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PNSWSH

TECHNICAL IMPLEMENTATION NOTICE 07-81
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
1130 AM EDT WED OCT 24 2007

TO: FAMILY OF SERVICES /FOS/ SUBSCRIBERS
NOAA WEATHER WIRE SERVICE /NWS/ SUBSCRIBERS
EMERGENCY MANAGERS WEATHER INFORMATION NETWORK /EMWIN/
SUBSCRIBERS
NOAAPORT SUBSCRIBERS
OTHER NWS CUSTOMERS...PARTNERS AND EMPLOYEES

FROM: PAUL HIRSCHBERG
CHIEF...SCIENCE PLANS BRANCH
OFFICE OF SCIENCE AND TECHNOLOGY

SUBJECT: NCEP BEGINS PRODUCING NAEFS PRODUCTS: EFFECTIVE DECEMBER 4 2007

EFFECTIVE TUESDAY DECEMBER 4 2007...WITH THE 1200 COORDINATED UNIVERSAL TIME /UTC/ RUN...THE NATIONAL CENTERS FOR ENVIRONMENTAL PREDICTION /NCEP/ WILL BEGIN PRODUCING PRODUCTS FROM THE NORTH AMERICAN ENSEMBLE FORECAST /NAEFS/ MODELING SYSTEM. THIS MODELING SYSTEM USES OUTPUT FROM BOTH THE NCEP GLOBAL ENSEMBLE FORECAST SYSTEM /GEFS/ AND THE CANADIAN ENSEMBLE FORECAST SYSTEM /CEFS/ AND COMBINES THEM TO PRODUCE NAEFS OUTPUT.

NCEP WILL BEGIN PRODUCING GLOBAL FORECAST SYSTEM /GFS/ BIAS CORRECTED FILES AT ONE DEGREE RESOLUTION...THROUGH 180 HOURS...SIMILAR TO THE CURRENT SET OF NCEP GEFS BIAS CORRECTED DATA SETS. THERE WILL BE 35 VARIABLES AVAILABLE. THESE HIGHER RESOLUTION DATA SETS WILL BE ASSIMILATED INTO THE NCEP GEFS BIAS CORRECTED FORECAST PRODUCTS AND ENHANCE/IMPROVE THE NCEP GEFS NUMERICAL GUIDANCE. THE NEW AND IMPROVED BIAS CORRECTED NCEP GEFS DATA SETS WILL BE AVAILABLE AT 00/06/12/18 UTC. PRODUCTS FOR WEIGHTS AND ANOMALIES WILL ALSO BE PRODUCED. ALL OUTPUT FROM THE GEFS WILL BE AVAILABLE THROUGH 384 HOURS EXCEPT FOR THE HIGH RESOLUTION GFS BIAS CORRECTED FORECASTS.

NCEP WILL BEGIN PRODUCING NAEFS PRODUCTS FROM THE COMBINED NCEP GEFS...20 MEMBERS...AND CMC GEFS...20 MEMBERS...FOR 00 AND 12 UTC. THESE PRODUCTS WILL BE PRODUCED ON A ONE DEGREE GLOBAL GRID. PRODUCTS INCLUDE MEANS/SPREADS/MODES AND 10...50 AND 90 PERCENT PROBABILITY FORECASTS. ANOMALY PRODUCTS WILL ALSO BE AVAILABLE. ALL NAEFS OUTPUT WILL BE AVAILABLE THROUGH 384 HOURS.

NCEP WILL BEGIN PRODUCING NDFD GRIDDED OUTPUT OVER THE CONUS DOMAIN...5 KM RESOLUTION...FROM THE NAEFS AND NCEP GEFS PRODUCT SUITES. THE NCEP GEFS GRIDS WILL BE AVAILABLE AT 00/06/12/18 UTC. THE NAEFS GRIDS WILL BE AVAILABLE ONLY AT 00 AND 12 UTC. THESE PRODUCTS WILL CONTAIN FOUR VARIABLES:

1. SURFACE PRESSURE
2. 2-METER TEMPERATURE
- 3-4. U/V COMPONENTS OF WIND.

ALSO...MEAN/SPREAD/MODE AND 10/50/90 PERCENT PROBABILITY PRODUCTS WILL BE PRODUCED. ALL NDFD OUTPUT WILL BE AVAILABLE THROUGH 384 HOURS.

