

SSEC/CIMSS River Forecast Center River Product Installation Instructions for AWIPS II

Necessary items for configuration:

- site version of *regionalsat.xml* distribution file
- site version of *regionalsat creatingEntities.xml* file drive.google.com/open?id=0B9cG9-0Ky4ouTTlFT2pBVINBcjQ
- site version of *regionalsat physicalElements.xml* file
- *satellitePurgeRulesRFC.xml* purge rules file
- *Flooding_Water.cmap* colormap file available ([Color Tables](#))
- *Ice_Extent.cmap* colormap file
- *Ice_Concentration.cmap* colormap file
- *RFCImageryStyleRules.xml* style rules file
- *RFCProductImagery.xml* menu configuration file

NOTE: When a site version is referenced above, that means you must copy the base version (if it exists) of the file into your respective site location, if one doesn't already exist, and append the given code below. To note, each */awips2/edex/data/utility/<cave, common, or edex>_static/* directory contains subdirectories of *base* and *site*. When observing the directory locations below, *LLL* is a localization placeholder and your specific localization identifier should be substituted.

EDEX Configuration (processing servers) –

- The site version of *regionalsat.xml* within the directory */awips2/edex/data/utility/common_static/site/LLL/distribution/* needs to be altered to include the following code

```
<!-- SSEC VIIRS/ABI Data Files for RFCs -->
<regex>SSEC_AWIPS_VIIRS-..RFC_1KM_RIVERFLOOD*</regex>
<regex>SSEC_AWIPS_ABI-CONUS_1KM_RIVERFLOOD*</regex>
<regex>SSEC_AWIPS_VIIRS-..RFC_1KM_RIVERICE*</regex>
<regex>SSEC_AWIPS_VIIRS-..RFC_1KM_RIVERICEC*</regex>
```

where the '..' within the regex tags can be replaced with your regional identifier of interest (e.g., NC, NE, MB, WG, SE, SW, NW, or AP).

- The site version of the *regionalsat creatingEntities.xml* file within the */awips2/edex/data/utility/common_static/site/LLL/satellite/regionalsat/* directory needs to be altered to include the following code.

```
<!-- SSEC RFC NPP Data -->
<entry><key>NPP-VIIRS</key><value>NPP-VIIRS</value></entry>
<!-- SSEC RFC GOES Data -->
<entry><key>GOES-ABI</key><value>GOES-ABI</value></entry>
```

- The site version of the regional *physicalElements.xml* file within the */awips2/edex/data/utility/common_static/site/LLL/satellite/regional_sat/* directory needs to be altered to include the following code.

```
<!-- SSEC RFC Products -->
<entry><key channel="RIVERFLOOD" satName="GOES-ABI"/><value name="River
Flood Areal Extent"/></entry>
<entry><key channel="RIVERFLOOD" satName="NPP-VIIRS"/><value name="River
Flood Areal Extent"/></entry>
<entry><key channel="RIVERICE" satName="NPP-VIIRS"/><value name="River Ice
Areal Extent"/></entry>
<entry><key channel="RIVERICE" satName="NPP-VIIRS"/><value name="River Ice
Concentration"/></entry>
```

- The *satellitePurgeRulesRFC.xml* purge rules file needs to be placed within the */awips2/edex/data/utility/common_static/site/LLL/purge/* directory and can be altered to keep files as long as you would like.
- The *Flooding_Water.cmap*, *Ice_Extend.cmap*, and *Ice_Concentration.cmap* colormap files need to be placed within the */awips2/edex/data/utility/common_static/site/LLL/colormaps/* directory.
- The *RFCImageryStyleRules.xml* style rules file needs to be placed within the */awips2/edex/data/utility/common_static/site/LLL/styleRules/* directory.
- Please make sure to use commands *chown* and *chmod* on the installed/altered files to make the ownership and permissions match those of the other AWIPS II files.
- Once these files are in place, you'll need to restart your EDEX.

