GE 5113/4113
Lab 00
Intro. to ENVI and Landsat Images
Jan. 24, 2018

Log onto one of the computers in ESB 1006 using your regular UW account.

First we need to copy the data files from the class website to your local computer.

While this particular example file is relatively small and you COULD place it on your "desktop" or in your "H: drive", those files don't live on the local machine, they live on some network server in the computer center. Especially for large files we'll be using later, you really want the data to actually reside on the local machine. (But a warning -- any files on the local machine will be deleted when you logoff, so in the future, if you really want to save something you've been working on, make sure it IS copied to your H: drive or your desktop.)

Open an internet browser and go to the main class website at <`http://geofaculty.uwyo.edu/rhowell/classes/remote_sensing/`> and right click on `Lab 00 data` to download it. Tell the browser to save on `This PC` in `C:\temp\` in a `new folder` called `lab_00`. (You don't have permission to write to most directories on C:, the actual hard drive on the local machine, but you can write to the **C:\temp** directory. To keep track of your files, it's best to put them in some directory you create. They will get deleted once you logoff. The file you are downloading is a "zip" archive containing two files we will need. Once it is downloaded you can close the web browser.

Next we need to "unzip" the archive. Open Windows (not Internet) Explorer -- which can be done by pressing `Windows_Key+E` or using the icons. Navigate to the `c:\temp\lab_00` directory you created. you should see the downloaded file, probably indicated by a folder icon with a zipper running through it. That icon indicates this isn't a real directory, but is instead a single archive file which contains additional files. While some programs can directly read files from within a zip archive, the program we will use needs to have the individual files extracted from the archive first. Right click on the archive and choose "Extract All". It should extract two files, probably into a further subdirectory called `Lab_00_Data`. Those two files are named `TM17June91Lar_B123457_Cal`, and `TM17June91LAR_B123457_Cal.hdr`. (Windows may hide the "`.hdr`" extension on the second one.)

We will be using a program called `ENVI`, and we will want to use the **"Classic"** interface, rather than a completely revised interface that just appeared in the ENVI 5.3 version. To be sure you start the Classic interface rather than the new one, do the following. (If you get something that does not look at all like the menu structure I'll project on the screen, you somehow inadvertently opened the new interface.)

Click `start`, then `ENVI 5.3`, then ENVI `Classic 5.3 (64 bits).`

Once ENVI is open I'll display it on the projector screen and we'll use to to examine the Landsat TM (Thematic Mapper) image of Laramie.