PARALLEL DATA SETS ARE AVAILABLE FOR EVALUATION ON THE NCEP PUBLIC FILE TRANSFER PROTOCOL /FTP/ SERVER AT THE URL BELOW. NCEP ENCOURAGES ALL USERS TO EVALUATE THESE DATA SETS /USE LOWER CASE AND THE CURRENT DATE FOR YYYYMMDD/:

[FTP://FTPFRD.NCEP.NOAA.GOV/PUB/DATA/NCCF/COM/GENS/PARA/NAEFS.YYYYMMDD](ftp://ftpprd.ncep.noaa.gov/pub/data/nccf/com/gens/para/naefs.yyyyymmdd)

THE ENVIRONMENTAL MODELING CENTER /EMC/ HAS A WEBSITE FOR MORE INFORMATION CONCERNING ALL NCEP MODELING SYSTEMS /USE LOWER CASE/:

[HTTP://WWW.EMC.NCEP.NOAA.GOV](http://www.emc.ncep.noaa.gov)

SPECIFIC INFORMATION REGARDING NAEFS CAN BE FOUND AT THE LINK BELOW /USE LOWER CASE/:

[WWW.EMC.NCEP.NOAA.GOV/GMB/YZHU/HTML/IMP/200711_IMP.HTML](http://www.emc.ncep.noaa.gov/gmb/yzhu/html/imp/200711_imp.html)

DATA DELIVERY TIMING/VOLUME/CONTENT INFORMATION:

NOAAPORT DATA:

- NO CHANGE IS EXPECTED WITH NCEP GEFS ENSEMBLE PRODUCTS THAT ARE CURRENTLY DELIVERED TO NOAAPORT CUSTOMERS.
- NO CHANGE IS EXPECTED IN THE CONTENT DELIVERY TIME.
- NO CHANGES IN DATA VOLUMES ARE EXPECTED.
- NO CHANGE IN PDS CONTENT IS EXPECTED.

NCEP/NWS FTP SERVERS:

- AT THE CURRENT TIME...GLOBAL NCEP GEFS LATITUDE/LONGITUDE /LAT/LON/ GRIDDED BINARY /GRIB/ FILES ARE DELIVERED TO BOTH SERVERS.
- CURRENT DATA SETS WILL BE NOT BE CHANGED.
- NO CHANGE IS EXPECTED IN THE CONTENT DELIVERY TIME.
- NO SIGNIFICANT CHANGES IN DATA VOLUMES ARE EXPECTED.
- NO CHANGE IN PDS CONTENT IS EXPECTED.
- NEW NAEFS NATIONAL DIGITAL GRIDDED DATABASE /NDGD/ AND BIAS CORRECTED DATA SETS FOR 00 AND 12 UTC WILL BECOME AVAILABLE ON THE NCEP FTP SERVER ON THE DAY OF THE IMPLEMENTATION.

NCEP ENCOURAGES ALL USERS TO ENSURE THEIR DECODERS ARE FLEXIBLE AND ARE ABLE TO ADEQUATELY HANDLE CHANGES IN CONTENT ORDER...PARAMETER FIELDS CHANGING ORDER...CHANGES IN THE SCALING FACTOR COMPONENT WITHIN THE PRODUCT DESCRIPTION SECTION /PDS/ OF THE GRIB FILES AND ALSO ANY VOLUME

CHANGES WHICH MAY BE FORTHCOMING. THESE ELEMENTS MAY CHANGE WITH FUTURE NCEP MODEL IMPLEMENTATIONS. NCEP WILL MAKE EVERY ATTEMPT TO ALERT USERS TO THESE CHANGES PRIOR TO ANY IMPLEMENTATIONS.

IF YOU HAVE ANY QUESTIONS CONCERNING THE SCIENTIFIC CHANGES WITHIN THE MODELING SYSTEM...PLEASE CONTACT:

YUEJIAN ZHU
NCEP/EMC
CAMP SPRINGS MARYLAND
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EMAIL: YUEJIAN.ZHU@NOAA.GOV

IF YOU HAVE ANY QUESTIONS CONCERNING THE DATAFLOW ASPECTS OF THIS IMPLEMENTATION...PLEASE SEND AN EMAIL TO THE NCEP/NCO/PMB DATAFLOW HELPDESK /USE UPPER CASE LETTERS FOR THE NCEP.PMB.D PORTION OF EMAIL ADDRESS AND LOWER CASE FOR THE REMAINDER/:

NCEP.PMB.DATAFLOW@NOAA.GOV

NATIONAL TECHNICAL IMPLEMENTATION NOTICES ARE ONLINE AT /USE LOWER CASE/:

[HTTPS://WWW.WEATHER.GOV/NOTIFICATION/ARCHIVE](https://www.weather.gov/notification/archive)

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