ESCI7205   hw2

Due Tue., Sep. 22, 2009.

0) Read Ch 1-8 of the book for class on Sep 29. (skip stuff on zsh, pico). This is all review of material covered in class.

* signifies that there is nothing to write down, this question only has activity on the computer. If there is no *, then there is something to write down to hand in.

~~1) [5] Using the man page, describe the output of the command~~

~~%date –u –r 10~~
~~Thu Jan 1 00:00:10 UTC 1970~~

Cannot be done on Solaris.

2) [5] Using the man page, describe the meaning of each of the columns output by the command

%ps –aef

3) [2] Where is the web browser FIREFOX on the CERI Sun system?

4) [4*] Copy the script ExaminePath.sh from my home directory (~rsmalley/ExamineScript.sh) . Run this script and redirect the output into a file named MyPath in your homework directory.

5) [5] Use the sort command to sort the output of ExaminePath.sh and redirect the output into a file MySortedPath in your homework directory. Use a pipe to do this and write down the command you used. Do not sort the file MyPath you made in #4.

6) [30] This question has both computer and written components.

A) Change into your homework directory.

B1) Create a file called NMSZ.catalog.nedit usingNEdit.
B2) Create a file in your homework directory called NMSZ.catalog.vim using vim.

C) Open the web browser Firefox and go to the CERI mainpage.
D) Click on the earthquake map and then click on the link "all earthquakes."
E) Highlight the earthquake hypocenter list, and copy it into the clipboard of your web browser.

F1a) paste this list into your NEdit file.
F1b) Save the file.
F2a) paste this list into your vim file.
F2b) Save the file.

We will now prepare this file for use by GMT or some other typical program. First GMT does not handle the character hemisphere specification on the latitudes and longitudes. These must be removed. Next, western longitudes are negative [or between 180° and 360°], so we have to put a minus sign in front of them (with no space)[or add 180°] . We will also get rid of the first column, which were links in the USGS web page we used to obtain the data. Look at the format of the file to see if you can figure out why the changes are made in the order specified.

In NEdit

(Note: Global search and delete below means do the specified action [delete the longitude directional "W"] to the whole file – it does not mean search and delete all the "W"s.)

G) Global search and delete the longitude directional "W". Do not do this by hand!
H) How did you do this?
I) Insert a negative sign (-) before all of the event longitudes.
J) How did you do this?
K) Global search and delete the longitude directional "N".
L) Remove the fist column with the word "map" (ignore case).
M) What commands did you use?
N) Save this file.

We will now redo this in vim.

N) Global search and delete the longitude directional "W". Do not do this by hand!
O) How did you do this?
P) Insert a negative sign (-) before all of the event longitudes.
Q) How did you do this?

R) Global search and delete the longitude directional "N".
S) Remove the fist column with the word "map" (ignore case).
T) How did you do this?
U) Save this file.

8. Do the new hypocenter files accurately reflect the original information on the website?
If not, what is different and how could it be fixed?
Are the NEdit and vim versions of the file the same?