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PNSWSH

TECHNICAL IMPLEMENTATION NOTICE 06-40  
NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC  
330 PM EDT FRI JUN 9 2006

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: IMPACT ON ETA BASED MOS GUIDANCE WITH IMPLEMENTATION OF NON-  
HYDROSTATIC MESOSCALE MODEL ON JUNE 13 2006

REFER TO: [TECHNICAL IMPLEMENTATION NOTICE /TIN/ 05-68](#)  
[AMENDED](#)...TRANSMITTED ON MARCH 20 2006.

ATTENTION USERS OF THE MODEL OUTPUT STATISTICS /MOS/ GUIDANCE:

EFFECTIVE JUNE 13 2006...BEGINNING WITH THE 1200 COORDINATED UNIVERSAL  
TIME /UTC/ RUN...THE NWS WILL REPLACE THE FORECAST MODEL CURRENTLY RUN IN  
THE NORTH AMERICAN MESOSCALE /NAM/ SYSTEM. THE 12 KM HORIZONTAL  
RESOLUTION ETA MODEL IS CURRENTLY USED IN THIS SYSTEM. THE MODEL WILL BE  
REPLACED WITH A 12 KM HORIZONTAL RESOLUTION WEATHER RESEARCH AND  
FORECASTING /WRF/ VERSION OF THE NON-HYDROSTATIC MESOSCALE MODEL /NMM/.

RECENT VERIFICATIONS INDICATE THAT THE CURRENT SYSTEM OF ETA-BASED MOS  
EQUATIONS...WHEN APPLIED TO OUTPUT FROM THE WRF VERSION OF THE  
NMM...PRODUCES GUIDANCE THAT IS CONSIDERABLY LESS ACCURATE THAN THE  
CURRENTLY OPERATIONAL ETA MOS GUIDANCE.

TO ALLOW USERS TO TRANSITION TO MOS GUIDANCE BASED ON THE GLOBAL FORECAST  
SYSTEM /GFS/...THE NWS WILL RUN AN INTERIM 32 KM ETA MODEL OVER THE NAM  
DOMAIN DURING THE 0000 AND 1200 UTC FORECAST CYCLES. FORECASTS FROM THIS  
ETA RUN WILL BE USED AS INPUT TO THE ETA MOS. NO DIRECT MODEL OUTPUT FROM  
THIS INTERIM VERSION OF THE ETA MODEL WILL BE TRANSMITTED OR MADE  
AVAILABLE ON NWS SERVERS.

THIS IMPLEMENTATION OF THE INTERIM ETA MODEL AND SUBSEQUENT MODIFICATION  
TO THE ETA MOS GUIDANCE WILL OCCUR ON JUNE 13 2006 WHEN THE WRF IS  
IMPLEMENTED. NO DELAY IN THE TIME OF TRANSMISSION OF THE ETA-BASED MOS  
PRODUCTS IS EXPECTED. THE QUALITY OF THE ETA MOS GUIDANCE IN THIS  
RECONFIGURATION IS EXPECTED TO BE ABOUT THE SAME AS THAT PRODUCED BY THE  
CURRENT ETA MOS SYSTEM.

THE EFFECTIVE DATE OF THIS CHANGE IS SOONER THAN SPECIFIED BY NWS POLICY. REDUCING THE NORMAL ADVANCE LEAD TIME WAS APPROVED DUE TO THE RECENT UNDERSTANDING OF THE NEGATIVE IMPACT THAT THE NCEP MODEL CHANGE ON JUNE 13 2006 WOULD HAVE ON THE WRF MOS.

SAMPLE VERIFICATIONS CAN BE FOUND AT THE URL LISTED BELOW /USE LOWER CASE/:

[HTTP://WWW.WEATHER.GOV/MDL/SYNOP/WRFMOSEVAL.HTM](http://www.weather.gov/mdl/synop/wrfmoseval.htm)

THE FOLLOWING PUBLIC WEATHER ALPHANUMERIC MESSAGES...MARINE MESSAGES AND BINARY UNIVERSAL FORM FOR THE REPRESENTATION OF METEOROLOGICAL DATA /BUFR/ PRODUCTS ARE AFFECTED BY THIS CHANGE:

TABLE 1. COMMUNICATION IDENTIFIERS FOR THE ETA-BASED MOS PUBLIC WEATHER TEXT PRODUCTS

WMO HEADING	AWIPS ID
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FOAK47 KWNO	METAJK
FOAK48 KWNO	METAFC
FOAK49 KWNO	METAFG
FOPA40 KWNO	METPA0
FOUS44 KWNO	METNE1
FOUS45 KWNO	METSE1
FOUS46 KWNO	METNC1
FOUS47 KWNO	METSC1
FOUS48 KWNO	METRM1
FOUS49 KWNO	METWC1

TABLE 2. COMMUNICATION IDENTIFIERS FOR THE ETA-BASED MOS MARINE TEXT PRODUCTS

WMO HEADING	AWIPS ID
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FQAK47 KWNO	MMEAK1
FQPA40 KWNO	MMEHI1
FQUS41 KWNO	MMENE1
FQUS42 KWNO	MMESE1
FQUS43 KWNO	MMEGL1
FQUS44 KWNO	MMEGF1
FQUS45 KWNO	MMENW1
FQUS46 KWNO	MMESW1

TABLE 3. COMMUNICATION IDENTIFIERS FOR THE ETA-BASED MOS BUFR MESSAGES

WMO HEADING

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JSML10 KWNO

JSML11 KWNO

JSML12 KWNO

JSML13 KWNO

JSML14 KWNO

JSML15 KWNO

JSML16 KWNO

JSML17 KWNO

TECHNICAL PROCEDURES BULLETINS DESCRIBING THE ETA MOS PUBLIC WEATHER TEXT PRODUCTS ARE AVAILABLE AT THE URL LISTED BELOW /USE LOWER CASE/:

[HTTP://WWW.NWS.NOAA.GOV/MDL/SYNOP/SMBPUBLICATIONS.HTML](http://www.nws.noaa.gov/mdl/synop/smbpublications.html)

A DESCRIPTION OF THE MOS MARINE TEXT MESSAGE CAN BE FOUND AT THE URL LISTED BELOW /USE LOWER CASE/:

[HTTP://WWW.NWS.NOAA.GOV/MDL/SYNOP/MARINEDESC.HTM](http://www.nws.noaa.gov/mdl/synop/marine_desc.htm)

MORE INFORMATION ABOUT THE BUFR MESSAGES CAN BE FOUND AT THE URL LISTED BELOW /USE LOWER CASE/:

[HTTP://WWW.NWS.NOAA.GOV/MDL/SYNOP/BUFR.HTML](http://www.nws.noaa.gov/mdl/synop/bufr.html)

IF YOU HAVE QUESTIONS ABOUT THESE PRODUCTS OR THE MOS GUIDANCE...PLEASE CONTACT:

J. PAUL DALLAVALLE

MDL/SILVER SPRING MARYLAND

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EMAIL: [PAUL.DALLAVALLE@NOAA.GOV](mailto:PAUL.DALLAVALLE@NOAA.GOV)

LINKS TO THE MOS PRODUCTS...ALONG WITH DESCRIPTIONS...CAN BE FOUND AT /USE LOWER CASE/:

[HTTP://WWW.NWS.NOAA.GOV/MDL/SYNOP](http://www.nws.noaa.gov/mdl/synop)

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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