

NAWIPS 6.3.0 Release Notes

Product Release Information

- **Product:** NAWIPS
- **Release Number:** 6.3.0
- **Release Date:** 11 January 2011

Introduction

This document contains the release notes for NAWIPS version 6.3.0. The following sections describe the release in detail and provide late-breaking or other information that supplements the main documentation.

This is a minor release with bug fixes, table updates and a few modifications, which are outlined below.

What's New

1. Support for migration to AWIPS2
 - a. Updates to the library were made to support conversion from the legacy VG file format to the AWIPS2 XML-VG file format, and vice versa
2. Fixed GFA product creation problems reported by the AWC:
 - a. The value of *Type* for the GFA elements was being set to "N/C" when multiple elements were selected. The "N/C" was intended to indicate that no change would be made to the original value for the multi-selected elements, but that value was actually written to the elements. Fixed this by restoring the original value for *Type*.
 - b. If the automated freezing level computation wrote elements with negative heights, the text product creation function would not interpret the value correctly and would not put "SFC" in the text. Fixed this by properly identifying and processing negative heights.
 - c. The freezing level elements also had a problem with closed contours. Fixed this by properly processing the first/last point of a closed contour. The order of the points was also corrected.
3. Fixed a number of issues with the hurricane graphics and text products at the request of the NHC and CPHC/HFO forecasters
 - a. Fixed calculation of the Saffir-Simpson number for Major Hurricanes for the NHC GIS products.
 - b. Fixed information about the initial location for the NHC GIS products.
 - c. Fixed the product ID in the header of the TCV product.
 - d. Added processing to correctly identify if a backup site is generating the TCV product.
 - e. Fixed Eastern Pacific (EP) storms to allow by NHC and CPHC to create TCV products.
 - f. Fixed the TCV product to use either NHC or CPHC as appropriate.

4. Fixed the display of Redbook and AFOS graphics. The header length for files acquired directly from the CCS is different than the header from the products received via NOAAPort (SBN). The display is used for testing the creation of the products.
5. Added a new grid diagnostic – VESD – to create a vector from a magnitude and direction. Keith Brill, HPC, submitted this addition.
6. Fixed string lengths in a number of functions. The erroneous declarations caused problems in some compilers. Kevin Tyle, SUNY/Albany, submitted this modification.
7. The HPC reported a problem with some ensemble functions where the computation could generate NaN (not a number) as a result. The functions did not check for negative numbers prior to doing a square root. Fixed this by adding a check for valid values prior to all square root calculation.
8. Fixed a bug in the upper air data merge function. Significant wind data would not be updated on levels that also had significant temperature data. Fixed this by properly checking the existing data prior to attempting to overwrite the wind values.
9. Fixed a bug with the grid packing function for the case when all of the grid point data values are missing. Kevin Tyle, SUNY/Albany, submitted this modification.
10. Added functionality to the lightning decoder to process the Vaisala ASCII format as input. This format is output by the LTS2005 software. Each of the NCEP Centers has a license for the PC software and can pass the data from the PC to the decoder for display in NMAP2.
11. Fixed a bug in CLIPVGF to properly process intersection points between lines and polygons.
12. Increased the number of data sources displayed in the data selection dialog box in NMAP2 from 40 to 60.
13. Maps and Tables
 - a. Fixed King George County, VA in the county bounds tables.
 - b. Added Las Vegas, NV (VEF, 72388) to the upper air station table.
 - c. Added Weaverville, CA (KO54) to the surface station table.
 - d. Updated Public Zones and Fire Weather Zones maps and tables.
 - e. Added 20 North Dakota stations to the surface stations table at the request of the HPC.
 - f. Added satellite image color enhancement tables used by the NESDIS forecasters.
 - g. Added new image types for OMI derived satellite images for use by NESDIS.
 - h. Updated volcano information provided by the NESDIS Volcanic Ash forecasters.
 - i. Updated vaa.tbl, goeg.tbl and datatype.tbl to include entries for NESDIS.
 - j. Updated prefs.tbl to support the changes for the TCV product.

List of Modified Tables

- \$GEMTBL/config/prefs.tbl
- \$GEMTBL/config/datatype.tbl
- \$GEMTBL/bounds/countybnds.tbl, countybnds.tbl.info
- \$GEMTBL/bounds/mzcntybnds.tbl, mzcntybnds.tbl.info
- \$GEMTBL/bounds/firebnds.tbl, firebnds.tbl.info
- \$GEMTBL/bounds/pfzbnds.tbl, pfzbnds.tbl.info

- \$GEMTBL/stns/snstns.tbl
- \$GEMTBL/stns/snstns_land.tbl
- \$GEMTBL/stns/sfstns.tbl
- \$GEMTBL/stns/zones.tbl
- \$GEMTBL/stns/volcano.tbl, volcano_names.tbl
- \$GEMTBL/stns/geog.tbl
- \$GEMTBL/luts/enhance.tbl
- \$GEMTBL/luts/gdpicinh.tbl, ssmiwnd_hi.tbl, tpw_cira.tbl, tpwpct_cira.tbl, omiai.tbl, omiso2.tbl
- \$GEMTBL/sat/imgtyp.tbl
- \$GEMTBL/pgen/vaa.tbl
- \$GEMTBL/nmap/spf.nmap, vgf.nmap

List of Modified Maps

- \$GEMMAPS/tpfzus.nws, hifzus.nws, mefzus.nws, lofzus.nws
- \$GEMMAPS/tpznus.nws, hiznus.nws, meznus.nws, loznus.nws

Installation Notes

Download Site

The distribution may be found at <http://www.nco.ncep.noaa.gov/sib/nawips>. This Release Notes document is also available at this web site. The link to the download page is located at the bottom of the page. A user id and password are required to access the download area. This will be provided to site administrators via a phone call.

Installation

After getting the necessary compressed tar file from the distribution page, unpack the tar file in your NAWIPS user directory. Please note that the “dot files” have been moved to 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 entire system as follows:

- `cd $GEMPAK/build`
- `external_libs_compile >&! EXTERNAL_BUILD_${NA_OS}`
- `cd $NAWIPS`
- `make all >&! MAKE_ALL_${NA_OS}`
- `make link >&! MAKE_LINK_${NA_OS}`

Repeat this process for each operating system.

System Requirements

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

- Red Hat Enterprise Linux 4 (32 bit)
- Red Hat Enterprise Linux 4 (64 bit)
- Red Hat Enterprise Linux 5 (32 bit)
- Red Hat Enterprise Linux 5 (64 bit)