

NOUS41 KWBC 061520
PNSWSH

TECHNICAL IMPLEMENTATION NOTICE 08-91
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
1020 AM EST THU NOV 6 2008

TO: SUBSCRIBERS:
-FAMILY OF SERVICES
-NOAA WEATHER WIRE SERVICE
-EMERGENCY MANAGERS WEATHER INFORMATION NETWORK
-NOAAPORT
OTHER NWS PARTNERS...USERS AND EMPLOYEES

FROM: JASON TUELL
CHIEF...SCIENCE PLANS BRANCH
OFFICE OF SCIENCE AND TECHNOLOGY

SUBJECT: UPGRADE TO SHORT RANGE ENSEMBLE MODELING SYSTEM:
EFFECTIVE DECEMBER 9 2008

EFFECTIVE TUESDAY DECEMBER 9 2008...AT 1500 COORDINATED
UNIVERSAL TIME /UTC/...THE NATIONAL CENTERS FOR ENVIRONMENTAL
PREDICTION /NCEP/ WILL UPGRADE THE SHORT RANGE ENSEMBLE
MODELING SYSTEM /SREF/.

MODELING SYSTEM CHANGES INCLUDE:

1. THREE OF THE FOUR MODELS USED IN THE SREF /NMM...ARW AND RSM/
WILL BE UPGRADED IN MODEL VERSION /WRF FROM V2.0 TO V2.2...RSM
FROM V2003 TO V2008/ AND INCREASED FROM 40/45KM TO 32KM IN
HORIZONTAL RESOLUTION. THE APPLICATION OF THE PROCEDURE IMPROVES
SIGNIFICANTLY THE PERFORMANCE OF EACH INDIVIDUAL MEMBER SUCH AS
THE REDUCTION OF STRONG COLD BIAS FOR LOWER-LEVEL TEMPERATURE IN
NMM MEMBERS AND MORE DETAILED SPATIAL STRUCTURE. AS A RESULT OF
THIS BETTER BEHAVED PROBABILITIES ARE ALSO ACHIEVED BY INCREASING
FORECAST SHARPNESS.
2. INCREASE OF WRF MEMBERSHIP /NMM FROM 3 TO 5...ARW FROM 3 TO 5/
AND REDUCTION OF ETA MEMBERSHIP /FROM 10 TO 6...MEMBERS
N3...N4...P3 AND P4 ARE REMOVED/
3. MORE PHYSICS DIVERSITY BY SWITCHING FROM ZHOU CLOUD SCHEME TO
FERRIER CLOUD SCHEME IN THREE OUT OF FIVE RSM MEMBERS.
4. FORECAST OUTPUT /GRIB/ FREQUENCY WILL INCREASE FROM 3-HOURLY
TO HOURLY FOR THE FIRST 39 HOURS.
5. FOUR NEW AVIATION PRODUCTS WILL BE ADDED TO ENSEMBLE PRODUCTS
/MEAN AND PROBABILITY/:
-ICING
-CLEAR AIR TURBULENCE
-LOW LEVEL CEILING

-FLIGHT RESTRICTION

6. INDIVIDUAL SREF MEMBERS BUFR OUTPUT WILL BE BROKEN OUT INTO INDIVIDUAL STATIONS.

PARALLEL DATA SETS FOR THE CURRENT PRODUCTS AND UPGRADED PRODUCTS ARE AVAILABLE ON THE NCEP FTP SERVER AT THE LINK BELOW. NCEP ENCOURAGES ALL USERS TO EVALUATE THESE DATA SETS TO ENSURE THAT THEIR SYSTEMS ARE PREPARED FOR THE UPCOMING CHANGE.

