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TECHNICAL IMPLEMENTATION NOTICE 05-56 NATIONAL WEATHER SERVICE HEADQUARTERS WASHINGTON DC 1030 AM EDT FRI JUL 22 2005

- TO: SUBSCRIBERS: -FAMILY OF SERVICES /FOS/ -NOAA WEATHER WIRE SERVICE /NWWS/ -EMERGENCY MANAGERS WEATHER INFORMATION NETWORK /EMWIN/ -NOAAPORT OTHER NWS CUSTOMERS...PARTNERS AND EMPLOYEES
- FROM: PAUL HIRSCHBERG CHIEF...SCIENCE PLANS BRANCH OFFICE OF SCIENCE AND TECHNOLOGY

SUBJECT: ADDITION OF NEW GFS-BASED GRIDDED MOS GUIDANCE: EFFECTIVE NOVEMBER 29 2005

ATTENTION USERS OF THE MODEL OUTPUT STATISTICS /MOS/ GUIDANCE: NOTE: THIS CHANGE IS SUBJECT TO OBTAINING A WAIVER FROM THE TELECOMMUNICATIONS OPERATIONS CENTER MORATORIUM ON SYSTEM CHANGES.

ON TUESDAY...NOVEMBER 29 2005...THE NWS WILL PRODUCE NEW GLOBAL FORECAST SYSTEM /GFS/-BASED GRIDDED MODEL OUTPUT STATISTICS /MOS/ GUIDANCE AND DISSEMINATE IT ON THE SATELLITE BROADCAST NETWORK /SBN/...NOAAPORT AND THE NWS FILE TRANSFER PROTOCOL /FTP/ SERVER. THESE GUIDANCE PRODUCTS WILL BE IN GRIDDED BINARY VERSION TWO /GRIB2/ FORMAT. THE NEW COMMUNICATION IDENTIFIERS FOR THESE PRODUCTS ARE SHOWN IN TABLE 1 BELOW. THE GRIDDED MOS PRODUCTS WILL CONTAIN GUIDANCE ON THE 5 KM NATIONAL DIGITAL FORECAST DATABASE /NDFD/ CONTIGUOUS U.S. /CONUS/ GRID FOR SELECTED ELEMENTS AT PROJECTIONS OF ONE TO SEVEN DAYS IN ADVANCE.

GRIDS WILL BE GENERATED FROM THE 0000 AND 1200 COORDINATED UNIVERSAL TIME /UTC/ MODEL RUNS. GUIDANCE WILL BE AVAILABLE FOR THE FOLLOWING ELEMENTS WITH OTHERS TO BE ADDED AT A LATER DATE:

- DAYTIME MAXIMUM AND NIGHTTIME MINIMUM TEMPERATURE
- 2-METER SPOT TEMPERATURE
- 2-METER SPOT DEWPOINT TEMPERATURE
- RELATIVE HUMIDITY
- WIND SPEED
- WIND DIRECTION
- PROBABILITY OF PRECIPITATION /6- AND 12-HOUR/
- PROBABILITY OF THUNDERSTORMS /3-...6- AND 12-HOUR/
- 24-HOUR SNOWFALL AMOUNT

A WEBPAGE PROVIDING MORE INFORMATION REGARDING PROJECTIONS AND ELEMENTS FOR WHICH GUIDANCE IS AVAILABLE IS REFERENCED BELOW.

INITIALLY...ONLY THE WESTERN THIRD OF THE NDFD GRID WILL BE POPULATED WITH GUIDANCE. THE OTHER TWO-THIRDS OF THE GRID WILL CONTAIN MISSING VALUES.

NWS WILL FILL IN THE REMAINDER OF THE GRID AS THE GUIDANCE BECOMES AVAILABLE.

EXPERIMENTAL GRIB2 PRODUCTS FOR SOME ELEMENTS ARE AVAILABLE ON THE NWS FTP SERVER AT /USE LOWER CASE EXCEPT FOR SL...ST...DF...DC...GT AND AR/:

FTP://TGFTP.NWS.NOAA.GOV/SL.US008001/ST.EXPR/DF.GR2/DC.NDGD/GT.MOSGFS/AR.C ONUS

TABLE 1: COMMUNICATION IDENTIFIERS FOR THE GFS-BASED GRIDDED MOS GRIB2 PRODUCTS. EACH GRIB2 PRODUCT HAS A UNIQUE WORLD METEOROLOGICAL ORGANIZATION /WMO/ HEADER. LISTED BELOW ARE REPRESENTATIONS OF THE WMO HEADERS. A COMPLETE LIST OF GRIDDED MOS WMO HEADERS IS AVAILABLE AT /USE LOWER CASE/:

HTTP://WWW.NWS.NOAA.GOV/MDL/SYNOP/GMOS/GMOSHEADERS.PDF

ELEMENT
WIND DIRECTION
WIND SPEED
12-HOUR PROBABILITY OF PRECIPITATION
2-METER TEMPERATURE
2-METER DEW POINT TEMPERATURE
DAYTIME MAXIMUM TEMPERATURE
NIGHTTIME MINIMUM TEMPERATURE
6-HOUR PROBABILITY OF THUNDERSTORMS
RELATIVE HUMIDITY
24-HOUR SNOWFALL AMOUNT
6-HOUR PROBABILITY OF PRECIPITATION
12-HOUR PROBABILITY OF THUNDERSTORMS
3-HOUR PROBABILITY OF THUNDERSTORMS

A WEBPAGE OUTLINING THE GRIDDED MOS GUIDANCE AND THE FTP SERVER STRUCTURE CAN BE FOUND ONLINE AT /USE LOWER CASE/:

HTTP://WWW.NWS.NOAA.GOV/MDL/SYNOP/GMOS.HTML

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

PAUL DALLAVALLE MDL/SILVER SPRING MARYLAND PHONE: 301-713-0023 EXT. 135 EMAIL: 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

NATIONAL TECHNICAL IMPLEMENTATION NOTICES ARE ONLINE AT /USE LOWER CASE/: <u>HTTPS://WWW.WEATHER.GOV/NOTIFICATIONS/ARCHIVE</u> \$\$ NNNN