FuncLab script / QuickStart for test data
August 13, 2011 (MJF/JDW)

Start a new project

1. Start Matlab
2. Run setup_funclab.m from FuncLab source directory.
3. cd to top level project directory (e.g., ~/RFs). NOTE: raw data must be outside the new project directory tree.
4. Start FuncLab by typing "funclab" in the Matlab Command Window.
5. Start a new project (File->New Project)
6. Enter subdirectory for new project (can't already exist)
7. Browse to find FuncLab -formatted data for project (e.g., ID008).
8. Select "Start" in FuncLab opening screen.
9. Data should load without errors (errors would appear on Command Window screen); FuncLab should show a list of events and the station (or stations) imported.

THINGS TO TRY:

Explore dataset: from the **View** menu

1. Dataset Statistics
2. Station map (not too interesting with only a single station uploaded; also look for errors in command window in case shorelines aren't present)
3. Event map (should be nice)
4. Backazimuthal / ray parameter map
5. Can change map plotting parameters in File->FuncLab Preferences

Trace editing: **Editing** menu

1. Change plotting parameters in **Editing->Trace Editing Preferences**
   a. Begin Time -> -5
   b. End Time -> 40
   c. save
2. Select "**Manual Trace Edit**"
3. Use check boxes on top to select or deselect traces
4. Right click on RF to view other metadata
5. **Save Edits** closes window
6. Start trace editing again and see that all traces are now blue, indicating that these traces have been edited.

View other dataset features: **View** menu

1. Backazimuthal and moveout plots (both traces and binned images) - check out selections beginning with "RF"
2. Can change plotting parameters in **File->FuncLab Preferences**
   a. End time -> 40s
   b. 1-D Velocity Model -> IASP91.vel

H-k stacking: **Add-ons** menu

1. Choose parameters (or leave alone for now in demo mode)
2. Select “H-k Stack (Single Station)”
3. Once stack is completed, plots will appear with raw RFs, binned moveout image, binned backazimuthal image, and H-k stack
4. Note that for better results the user should spend more time trace editing to remove noisy/unwanted data.

Features not attempted during the demo due to time constraints:

CCP or GCCP stacking
Auto trace editing
H-k stacking for all stations (if there are lots of stations loaded)