



Exploratory Seismic Data Analysis in the Field

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The Project

- Software to replace of ProMAX in the field.
 - Display survey geometry
 - Plot GPS, source/receiver midpoints, elevation, etc.
 - Interactively display seismograms
 - Display by FFID, midpoint, offsets
 - Controls for gain, amplitude balancing, etc.

The Project

- Simple processing
 - Surface wave attenuation
 - NMO correction

Progress

- GPS
 - Import from any source (Excel, CSV, Tab delimited, Garmin gpx, etc.)
 - Convert from Lat/Lon to UTM
 - Export to a CSV
 - Extrapolates missing flags
 - Plot in map view

Progress

- Segd files
 - Converted Jython code to JAVA
 - Read/plot data from segd files
 - Simple gain, tpow and lowpass filtering
- GUI
 - Save an image
 - Dynamically finds nearest GPS point and plots the nearest shot to that point

Next Steps

- Finish implementing core features
 - Expanding interactive survey exploration toolbox
 - Plotting station elevations
 - Read elevation from USGS DEM files
 - Reading & integrating observation logs
 - Etc.

Timeline

- Mid-February
 - All core code implemented (Alpha product)
 - Optimization begins
- March 15
 - Core features expanded to be usable by the end user (Beta product)
- Field Camp 2014
 - Finished product

Demo