VegDRI Software – Checking out and Building

The VegDRI software is stored in CVS on edcsns1. The following steps should be taken to check out and build the software.

1. Make sure CVSROOT environment variable is set to `/edcsns1/csb/vegdri/.CVS_REPOSITORY`.
2. Check out the PERL scripts to check out the rest of the software and build the VegDRI library and applications.
   a. `cvs co vegdri/vegdri_build.pl`
   b. `cvs co vegdri/vegdri_perl_make.pl`
3. Change directories into the `vegdri` directory, which was just created by the above checkout steps.
4. Set up your VegDRI environment variables use the current `vegdri` directory as the `VEGDRI_HOME` location. See Appendix A for a list of the needed environment variables. These will need to be modified for your environment.
5. Run `./vegdri_build.pl` to check out the rest of the VegDRI software, then build and install it. If successful, all the executables will be in the `$VEGDRI_HOME/bin` directory. `make.log` will contain information regarding the build process.

VegDRI Software – Running

The `VegDRI.pl` script in the script directory is used to run the VegDRI software, once the software has been checked out and built. The script allows the user to specify the year, DOY, sensor (MODIS, AVHRR), and satellite (only if processing MODIS - Aqua, Terra). The default is to use the current year and DOY, then MODIS, Terra for the sensor and satellite. The `VEGDRI_PROD`, `VEGDRI_BIN`, and `MAPCUBIST_VER` environment variables need to be defined (see Appendix A), since they are used by the VegDRI application.

The following is the usage information for the VegDRI application. Change directories to the `script` directory in order to run the script, or add the `script` directory to your Path.

```
Usage: VegDRI.pl -doy=<DOY> -year=<year> -sensor=<sensor>
                 -satellite=<satellite>
  <DOY> is the day for which the VegDRI model should be run (default
        is the current DOY)
  <year> is the year for which the VegDRI model should be run (default
         is the current year)
  <sensor> is the sensor data is from, MODIS or AVHRR (default is
           MODIS)
  <satellite> is either AQUA or TERRA (default is TERRA)
```

Appendix A – VegDRI Environment Variables

setenv VEGDRI_PROD /edcsns1/vegdri/Test
- Points to the core directory of the VegDRI data

setenv VEGDRI_HOME /edcsns1/csb/gschmidt/sandbox/vegdri
- Points to the core directory of the VegDRI software

setenv VEGDRI_LIB /edcsns1/csb/gschmidt/sandbox/vegdri/shared_src
- Points to the shared_src directory that contains the VegDRI library

setenv VEGDRI_INC /edcsns1/csb/gschmidt/sandbox/vegdri/shared_src
- Points to the shared_src directory that contains the VegDRI includes

setenv VEGDRI_BIN /edcsns1/csb/gschmidt/sandbox/vegdri/bin
- Points to the VegDRI directory that contains the binaries

setenv MAPCUBIST_VER 202
- Specifies which version of mapCubist to run 202 = v2.02, 109 = v1.09

setenv TIFF_LIB /edcsns1/csb/vegdri/vegdri/COTS/tiff
- Specifies the location of the TIFF libraries

setenv TIFF_INC /edcsns1/csb/vegdri/vegdri/COTS/tiff
- Specifies the location of the TIFF include files

setenv GEOTIFF_LIB /edcsns1/csb/vegdri/vegdri/COTS/geotiff
- Specifies the location of the GeoTIFF libraries

setenv GEOTIFF_INC /edcsns1/csb/vegdri/vegdri/COTS/geotiff
- Specifies the location of the GeoTIFF include files