Sea Surface Temperature (˚C)

-2   35

MODIS Imagery in D-2D

Phase Two – Phase Two – Phase Two – Phase Two – Phase Two – Phase Two – Phase Two

For East Coast and Great Lakes Marine Weather Forecast Offices

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Instructions for AWIPS Installation

Jordan Joel Gerth

Cooperative Institute for Meteorological Satellite Studies

Space Science and Engineering Center

University of Wisconsin in Madison

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Contributors

This document and the products gained from this installation could not have been accomplished without the dedicated work and assistance of the individuals listed below.

Scott Bachmeier,
Russ Dengel,
Scott Lindstrom,
Jerrold Robaidek,
Kathy Strabala,
Steve Wanzong
Space Science and Engineering Center
University of Wisconsin in Madison
Madison, WI

Kim Licitar
Information Technology Officer
National Weather Service Forecast Office
Milwaukee/Sullivan, WI

Jason Burks
Information Technology Officer
National Weather Service Forecast Office
Huntsville, AL

Above: Steve Hentz, a Senior Forecaster at the NWSFO in Mke/Sullivan, loads satellite data using AWIPS while talking to Forecaster Mark Gehring.
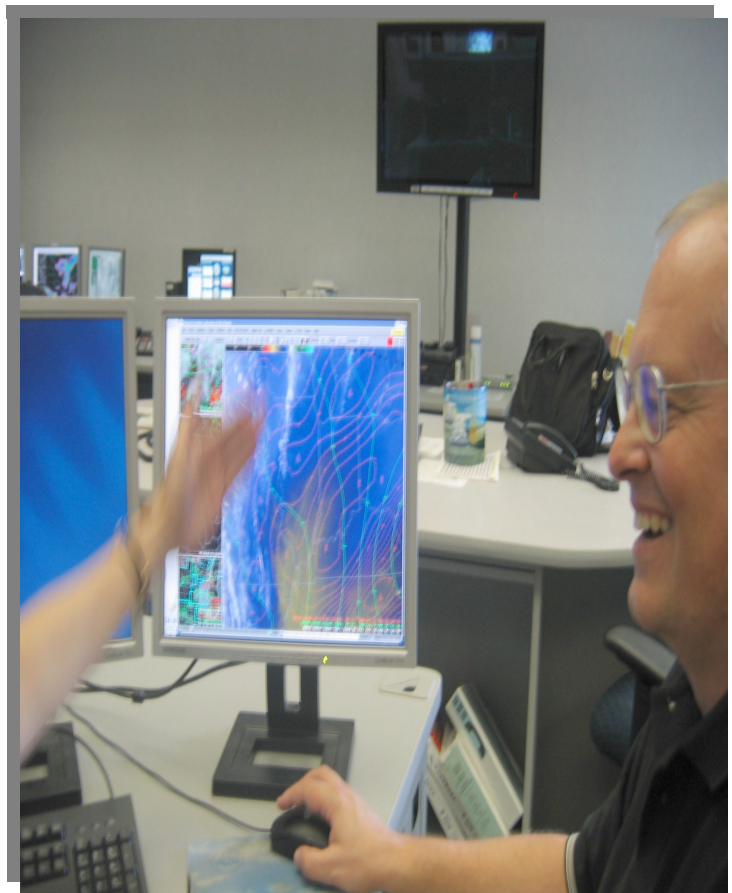
Important Notes

This document is applicable only to Central Region and Southern Region WFOs.

Phase One is required to install Phase Two. Phase One contains many mainstream MODIS images. If bandwidth usage is a concern at your site, contact Jordan Gerth.

These products are not operational. The Space Science and Engineering Center (SSEC) is not staffed around the clock. As a result, data outages may result periodically.

Contact Information

If you have questions regarding this document or experience installation problems, please contact Jordan Gerth, SSEC, jordang@ssec.wisc.edu or jordan.gerth@noaa.gov.

For questions and comments about these images and future developments involving satellite imagery in AWIPS, contact Kathy Strabala, SSEC, kathys@ssec.wisc.edu.

