

NOUS41 KWBC 011227  
PNSWSH

Technical Implementation Notice 15-22  
National Weather Service Headquarters Washington DC  
825 AM EDT Fri May 1 2015

To:     Subscribers:  
       -Family of Services  
       -NOAA Weather Wire Service  
       -Emergency Managers Weather Information Network  
       -NOAAPORT  
       Other NWS Partners, Users and Employees

From:    Timothy McClung  
          Chief Operating Officer  
          NWS Office of Science and Technology Integration

Subject: Changes to NAM DNG and DGEX, including addition of  
          Haines Index to NOAAPORT Effective June 2, 2015

Effective on or about Tuesday, June 2, 2015, beginning with the  
1200 Coordinated Universal Time (UTC) run, the National Centers  
for Environmental Prediction (NCEP) will make the following  
modifications to the Downscaled Numerical Guidance (DNG) from the  
NAM analysis and forecast system and from the downscaled GFS by  
NAM extension (DGEX) forecast system:

- Correct the wind adjustment algorithm in regions where the  
terrain height is below sea level: This change will correct  
erroneously large adjusted wind speeds seen in NAM DNG in the  
vicinity of the Salton Sea in California.
- Change the AWIPS Haines Index calculation to use the correct  
dew-point depression and intercept and to ensure that it is a  
whole number between 2 and 6 over land, as defined in the  
original formulation of the index by Haines (1988, National  
Weather Digest)
- Fix labeling problem. The NAM DNG and DGEX DNG GRIB2 files at  
forecast hours not divisible by 12 also contain hourly  
temperatures, for example, the hour 3 file contains hour 1 and 2  
temperatures. This process is done for the calculation of the 12-  
h maximum and minimum temperatures; however, the forecast hour  
was mislabeled for these hourly temperatures, i.e., in the 3-hour  
file, hour 2 was mislabeled as hour 1, and hour 1 was mislabeled  
as hour 2. This has been fixed in this package.

In addition, the Haines Index parameters from the NAM DNG and  
DGEX will be disseminated via NOAAPORT on this date. The WMO  
headers for the products are as follows:

NAM DNG CONUS 2.5 km (hours 00 - 60): tZIa98 KWBE  
NAM DNG CONUS 5 km (hours 63 - 84): tZOa98 KWBE  
NAM DNG Alaska 3 km (hours 00 - 60): tZKa98 KWBE

NAM DNG Alaska 6 km (hours 63 - 84): tZAa98 KWBE

where

t = L for forecast hours 00,06,12,18,24,30,36,42,48,60,72,84

t = M for forecast hours 03,09,15,21,27,33,39,45,51,54,57,63,  
66,69,75,78,81

and

a = forecast hour, where A=00, B=03 or 06, C=12, D=18, E=09 or  
24, F=30, G=36, H=15 or 42, I=48, J=60, K=21 or 72, L=27 or  
84, M=54, N=66, O=33, P=39, Q=45, R=51, S=57, T=78, Z= 63,  
69, 75, 81

DGEX CONUS (hours 87 to 192, every 3 hours): tZOa98 KWBD

DGEX Alaska(hours 87 to 192, every 3 hours): tZAa98 KWBD,

where

t = Y for forecast hours 96, 108, 120, 132, 144, 156, 168, 180,  
192

t = Z for forecast hours 87, 90, 93, 99, 102, 105, 111, 114, 117,  
123, 126, 129, 135, 138, 141, 147, 150, 153, 159, 162, 165,  
171, 174, 177, 183, 186, 189

and

a = forecast hour, where M=96, N=108, O=120, P=132, Q=144, R=156,  
S=168, T=180, U=192, and all other hours between 87 and  
192 = Z

The NAM DNG and DGEX, including the Haines Index parameter, are  
available today via the following URLs:

<http://www.ftp.ncep.noaa.gov/data/nccf/com/nam/>

<ftp://ftp.ncep.noaa.gov/pub/data/nccf/com/nam/>

A set of output files with the fixes above are provided at:

NAM DNG: [http://www.ftp.ncep.noaa.gov/data1/haines\\_index/dng\\_nam](http://www.ftp.ncep.noaa.gov/data1/haines_index/dng_nam)

DGEX: [http://www.ftp.ncep.noaa.gov/data1/haines\\_index/dgex](http://www.ftp.ncep.noaa.gov/data1/haines_index/dgex)

Please ensure your decoders can handle changes in content order,  
changes in the scaling factor component within the product  
definition section (PDS) of the GRIB files, and volume changes.  
These elements may change with future NCEP model implementations.  
NCEP will make every attempt to alert users to these changes  
before implementation.

For questions regarding these changes, please contact:

Geoff DiMego  
NCEP/Mesoscale Modeling Branch  
College Park, MD  
301-683-3764  
[Geoff.DiMego@noaa.gov](mailto:Geoff.DiMego@noaa.gov)

For questions regarding the dataflow aspects of these datasets,  
please contact:

Kelly Kempisty  
NCEP/NCO Dataflow Team  
College Park, MD  
301-683-0567  
ncep.pmb.dataflow@noaa.gov

NWS National Technical Implementation Notices are online at:

<http://www.nws.noaa.gov/os/notif.htm>

\$\$