CAVE Configuration (visualization servers) –

- CAVE menus are installed on a site preference basis; however, the following configuration is what we use locally to make the products menu selectable. Please use the information as you like but make sure to alter it to work with your local CAVE settings.
- If used, the *RFCProductImagery.xml* menu file should be placed in an appropriate location within the */awips2/edex/data/utility/cave_static/site/LLL/menus/* directory and needs to be referenced within the appropriate *index.xml* menu index file similar to as follows (satellite menu *index.xml* file example shown):

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<menuContributionFile>
```

```
<include installTo="menu:satellite?after=GROUP7"
fileName="menus/satellite/RFCProductImagery.xml"></include>
</menuContributionFile>
```

- If the *RFCProductImagery.xml* menu file is used, a user can comment out unused RFC locations for the NPP-VIIRS products to only supply the menus appropriate for his or her location.
- If the menus are not configured, the products can still be loaded from the Product Browser via the following path Satellite → NPP-VIIRS → <NCRFC, NERFC, MBRFC, WGRFC, NWRFC, SWRFC, SERFC, or APRFC> → <RFC Product of Choice>, or Satellite → GOES-ABI → CONUS → <RFC Product of Choice>
- Please make sure to use commands *chown* and *chmod* on the installed/altered files to make the ownership and permissions match those of the other AWIPS II files.
- If you use the menu configuration, once the proper items are in place, you'll have to restart your CAVE session, if it's already running.

Products Included with Configuration-

- The products available with configuration of the SSEC/CIMSS RFC River Product file processing are as follows.
 - VIIRS River Flood Areal Extent
 - ABI River Flood Areal Extent
 - VIIRS River Ice Areal Extent
 - VIIRS River Ice Concentration

Additional Information –

- The naming convention of the SSEC/CIMSS RFC River Product data files are as follows:

For VIIRS River Flood Areal Extent:

```
SSEC_AWIPS_VIIRS-NCRFC_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.7117
SSEC_AWIPS_VIIRS-NERFC_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.7127
SSEC_AWIPS_VIIRS-MBRFC_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.7137
SSEC_AWIPS_VIIRS-APRFC_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.7119
SSEC_AWIPS_VIIRS-WGRFC_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.xxxx
SSEC_AWIPS_VIIRS-NWRFC_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.7167
SSEC_AWIPS_VIIRS-SWRFC_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.7157
SSEC_AWIPS_VIIRS-SERFC_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.7147
```

For ABI River Flood Areal Extent

```
SSEC_AWIPS_ABI-CONUS_1KM_RIVERFLOOD_<YYYYMMDD>_<HHMM>.7187
```

For VIIRS River Ice Areal Extent:

SSEC_AWIPS_VIIRS-NCRFC_1KM_RIVERICE_<YYYYMMDD>_<HHMM>.7119
SSEC_AWIPS_VIIRS-NERFC_1KM_RIVERICE_<YYYYMMDD>_<HHMM>.7127
SSEC_AWIPS_VIIRS-MBRFC_1KM_RIVERICE_<YYYYMMDD>_<HHMM>.7120
SSEC_AWIPS_VIIRS-APRFC_1KM_RIVERICE_<YYYYMMDD>_<HHMM>.7118

For VIIRS River Ice Concentration:

SSEC_AWIPS_VIIRS-NCRFC_1KM_RIVERICEC_<YYYYMMDD>_<HHMM>.7119
SSEC_AWIPS_VIIRS-NERFC_1KM_RIVERICEC_<YYYYMMDD>_<HHMM>.7127
SSEC_AWIPS_VIIRS-MBRFC_1KM_RIVERICEC_<YYYYMMDD>_<HHMM>.7120
SSEC_AWIPS_VIIRS-APRFC_1KM_RIVERICEC_<YYYYMMDD>_<HHMM>.7118

These files can be accessed from the CIMSS EXP LDM feed via CIMSS or NWS Regional Headquarters (preferred source). Once the files are in hand, you'll want to place them within the /awips2/edex/data/manual/ directory for AWIPS II processing. As a suggestion, we use a shell script to place the file in that location as soon as it comes across the LDM. This would be done in your pqact.conf LDM configuration file.

- If a new colormap is to be applied to one of the products as the default, you'll need to place it within same directory as specified above for the original colormap. You'll then need to change the *<defaultColormap>* entry within the *RFCImageryStyleRules.xml* file and the colormap substitution within the *RFCProductImagery.xml* menu configuration (if used) for the particular product of interest. Last, if you have a CAVE session open, you'll have to restart it for the changes to take effect.
- Colormap and xml files can be found here:
<https://drive.google.com/drive/folders/0B9cG9-0Ky4ouTTlFT2pBVlNBcjQ?usp=sharing>