A copy of this document as well as updates and sample imagery is maintained at http://cimss.ssec.wisc.edu/~jordang/awips-modis. This is version 1.11.

The address for the University of Wisconsin Space Science and Engineering Center is 1225 W. Dayton Street, Madison, WI 53706.

Instructions

!! Always use /tmp as your temporary directory when applying these instructions. These scripts have been written to look for files in /tmp/modis-setup. Every time directions request to extract a new tarball, make sure to have deleted the old, previous modis-setup directory. !!

!! Assure that the temporary files have the proper file permissions before running scripts. !!

Use the two Perl scripts included with color table manipulation package manage-ct.tar to extract the color tables from SSEC's ModisColors.nc and add into customColorMaps.nc as located in /data/fxa/workFiles. The manage-ct.tar file can be extracted into a temporary location of choice. Refer to instructions.txt for information about how to use the utility. It might be a good idea to backup the initial version of customColorMaps.

To add MODIS menu items under "Satellite" on each AWIPS D-2D workstation, extract the files in modis-setup-loc.tar on PX1, modify the depict keys file to <u>make sure the key numbers (first column) are not already used on your system</u> and <u>the color tables (last column) correspond to the correct number in customColorMaps</u>, and run localization.sh from within. Upon successful completion, delete the modis-setup directory and tarball, then force run a '-tables' and '-dataSups' localization on each workstation as user fxa.

```
su - fxa
cd /tmp
tar -xvf modis-setup-loc.tar
cd modis-setup
vi UW-localDepictKeys.txt
        Modify key currently numbered 7370; note change
./localization.sh      # Ignore errors if previous files do not exist
cd ../
rm -rf modis-setup
rm -f modis-setup-loc.tar
cd /awips/fxa/data/localization/scripts
./mainScript.csh f -tables -dataSups
```

To create the data management system (directory structure, data monitor, and purger) for the MODIS files, extract the files in modis-setup-px1.tar to the temporary directory on PX1 and run px-monitor-purge.sh as user fxa. Delete the temporary modis-setup

directory when complete, then run a '-tables', '-dataSups', and '-dirs' localization on PX1 as user fxa. The html-add.sh script may need to be rerun after an AWIPS build upgrade.

```
su - fxa
cd /tmp
tar -xvf modis-setup-px1.tar
cd modis-setup
./px-monitor-purge.sh        # Also runs two other scripts in directory
cd ../
rm -rf modis-setup
rm -f modis-setup-px1.tar
cd /awips/fxa/data/localization/scripts
./mainScript.csh -tables -dataSups -dirs
```

Run a '-purge' localization on DX1 as fxa to acknowledge the new purge information, then restart the purge process. The notification server may need restarting as well.

```
su - fxa
cd /awips/fxa/data/localization/scripts
./mainScript.csh -purge
cd /awips/fxa/bin
./stopPurgeProcess
./startPurgeProcess
./stopNotificationServer        # Optional, but may be necessary
./startNotificationServer       # Optional, but may be necessary
```

If there are no errors with the '-purge' localization, do the same on DX2. Remember, if PX1 is offline, there is nothing running to purge the incoming files on LS1.

```
ssh dx2 /awips/fxa/data/localization/scripts/mainScript.csh -purge
```

On LS1 as ldm user, extract the files in modis-setup-ls1.tar to a temporary directory and run ldad.sh. Delete the temporary directory when complete.

```
su - ldm
cd /tmp
tar -xvf modis-setup-ls1.tar
cd modis-setup
./ldad.sh
cd ../
rm -rf modis-setup
rm -f modis-setup-ls1.tar
```

Restart the Local Data Manager on LS1 as ldm user. Watch the EXP feed if you wish.

```
su - ldm
cd /usr/local/ldm/runtime/bin
./ldmadmin.in stop
./ldmadmin.in start
```

This completes the installation. Products will arrive in AWIPS following the next pass of either MODIS satellite. The MODIS passes over the course of a day are irregular, so the wait could be several hours for a complete set depending on the time and date.

General information about MODIS can be found at **http://modis.gsfc.nasa.gov/**