1. Download teleseismic data from Wilbur 3, <http://www.iris.edu/wilber3/find_event>

For one of the following events:

Each student will do a different event

11/19/2007 15:20:02 Mw 6.0 Loyalty Island

11/19/2007 00:52:12 Mw 6.3 Fiji Island

04/13/2007 05:42:23 Mw 6.0 Guerrero Mexico

07/12/2007 13:27:03 Mw 6.0 Western Brazil

1. Download the data anyway you want, direct SAC, SEED or Tar file from all the transportable array stations and the broadband stations from New Madrid network.
2. In MATLAB, write a code that plots the record section using all three components, vertical, radial and tangential (three plots, one program).
3. These events were picked for very specific reasons. Once the record sections are complete, compare the vertical record sections from each event. (You will have to exchange copies your record sections, and at least the print out of one sac file header, with each other.)
   1. What are some of the major differences?
   2. The record sections are made from essentially the same stations, what would cause these differences?
   3. Using the sac header information, what are some of the source characteristics of each of these events? (location, depth, etc)
   4. What role do the source characteristics from questions 4c play in the differences noticed in the record sections?

Note: While the best way to learn programming is to find an already written program close to what you need and modify it, and it is OK to talk to other students when you have a problem, you should write your own programs and not “borrow” actual code from classmates. It is pretty obvious when the only difference between two programs is that the variable names are globally modified.