

NOUS41 KWBC 222020
PNSWSH

PUBLIC INFO STATEMENT...TECHNICAL IMPLEMENTATION NOTICE 02-17
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC
430 PM EDT THU AUG 22 2002

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

FROM: HUA-LU PAN
CHIEF...GLOBAL CLIMATE AND WEATHER MODELING BRANCH
ENVIRONMENTAL MODELING CENTER /EMC/
NATIONAL CENTERS FOR ENVIRONMENTAL PREDICTION /NCEP/

AND

JOHN WARD
CHIEF...PRODUCTION MANAGEMENT BRANCH
NCEP CENTRAL OPERATIONS /NCO/
NATIONAL CENTERS FOR ENVIRONMENTAL PREDICTION /NCEP/

SUBJECT: RESCHEDULED CHANGES TO THE HORIZONTAL AND VERTICAL
RESOLUTIONS OF THE NCEP GLOBAL FORECAST
SYSTEM...NOW EFFECTIVE OCT 29 2002 AT 1200 UTC

NOTE: THE FOLLOWING CHANGES HAVE NO IMPACT ON NOAA WEATHER
WIRE SUBSCRIBERS

ON OCTOBER 29 2002 AT 1200 COORDINATED UNIVERSAL TIME /UTC/...THE
NATIONAL CENTERS FOR ENVIRONMENTAL PREDICTION /NCEP/ WILL CHANGE
THE HORIZONTAL AND VERTICAL RESOLUTIONS OF THE ANALYSIS AND
FORECAST SUITES IN ITS GLOBAL FORECAST SYSTEM /GFS/. THE CHANGE
IN RESOLUTION IS THE FINAL STEP IN A CONSOLIDATION OF GLOBAL
MODEL JOBS...WHICH PREVIOUSLY INCLUDED ELIMINATION OF THE MEDIUM
RANGE FORECAST /MRF/ RUN...ON APRIL 24 2002...AND THE GENERATION
OF THE 4 PER DAY GFS /FORMERLY KNOWN AS THE AVN/ RUNS OUT TO 16
DAYS...ON MARCH 5 2002.

THE GFS WILL INCREASE ITS USE OF SATELLITE DATA...AND WILL CHANGE
ITS CURRENT T170...42-LAYER /T170L42/ RESOLUTION TO T254L64...
HORIZONTAL RESOLUTION CHANGES FROM 75 KM TO 55 KM...VERTICAL
RESOLUTION CHANGES PRIMARILY IN THE STRATOSPHERE...WITH MODEL TOP
RAISED FROM 2 HPA TO 0.2 HPA.

FORECAST MODEL SUITE...CURRENTLY T170L42 /0-180 HOURS/ AND T62L28
/180-384 HOURS/...WILL BECOME A DOWNWARD CASCADE OF RESOLUTIONS
FOR SHORT MEDIUM AND LONG RANGE FORECASTS...T254L64
/0-84 HOURS/...T170L42 /84-180 HOURS/ AND T126L28
/180-384 HOURS/.

USERS CAN EXPECT TO SEE SLIGHT IMPROVEMENTS IN MOST FORECASTS. THE TROPICS MAY BE SLIGHTLY MORE NOISY. MODEL BIASES AND OTHER CHARACTERISTICS WILL REMAIN LARGELY UNCHANGED. IT IS ANTICIPATED THAT THE HIGHER RESOLUTION DURING THE FIRST 84 HOURS OF THE FORECAST WILL IMPROVE MODELED DETAILS OF FRONTS...JET STREAMS...PRECIPITATION...AND TROPICAL STORMS...WHILE THE HIGHER RESOLUTION BEYOND 180 HOURS WILL IMPROVE FORECASTS OF TRANSIENTS...THEREBY IMPROVING PREDICTIONS OF REGIME CHANGES.

THE IMPACT OF THIS CHANGE ON THE NCEP PRODUCTION SCHEDULE WILL BE AS FOLLOWS:

GFS 120 HOUR PRODUCTS DELAYED 21 MINUTES
GFS 384 HOUR PRODUCTS DELAYED 21 MINUTES
GFDL HURRICANE MODEL DELAYED 25-30 MINUTES
WAVE MODEL PRODUCTS DELAYED 25 MINUTES
AVN MOS PRODUCTS DELAYED 21 MINUTES
1200 UTC GLOBAL ENSEMBLE PRODUCTS DELAYED 25 MINUTES

WHEN THE NEXT CENTRAL COMPUTER SYSTEM BECOMES OPERATIONAL BY THE THIRD QUARTER /APRIL...MAY...AND JUNE/ OF FISCAL YEAR 2003...THE NCEP PRODUCTION SCHEDULE WOULD RETURN TO ITS CURRENT CONFIGURATION.

IF YOU HAVE ANY QUESTIONS ABOUT THESE CHANGES TO THE NCEP GLOBAL FORECAST SYSTEM PLEASE CONTACT:

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OR

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THIS AND OTHER NWS TECHNICAL IMPLEMENTATION NOTICES ARE AVAILABLE ON THE INTERNET AT /USE LOWER CASE/:

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

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