

Downloading and Adjusting Color Curves in AWIPS

Phil Kurimski

AWIPS Focal Point
National Weather Service
Green Bay, Wisconsin
November 1, 2007

1. Save off a copy of the office color curves
/data/fxa/workFiles/customColorMaps.nc

cp /data/fxa/workFiles/customColorMaps.nc
/data/fxa/workFiles/customColorMaps.nc.OLD
2. Download the sbct.tar.gz file from the CIMSS/SSEC website and store it in a temporary directory such as /tmp.

3. Gunzip the sbct.tar.gz file: gunzip sbct.tar.gz

4. Untar the manage-ct.tar file: tar -xvf manage-ct.tar

5. Untar the colorMapsProgram.tar file: tar -xvf colorMapsProgram.tar

6. Append the color curves you wish to the end of your customColorMaps.nc by using the script in the /tmp/manage-ct/colorMapsProgram directory called extractcolorcurve.pl and choose the color curves you would like extracted.

- To use the Modis Colors type in:

```
./extractcolorcurve.pl /tmp/manage-ct/ModisColors.nc  
/data/fxa/workFiles/customColorMaps.nc
```

- To use the color curves for additional GOES products type in:

```
./extractcolorcurve.pl /tmp/manage-ct/GOESColors.nc  
/data/fxa/workFiles/customColorMaps.nc
```

7. You can now customize AWIPS to assign these color curves from CIMSS/SSEC as your default color curve whenever these products are loaded. To do this you will need to run the readoutnames.pl script from the /tmp/manage-ct/colorMapsProgram directory to get the key number from the new color curves. To run this program type in:

```
./readoutnames.pl /data/fxa/workFiles/customColorMaps.nc
```

and note the key number highlighted in red for the custom color curves. The readout should look like the following if you have added all of the color curves:

- 1099 GOES CAPE
- 1100 GOES Ozone
- 1103 MODIS CTT New
- 1104 MODIS TPW (GOES)
- 1105 MODISCloudPhase
- 1106 MFOG2
- 1107 WV (CIMSS)
- 1108 Band26Cirrus

8. To change the default colors used in AWIPS you will need to edit the UW/CIMSS/SSEC entries in the /data/fxa/customFiles/XXX-localDepictKeys.txt file. The entries that will need changing are as follows:

```
# Added for MODIS imagery by UW/CIMSS/SSEC script
7340 | 2 | 7340 | | 0 | 0 | MODIS Visible 1km - Band 1 | MODIS VIS | 8 | 0 | 1 | 57,100 |
7341 | 2 | 7341 | | 0 | 0 | MODIS Snow/Ice 1km - Band 7 | MODIS SNOW ICE | 8 | 0 | 1 | 57,100 |
7342 | 2 | 7342 | | 0 | 0 | MODIS Cirrus 1km - Band 26 | MODIS CIRRUS | 8 | 0 | 1 | 1108,100 |
7343 | 2 | 7343 | | 0 | 0 | MODIS 3.7um 1km - Band 20 (C) | MODIS 4 MICRON | 8 | 0 | 1 | 57,100 |
7344 | 2 | 7344 | | 0 | 0 | MODIS Water Vapor 1km - Band 27 (C) | MODIS WV | 8 | 0 | 1 | 1107 |
7345 | 2 | 7345 | | 0 | 0 | MODIS IR Window - Band 31 (C) | MODIS IR | 8 | 0 | 1 | 7 |
7346 | 2 | 7346 | | 0 | 0 | MODIS 11um - 3.7um Product 1km | MODIS FOG | 8 | 0 | 1 | 1106 |
7360 | 2 | 7360 | | 0 | 0 | MODIS TPW 4km (mm) | MODIS TPW | 8 | 0 | 1 | 1104 |
7361 | 2 | 7361 | | 0 | 0 | MODIS Cloud Phase 4km | MODIS CPI | 8 | 0 | 1 | 1105 |
7362 | 2 | 7362 | | 0 | 0 | MODIS Cloud Top Temperature 4km (C) | MODIS CTT | 8 | 0 | 1 | 1103 |

# Added for MODIS imagery by UW/CIMSS/SSEC script
7370 | 2 | 7370 | | 0 | 0 | MODIS Sea Sfc Temperature 1km (F) | MODIS SST | 8 | 0 | 1 | 57,100 |

# Added for GOES imagery by UW/CIMSS/SSEC script
7203 | 2 | 7203 | | 0 | 0 | GOES Sounder Conv Avail Potl Energy (J/kg) | GOES CAPE | 8 | 0 | 1 | 1099 |
7204 | 2 | 7204 | | 0 | 0 | GOES Sounder Total Column Ozone (DU) | GOES Ozone | 8 | 0 | 1 | 1100 |
```

Notice how the red entries in the XXX-localDepictKeys.txt file match the keys from the /data/fxa/workFiles/customColorMaps.nc file. These numbers will probably be different for you but the entries from these two files must match for the default color curves to be assigned.

- 9. Run a `-tables` and `-dataSups` localization on all workstations so the default color curves to be assigned: `/awips/fxa/data/localization/scripts/mainScript.csh -tables -dataSups`
- 10. Restart D2D and bring up a MODIS or GOES product to make sure the changes are now in effect.

CIMSS/SSEC gives a special thanks to Phil Kurimski for authoring this documentation. If you have comments or questions regarding the procedure listed above, please contact Phil Kurimski via e-mail at phil.kurimski@noaa.gov.