

NAWIPS release version: 7.3.0
 Release date: Feb 16, 2016

Highlights:

- a. Enable lightning decoder to process encrypted data.
- b. GDGRIB2 parameter bulk processing.

RM	Summary	Component	Site
14831	Correct NFNA station altitude in sfstns.tbl	Tables	All
12481	Generate a baseline GDGRIB2 bulk processing table	Tables	IDSB
10186/13243	<p>A new parameter G2CONV has been added to GDGRIB2 to allow bulk processing of the GEMPAK parameters. A table that contains multiple entries of input parameters to convert to a grib2 file can be configured for processing. A typical entry in the configuration table would look like,</p> <pre>GDFILE=\$MODEL/gfs/gfs_0p25_2015113000f000 GBFILE=gfs_20151193000f000.grib2 GFUNC=tmpk GDATTIM=f00 GLEVEL=500 GVCORD=pres PROJ=ced GRDAREA=90;0;-90;-359.75 KXKY=1440;721 CPYFIL= G2TBL= G2IS=0;2 G2IDS=7;0;2;0;0;0 G2PDT=0 2;10;;;110;;;100;0;27500;255;0;0 GRDRT= 4 WHOHDR=</pre> <p>Where the input parameters are defined in GEMPAK document, \$GEMPAK/help/hlx.</p>	Grib Encoder	All
9815/8895/7649	<p>Corrected County name from Eastern Union to Union County, NJ;</p> <p>New fire weather forecast zone and fire weather forecast zone boundary changes for Southwest Alaska, effective April 7, 2015, (SCN15-11);</p> <p>Changes to the boundaries of some Grand Junction, UT, Weather Forecast Office Fire Weather Forecast Zones, effective April 7, 2015, (SCN15-12);</p> <p>Changes in both Fire and Public Weather Forecast Zones for NWS Weather Forecast Office Mobile, AL, for Baldwin and Mobile Counties, Alabama, and Escambia, Santa Rosa and Okaloosa Counties, Florida, effective May 28, 2015, (SCN15-14);</p> <p>Updated AWIPS baseline CWA shapefile attribute table, effective April 16, 2015 (SCN15-25);</p> <p>Changes to the county name and the Federal Information Processing Series (FIPS) code for Shannon County, SD, effective on October 1, 2015, (SCN15-31);</p> <p>Re-created the marine county maps to include the 2-tier marine zones;</p> <p>Updated SPC Outlook Bounds overlay to include 2-tier marine zones for Atlantic, Pacific, and Gulf of Mexico Zones;</p> <p>Updated bounds table for marine zones over Chesapeake Bay and Potomac River;</p> <p>Added new fire weather zone to SW AK and PR (PR2014&PR2027) and USVI (SCN15-39);</p> <p>Changed the name of Shannon County to Oglala Lakota County, SD, effective 5/1/15 (SCN15-31, SCN15-44); FIPS code changed from 46113 to 46102. UGC by County (UGC-C) changed from SDC113 to SDC102. A complete list of WFO Rapid City (UNR) products affected by this change is at: http://www.nws.noaa.gov/os/dissemination/unr.docx.</p> <p>Updated county names for the Hawaiian Islands (SCN15-40);</p> <p>On 11/10/2015, the NWS Weather Forecast Office in Pittsburgh, PA (PBZ) split its fire and public forecast zones for Monongalia, Preston and Tucker Counties in WV: (SCN15-43) Preston County (WVZ023) zone divided into three parts: (a) Ridges of Eastern Monongalia and Northwestern Preston (WVZ510) Preston (WVZ511) and Eastern Preston (WVZ512); (b) Tucker County (WVZ041) zone divided into western (Western Tucker- WVZ513) and eastern (Eastern Tucker - WVZ514) zones; and (c) Monongalia County (WVZ022) divided into two parts with the eastern part of the county being combined with the Northwestern Preston County zone (WVZ510), and the western part of the zone maintaining its name, but being renumbered (Monongalia - WVZ509). (SCN15-43)</p>	Map/Bound files	All
9616	Fixed problems in prob2cat that created erroneous displays of the categorical graphics for convective output.	PGEN	SPC
8760	Modified DCXMOS so that it is no longer use the climatology data provided by GEMPAK baseline. The data is over 15 years old and has never been updated. The GFS MOS reports contain an updated climatology column of data that is sufficient for the WPC forecasters. Updated the GFS MOS station table based on locations in an MDL table.	Decoder	All
7955	<p>Baselined three new scripts, <i>usall</i>, <i>islands</i> and <i>water</i>, under \$GEMPAK/utilities/tca2xml, which are run by users from command line to produce the TCA configuration files for CAVE. The output of each script should be redirected to the corresponding xml file names: <i>CoastBreakpoints.xml</i>, <i>IslandBreakpoints.xml</i>, <i>WaterBreakpoints.xml</i>.</p> <pre>usall tcabkptlz.tbl > CoastBreakpoints.xml islands tcabkptlz.tbl > IslandBreakpoints.xml water tcabkptlz.tbl > WaterBreakpoints.xml</pre> <p>The resulting config files will be copies to PGEN localization folder, gov.noaa.nws.ncep.ui.pgen/localization/ncep/pgen/</p>	Configuration	All
7695	Fixed problems with g2varswmo2.tbl in NAWIPS 7.2.0 delivery	Tables	All
7438	Tables updates to support HYSPLIT parameters requested by SDM.	Configuration	All

