

NOUS41 KWBC 091850
PNSWSH

TECHNICAL IMPLEMENTATION NOTICE 07-89
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
150 PM EST FRI NOV 9 2007

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

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

SUBJECT: UPGRADE TO SHORT RANGE ENSEMBLE MODELING SYSTEM:
EFFECTIVE DECEMBER 11 2007

EFFECTIVE TUESDAY DECEMBER 11 2007...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:

- BIAS CORRECTED FIELDS WILL BE PRODUCED FOR ALL COMPONENTS/
MEMBERS. EACH BIAS CORRECTION IS COMPUTED USING A DECAYING
AVERAGE APPROACH WHERE HIGHER WEIGHT IS GIVEN TO THE MORE
RECENT FORECAST. A SEPARATE BIAS CORRECTION IS COMPUTED AT EACH
GRID POINT AND APPLIED TO EACH OF THE 21 SREF MEMBERS, FOR EACH
CYCLE...03Z...09Z...15Z AND 21Z...FOR EACH FORECAST LEAD TIME
...3 HOURLY OUT TO 87 HOURLY. ALL ENSEMBLE PRODUCT GENERATION
USES THESE BIAS CORRECTED MEMBERS. THE APPLICATION OF THE
PROCEDURE RESULTS IN SIGNIFICANTLY LOWER ERRORS AND BETTER
BEHAVED PROBABILITIES.
- THE DOMAIN OF RSM MEMBERS WILL BE EXPANDED TO COVER MORE AREA
WEST OF ALASKA COVERED BY THE OTHER MEMBERS.
- FOUR NEW AVIATION PRODUCTS WILL BE ADDED:
 - ICING
 - CLEAR AIR TURBULENCE
 - LOW LEVEL CEILING
 - FLIGHT RESTRICTION
- ADD BUFR OUTPUT FROM SIX WRF MEMBERS

A LIST OF BIAS CORRECTED FIELDS IS AVAILABLE. PLEASE SEE THE
FOLLOWING WEBSITE FOR MORE INFORMATION: /USE LOWERCASE LETTERS/

[HTTP://WWW.NCO.NCEP.NOAA.GOV/PMB/CHANGES/SREF-](http://www.nco.ncep.noaa.gov/pmb/changes/sref-)

12_11_2007_BIASCORRECTEDFIELDS.HTML

PARALLEL DATA SETS FOR THE CURRENT PRODUCTS AND BIAS CORRECTED 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 LETTERS/

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

THE ENVIRONMENTAL MODELING CENTER /EMC/ HAS A PUBLICLY AVAILABLE WEB SITE WHICH CAN PROVIDE USERS MORE INFORMATION CONCERNING THE SREF MODELING SYSTEM AS WELL AS ALL OTHER NCEP MODELING SYSTEMS. /PLEASE USE LOWERCASE LETTERS/

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.HH/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 LOWERCASE LETTERS/

- 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
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.
- THE DIRECTORY STRUCTURE WILL CHANGE SIGNIFICANTLY FOR THE SREF OUTPUT WHICH IS CURRENTLY DISSEMINATED. THE CYCLES WILL BE SEPARATED INTO THEIR OWN SUBDIRECTORIES INSTEAD OF RESIDING IN ONE SUBDIRECTORY. PLEASE SEE THE PARALLEL DATA SETS FOR AN EXAMPLE OF THE NEW DIRECTORY PATH. THE NEW FORMAT WILL BE AS FOLLOWS:/USE LOWERCASE LETTERS/

MAIN/PARENT DIRECTORY STRUCTURE:

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

CURRENT SUBDIRECTORY STRUCTURE

SREF.YYYYMMDD

NEW SUBDIRECTORY STRUCTURE

SREF.YYYYMMDD/HH/PGRB - INDIVIDUAL MEMBER GRIB1/GRIB2 DATA SETS

SREF.YYYYMMDD/HH/ENSPROD - MEAN/SPREAD/PROB GRIB1/GRIB2 DATA SETS

- NEW BIAS CORRECTED DATA SETS WILL BECOME AVAILABLE ON THE NCEP FTP SERVER. THESE DATA SETS WILL BE DELIVERED APPROXIMATELY 60 MINUTES AFTER THE NON-BIAS CORRECTED DATA SETS.

MAIN DIRECTORY STRUCTURE:

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

SUBDIRECTORY STRUCTURE

SREF.YYYYMMDD/HH/PGRB_BIASC - INDIVIDUAL MEMBER GRIB1/GRIB2 DATA SETS

SREF.YYYYMMDD/HH/ENSPROD_BIASC - MEAN/SPREAD/PROB GRIB1/GRIB2 DATA SETS

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
PHONE: 301-763-8000X7221
EMAIL: 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 FOR THE FOLLOWING PORTION OF THE EMAIL
ADDRESS BELOW/: /ATAFLOW/

EMAIL: NCEP.PMB.DATAFLOW@NOAA.GOV

THIS NOTICE AND OTHER TECHNICAL IMPLEMENTATION NOTICES ARE
AVAILABLE ONLINE AT /USE LOWER CASE LETTERS/:

[HTTP://WWW.NWS.NOAA.GOV/OM/NOTIF.HTM](http://www.nws.noaa.gov/om/notif.htm)

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