

# NWS REQUEST FOR CHANGE FORM

1. WSH TRACKING NUMBER    1A. REV LEVEL    2. DATE RECEIVED

## PART A - COVER SHEET

This form is in three parts. Submitters must complete unshaded blocks in Part A, and as much of Part B and C as possible. If there is no specific required change date, enter 60 days from date submitted. Address questions to NWS Change Management at (301) 713-1373. Submit change requests to the NWSRC mailbox (External: NWSRC@noaa.gov).

3. ORIGINATOR OFFICE NWS/OST/MDL	4. SUBMITTING AUTHORITY Name: Rebecca Cosgrove Routing Code: W/OST22	5. COGNIZANT TECHNICAL INDIVIDUAL Name: Paul Dallavalle Routing Code: W/OST22 Phone: 301-713-0023 x135	6. ORIGINATOR TRACKING NUMBER MDL2005-05	7. DATE SUBMITTED July 7, 2005
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8. SYSTEMS AFFECTED BY CHANGE <input type="checkbox"/> ASOS <input checked="" type="checkbox"/> AWIPS <input type="checkbox"/> CSSA <input type="checkbox"/> CRS <input checked="" type="checkbox"/> DATA PRODUCTS <input type="checkbox"/> EMWIN <input type="checkbox"/> NEXRAD <input type="checkbox"/> RRS <input type="checkbox"/> OTHER (specify)	9. ORD IDENTIFIER
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10. TITLE OF CHANGE  
Addition of GFS-based gridded MOS guidance for the CONUS

11. CATEGORY OF CHANGE <input checked="" type="checkbox"/> RC <input type="checkbox"/> PECP <input type="checkbox"/> ECP	12. TYPE OF CHANGE <input type="checkbox"/> DOCUMENTATION ONLY <input type="checkbox"/> HARDWARE <input checked="" type="checkbox"/> SOFTWARE <input checked="" type="checkbox"/> DATA
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13. SITES AFFECTED  
all

14. STATEMENT OF REQUIREMENT, PROBLEM, OR DEFICIENCY OF EXISTING SYSTEM  
To support the NDFD, forecasters must produce accurate forecasts on a high-resolution grid in an optimal manner, using guidance available on a grid at a resolution comparable to that used in the WFO forecast process. The current MOS system is only available at specific sites, and the direct numerical model output is not available at the desired grid resolution. The IFPS ISST has recommended the development of MOS guidance in gridded format. (Text adapted from Gridded MOS OSIP Stage 2 documents)

15. KNOWN OR PROPOSED SOLUTION  
MDL will generate GFS-based MOS guidance on the 5-km NDFD CONUS grid twice daily (0000 and 1200 UTC model cycles) in GRIB2 format. Guidance will be available for projections of 6 to 192 hours after model run time. The initial implementation will consist of guidance for maximum and minimum temperature, 2-m spot temperatures and dewpoints, 6- and 12-h probability of precipitation (POP), wind direction and speed, 6- and 12-hr probability of thunderstorms, relative humidity, and categorical snowfall amount. More elements will follow, along with some OCONUS grids, as they become available. Although the grid encompasses the entire CONUS, initially some or all elements will only have forecast data for the Western third of the grid, with the rest of the grid containing missing values. We will populate the other 2/3rds of the CONUS grid as the guidance becomes available.

The GRIB2 products will be sent from the NCEP CCS via the SBN to AWIPS, decoded by the GRIB2 decoder, and then ingested into GFE and the volume browser. These products are slated for Application Release 6.1. We anticipate these products to add roughly 80 MB of data to the SBN twice per day.

16. ALTERNATE SOLUTIONS  
none

17. REQUIRED CHANGE DATE ASAP for testNCF November 29, 2005 for SBN transmission	18. RATIONALE FOR REQUIRED CHANGE DATE SEC needs sample data on the testNCF as soon as possible for testing. November 29, 2005 for official SBN transmission corresponds to 120 advance notice for new WMO headers	19. PRIORITY <input checked="" type="checkbox"/> ROUTINE <input type="checkbox"/> URGENT <input type="checkbox"/> EMERGENCY
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DRG/CCB/PMC/CMB DECISION					
20. DECISION AUTHORITY AND IMPACT LEVEL	<input type="checkbox"/> PMC or NWS CMB DECISION REQUIRED	<input type="checkbox"/> CCB LEVEL ONLY	<input type="checkbox"/> FAST TRACK	<input type="checkbox"/> MAJOR CHANGE	<input type="checkbox"/> MINOR CHANGE

21. CCB LEVEL DECISION	<input type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED	SIGNATURE
	<input type="checkbox"/> RECOMMEND APPROVAL	<input type="checkbox"/> REFERRED TO OSIP	DATE SIGNED

FOR USE ONLY WHEN PMC or NWS CMB DECISION REQUIRED

22. PMC OR NWS CMB DECISION	<input type="checkbox"/> APPROVED	<input type="checkbox"/> DISAPPROVED	SIGNATURE/DATE
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