Beyond the Mouse – A Short Course on Programming

0. Introductory Motivation

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The Project . . .

- intention was to test our processing against other labs

- took a while, I got impatient, set up my own website

- this website published processed positioning time series data for >1200 GPS stations

- something cool has to be in there!
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- few cool results to be published on a community website
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Show movie ...
The Program ...

Program consists of 3 shell scripts:

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- **aria_animate.gmt** — create map for each time step, call make_movie
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- `make_vel_frames` — filtering, data re-formatting
- `aria_animate.gmt` — create map for each time step, call `make_movie`
- `make_movie` — create .avi, .mp4 files

Horizontal Displacement

Geophysical Institute, Univ. Alaska Fairbanks
Preliminary GPS time series Provided by the ARIA team at JPL and Caltech.
All original GEONET RINEX data provided to Caltech by the Geospatial Information Authority (GSI) of Japan.
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- **Unix programs**: basename, head, touch, **awk, grep**, paste, convert
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- GMT to make maps
- mencoder to turn frames to avi movie
- ffmpeg to turn avi movie to quicktime
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- `tcsh` scripting language
- Unix programs: `basename`, `head`, `touch`, `awk`, `grep`, `paste`, `convert`  
- GMT to make maps
- `mencoder` to turn frames to avi movie
- `ffmpeg` to turn avi movie to quicktime
- `HMTL` to link to YouTube . . .
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Results . . .

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- tremendous outreach success
- GRL paper in press right now
- many lessons learned in science politics
- mode of visualization seems to catch on
- useful experience in terms of event response