/USE LOWERCASE/

FTP://FTPPRD.NCEP.NOAA.GOV/PUB/DATA/NCCF/COM/SREF/PARA/SREF.YYYYMMDD/HH

THE ENVIRONMENTAL MODELING CENTER /EMC/ HAS A PUBLICLY AVAILABLE WEBSITE WHICH PROVIDES USERS MORE INFORMATION CONCERNING THE SREF MODELING SYSTEM AS WELL AS ALL OTHER NCEP MODELING SYSTEMS

/USE LOWERCASE/:

HTTP://WWW.EMC.NCEP.NOAA.GOV

DATA DELIVERY TIMING/VOLUME/CONTENT CHANGES:

NOAAPORT DATA:

-AT THE CURRENT TIME...THE FOLLOWING DOMAINS ARE DISSEMINATED TO NOAAPORT/AWIPS USERS: CONUS...ALASKA...EASTERN PACIFIC.

-NO DATA CONTENT CHANGES ARE EXPECTED.

-NO CHANGE IS EXPECTED IN THE CONTENT DELIVERY TIME.

-NO SIGNIFICANT CHANGES IN DATA VOLUMES ARE EXPECTED.

-NO CHANGE IN PDS CONTENT IS EXPECTED.

NWS FTP SERVER /USE LOWERCASE LETTERS EXCEPT FOR THE SL...ST...MT AND CY. THE HH REFERS TO THE CYCLE: 03...09...15...21. THE YYYYMMDD REFERS TO THE CURRENT DATE/:

FTP://TGFTP.NWS.NOAA.GOV/SL.US008001/ST.OPNL/MT.SREF_CY.YY/RD.YYY YMMDD

-THE CONUS DOMAIN IS CURRENTLY DISSEMINATED.

-NO DATA CONTENT CHANGES ARE EXPECTED.

-NO CHANGE IS EXPECTED IN THE CONTENT DELIVERY TIME.

-NO SIGNIFICANT CHANGES IN DATA VOLUMES ARE EXPECTED.

-NO CHANGE IN PDS CONTENT IS EXPECTED.

NCEP FTP SERVER: /USE LOWER CASE/

-AT THE CURRENT TIME...THE FOLLOWING DOMAINS ARE DISSEMINATED:

FTP://FTPPRD.NCEP.NOAA.GOV/PUB/DATA/NCCF/COM/SREF/PROD

NCEP FTP SERVER USERS: CONUS...ALASKA...EASTERN PACIFIC AND NWS

FTP SERVERS USERS: CONUS

- NO CHANGE IS EXPECTED IN THE CONTENT DELIVERY TIME.
- NO CHANGE IN PDS CONTENT IS EXPECTED FOR THE CURRENT DATA SETS WHICH ARE DELIVERED.
- NO SIGNIFICANT CHANGES IN DATA VOLUMES ARE EXPECTED FOR THE DATA SETS WHICH ARE CURRENTLY DELIVERED.
- NO DIRECTORY STRUCTURE CHANGE IS EXPECTED.
- MEMBERSHIP CHANGE IS EXPECTED: ETA'S N3...P3...N4...P4 FOUR MEMBERS WILL BE GONE...NMM N2...P2 AND EM N2...P2 FOUR MEMBERS WILL BE ADDED.

NCEP ENCOURAGES 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 PDS OF THE GRIB FILES AND ANY VOLUME CHANGES THAT MAY BE FORTHCOMING. 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 THE SCIENTIFIC CONTENT OF THE MODELING SYSTEM...PLEASE CONTACT:

GEOFF DIMEGO
NCEP/EMC
CAMP SPRINGS MD 20746
301-763-8000X7221
GEOFF.DIMEGO@NOAA.GOV

FOR QUESTIONS REGARDING THE DATAFLOW ASPECTS OF THESE DATA SETS...PLEASE CONTACT THE NCEP/NCO/PMB DATAFLOW HELP DESK EMAIL ADDRESS BELOW /USE LOWERCASE LETTERS/:

EMAIL: NCEP.PMB.DATAFLOW@NOAA.GOV

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

[HTTP://WWW.WEATHER.GOV/OS/NOTIF.HTM](http://WWW.WEATHER.GOV/OS/NOTIF.HTM)

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