

Garmin eTrex Vista GIS/GPS Data Collection System

TIPS provides customers with low-cost Garmin eTrex Vista handheld GPS device for quick and easy GPS data collection. The Garmin eTrex is designed as a WAAS-enabled real-time low grade accuracy GPS solution for easy navigation. eTrex data is convertible to CAD and GIS formats, and offers navigation/recreation level accuracy.

GPS Overview

Global Positioning System technology allows digital capture of three-dimensional locations anywhere on or above the earth's surface with 24/7 availability. This free system is the same one used for vehicle navigation or hiking. GPS horizontal positional accuracy ranges from 2-5 meters for navigation/recreation equipment to around one inch for survey units. Elevation accuracy is generally one half or one third of the XY accuracy. GPS accuracies can be enhanced in real-time by use of commercial or WAAS satellite correction signals or by later post-processing using base station data posted on the Internet. Navigational /recreational GPS is biased towards yield of GPS signals irrespective of accuracy; GIS mapping GPS is biased toward collecting GPS positions of known accuracy.

Field to Map

The Garmin eTrex is a highly portable, low grade GPS receiver featuring basemap, barometric altimeter, and electronic compass. With its high-sensitivity, WAAS-enabled GPS receiver, eTrex Vista locates position quickly and precisely and maintains its GPS location even in deep woods or just near tall buildings and trees. The signals can translate mine or reclamation features into GIS formats. These files are then turned into GIS or CAD maps or used for GIS analysis.

Geospatial Data Portability

GPS data is automatically collected into standard "real-world" coordinate systems that can be easily translated into GIS coordinate systems. CAD system support is provided for geospatially-enabling CAD drawings. Using GPS data exported into standard GIS/CAD formats allows TIPS users to more effectively access and share geospatial data across organizational boundaries.

Hardware: eTrex Vista



SMCRA BENEFITS/USES:

- Capture digital field data for permitting and reclamation investigations.
- Collect data in standard "real-world" coordinate systems.
- Built-in compass provides bearing information even while you're standing still.
- Barometric altimeter tracks changes in pressure to pinpoint your precise altitude.

TIPS TRAINING CLASSES:

Introduction to GPS w/ Garmin eTrex Vista C

NEED HELP????

http://www.tips.osmre.gov/tips_html/mobile_computing.asp

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