

NOUS41 KWBC 212005 AAB
PNSWSH

Technical Implementation Notice 15-01 Amended
National Weather Service Headquarters Washington DC
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To: Subscribers:
-Family of Services
-NOAA Weather Wire Service
-Emergency Managers Weather Information Network
-NOAAPORT
Other NWS Partners and NWS Employees

From: Tim McClung
Portfolio Manager
Office of Science and Technology Integration

Subject: Amended: Nearshore Wave Prediction System (NWPS)
data will be provided over the Satellite Broadcast
Network (SBN) and NOAAPORT on or about January 5, 2016,
for WFOs MFL and BOX and to the remaining Eastern and
Southern Region coastal WFOs by February 9, 2016

Amended date of data activation to January 5, 2016, for WFOs
MFL and BOX and to the remaining Eastern Region and Southern
Region coastal Weather Forecast Offices (WFO) by February 9,
2016

Effective on or about Tuesday, January 5, 2016, NWPS data will
be added to the SBN and NOAAPORT. The NWPS is run 2-4 times per
day or on demand, depending on the WFO. There are 37 coastal
WFOs. Initially, the NWPS will be available to WFOs Miami (MFL)
and Boston (BOX) and then to the 23 coastal Eastern and Southern
Region WFOs in February 2016.

Over the next 1-2 years, data for the remaining coastal WFOs
will be available. The 3-hourly grids will be disseminated in
GRIB2 format. Grid resolutions will be dependent upon individual
coastal WFOs.

The parameters associated with the messages at these resolutions
are:

Q - Wind Speed
R - Wind Direction
Z - Current speed
Z - Current direction
Z - Water level
C - Wave Height
D - Water Depth
J - Peak Frequency/Period
K - Peak Direction

Z - Wave Length
O - Wave height of swell waves
O - Partitioned swell wave height
Y - Partitioned swell peak period
P - Partitioned swell mean direction

Data volume will vary, depending on coastal WFO. The average total data volume is approximately 65 MB per cycle, 2 times per day, for each of the 23 coastal WFOs.

CG grids are described as follows:

CG0 grid - partition output on overall computational domain (low-resolution), for a given WFO

CG1 grid - integral output on overall computational grid, for a given WFO

CG2 grid - integral output on first nested grid, where applicable

CG3 grid - integral output on second nested grid, where applicable

CG4 grid - integral output on third nested grid, where applicable

CG5 grid - integral output on fourth nested grid, where applicable

Note: Each WFO may produce up to 5 grids. Not all WFOs are producing all 5 grids for their County Warning Area (CWA).

The sizes of the CG0 grid messages are approximately 8 MB per WFO. The total volume (23 coastal WFOs) is 176 MB per cycle, 2 times per day.

The sizes of the CG1 grid messages are approximately 29 MB per WFO. The total volume is 638 MB per cycle, 2 times per day.

The sizes of the CG2 grid messages are approximately 24 MB per WFO. The total volume is 528 MB per cycle, 2 times per day.

The sizes of the CG3 grid messages are approximately 3 MB per WFO. The total volume is 66 MB per cycle, 2 times per day.

The sizes of the CG4 grid messages are approximately 1 MB per WFO. The total volume is 22 per cycle, 2 times per day.

The sizes of the CG5 grid messages are 3 MB per WFO. The total volume is 66 MB per cycle, 2 times per day.

The total volume (23 coastal WFOs) for all resolution files is approximately 1.5 GB per cycle, 2 times per day.

The following summarizes the generic WMO Headers for the NWPS data: T1T2A1A2iiCCCC, where

T1 = E

T2 specifies the parameters (stated above)

A1 = A for CG0 grid; B for CG1 grid; C for CG2 grid; D for CG3

grid; E for CG4 grid, and F for CG5 grid
A2 specifies forecast hours: A=00, B=03, C=06, D=09, E=12,
F=15, G=18, H=21, I=24 and 27, J=30 and 33, K= 36 and 39, L=42
and 45, M=48 and 51, X=54 and 57, N=60 and 63, Y=66 and 69,
O=72, 75, 78 and 81, P=84, 87, 90 and 93, Q=96, 99, 102
ii = 88 (specifies surface)
CCCC corresponds to K, appended by the three-letter AWIPS code
for the generating 23 coastal WFOs:

BRO - Brownsville, Texas
CRP - Corpus Christi, Texas
HGX - Houston/Galveston, Texas
LCH - Lake Charles, Louisiana
LIX - New Orleans/Baton Rouge, Louisiana
MOB - Mobile/Pensacola, Alabama/Florida
TAE - Tallahassee, Florida
TBW - Tampa Bay, Florida
MFL - Miami-South Florida, Florida
KEY - Key West, Florida
MLB - Melbourne, Florida
JAX - Jacksonville, Florida
SJU - San Juan, Puerto Rico
CAR - Caribou, Maine
GYX - Gray/Maine, Maine
BOX - Boston, Massachusetts
OKX - New York, New York
PHI - Mt. Holly, New Jersey
LWX - Baltimore/Washington, Maryland/Virginia
AKQ - Wakefield, Virginia
MHX - Morehead City, North Carolina
ILM - Wilmington, North Carolina
CHS - Charleston, South Carolina

OUTPUT DATA:

In addition to NOAAPORT, data will be available through the NCEP
ftp/http services:

<http://nomads.ncep.noaa.gov>
<ftp://ftp.ncep.noaa.gov>

On Implementation day there will be directory changes for the
following:

</pub/data/nccf/nonoperational/com/nwps/para/> -->
</pub/data/nccf/com/nwps/prod>

Parallel data is at the following locations:

NOAAPORT/SBN feed -
<http://para.nomads.ncep.noaa.gov/pub/data/nccf/noaaport/>
NCEP ftp/http -
<http://nomads.ncep.noaa.gov/pub/data/nccf/nonoperational/com/nwps/para/>

The file format is as follows: For each of the 3-character WFO codes listed above (in lower case), the GRIB2 files are listed under date (YYYYMMDD), run cycle (CC) and model domain (CG = CG1, CG2, CG3, CG4, CG5; or CG0). The run cycle always corresponds to the analysis time of the run (HH). All output variables pertaining to the run domain are stored in a single GRIB2 file. Note that since the runs are on demand, not all CC cycles will be produced during a given YYYYMMDD.

WFO.YYYYYMMDD/CC/CG/WFO_nwps_CG_YYYYMMDD_HHMM.grib2
WFO.YYYYYMMDD/CC/CG0/WFO_nwps_CG0_Trkng_YYYYMMDD_HHMM.grib2

The NWPS website is located at:

<http://polar.ncep.noaa.gov/nwps/>

For additional information regarding GRIB2 files, visit:

<http://www.nco.ncep.noaa.gov/pmb/docs/grib2/>

For questions pertaining to NWPS data, please contact:

Nicole P. Kurkowski
NWS STI Modeling Lead
NOAA/NWS/Office of Science and Technology Integration
Silver Spring, MD 20910
nicole.kurkowski@noaa.gov

For questions regarding the model, please contact:

Hendrik L. Tolman
NCEP/Director, Environmental Modeling Center
College Park, MD 20746
301-683-3748
hendrik.tolman@noaa.gov

For questions regarding data flow aspects, please contact:

Carissa Klemmer
NCEP/NCO Dataflow Team
College Park, MD 20746
301-683-0567
ncep.list.pmb-dataflow@noaa.gov

National Technical Implementation Notices are online at:

<http://www.weather.gov/os/notif.htm>

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