct a full GPS survey from start to finish including planning, field work, post-processing, trouble shooting and network adjustment. A practical, hands-on approach to field and office sessions will be applied every day.

There will also be a chance to learn about Real Time Kinematic GPS surveying (RTK) which can be beneficial for some survey applications. RTK surveying provides positions of 1-2 cm accuracy in real time, allowing for rapid data collection. RTK also has the ability to stake out points on the ground and requires no post-processing.

Consider this course if you plan to use UNAVCO GPS equipment during your 2004 field season.

Class size limited to 16.
The course is offered at no cost.
Participants must cover travel

Contact Jim Greenberg for details
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Course Highlights

Day one
Office session
How GPS works – satellites and coordinate systems
Data collection methods
Introduction to Trimble’s Geomatics Office software (TGO)
Field session
Static data collection

Day Two
Office session
Static data processing
Least squares network adjustment
Applying a geoid model
Field session
Surveying a GPS network
Campaign survey monumentation

Day Three
Office session
Kinematic data processing
Least squares network adjustment (continued)
Field session
Kinematic data collection (using Trimble’s TSC1)
Post processed kinematic Surveying (PPK)

Day Four (Optional)
Office session
Open forum for discussing project specific requirements
Field session
Open forum data collection practice session