7402	Updated warning decoder to handle the flash flood scenario that appears more than five sections in a flash flood warning file.	Decoder	All
7143	Updated TC watch/warning tables for 2015: tcabkpt_island.tbl tcabkpt_land.tbl tcabkptlz.tbl tcabkpt_ovl.tbl tcabkpt.tbl tcabkpt_water.tbl	Tables	NHC
6872/14525	Enabled VGF2XML converter command line to specify site, forecaster and status. For example, vgf2xml -f Rosencrans.	Utilities	All
6790	Fixed NAGRIB2 analysis grid, e.g., RTMA, GDATTIM to be set in a format of YYMMDD/HHHH. Before this fix, if grib(1) is converted to grib2 and then run nagrib2, GDATTIM would be incorrectly set as YYMMDD/HHHHF000.	Grib Decoder	All
6784	Updated NHC cone circle radii (nm) (altker.tbl and eptker.tbl) based on 15 hurricane seasons. Track Forecast Cone Two-Thirds Probability Circles (nm) become: Forecast Period (h) Atlantic Basin Eastern North Pacific Basin 3 16 16 12 32 26 24 52 42 36 71 54 48 90 69 72 122 100 96 170 143 120 225 182	Tables	NHC
6481/14428	Updated lightning decoder (ltgdecode) to handle the two new encrypted lightning data feeds from Vaisala and Earth Network Inc (ENI) distributed through the SFUS41 header on NOAAPORT, starting from 1630Z Nov 12, 2015 (see TIN 15-47 from http://www.nws.noaa.gov/os/notification/tin15-vaisala_lightning.htm). Lightning data are written to the files in the same manner so displays are seamless. Note: When you install the new code to your system, make sure you also have the "key" files in \$OS_BIN/.ky	Lightning Decoder	All
6160/12492	Fixed negative grid resolution (dx) when running GDGRIB2 in converting GEMPAK grid to grib2. It happened in two scenarios: (1) rlon1 > 0 and rlon2 = 0.0, i.e., eastern hemisphere (2) rlon1 < 0. && rlon2 < 0. && rlon1 > rlon2. Before the fix, negative grid increment would also show up.	Grib Encoder	All

System Requirements

The software has been built and tested on the following operating systems:

- Red Hat Enterprise Linux 5 (32 bit)
- Red Hat Enterprise Linux 5 (64 bit)
- Red Hat Enterprise Linux 6 (32 bit)
- Red Hat Enterprise Linux 6 (64 bit)

Installation Instructions

The distribution may be found at <http://www.nco.ncep.noaa.gov/sib/nawips/distribution/>. After getting the necessary compressed tar file from the distribution page, please unpack the tar file in NAWIPS user directory. Please note that the dot files have been moved to the subdirectories. The sample .cshrc and .profile files are in the sample_files/ subdirectory and show the proper use and locations for these files. Update all users' .cshrc or .profile as needed.

Build the new NAWIPS system as follows:

```
cd $GEMPAK/build
external_libs_compile >&!
EXTERNAL_BUILD_SNA_OS
cd $NAWIPS
make all >&! MAKE_ALL_SNA_OS
make link >&! MAKE_LINK_SNA_OS
cd $GEMPAK/utilities/a2conv
make >&! A2CONV_MAKE_SNA_OS
```

To install NAWIPS onto AWIPS systems, follow instructions from this link:

<https://docs.google.com/document/d/10r9HdYfMM138EMfsdVuIwopvDjcCnYS4cbYlsfxqBOQ>