

Gridded MOS - Operational Requirements

Last Updated: 7/26/2005

Identification Number	Category	Requirement	Priority	Level	Qualification Type
1	Meteorological Requirements	Initial gridded MOS guidance elements shall include, but not be limited to: 2-m temperature and dew point, maximum/minimum temperatures, surface wind speed and direction, and the probability of precipitation. (Initial deployment for CONUS only)	high		test
2	Meteorological Requirements	In addition to the initial guidance elements, the fully operational gridded MOS system shall also include cloud cover, snowfall amounts, quantitative precipitation forecasts (QPF), probability of thunderstorms and present weather (such as characteristics, type, intensity, fog, severe)	high		test
3	Meteorological Requirements	Gridded MOS shall be produced twice a day for the 0000 and 1200 UTC model cycles out to day 7	high		test
4	Meteorological Requirements	OCONUS gridded MOS shall be produced for Alaska, Hawaii, and Puerto Rico beginning 1 - 2 years after the implementation of the CONUS gridded MOS	high		test
5	Meteorological Requirements	Gridded MOS shall be produced out to day 3 for 0600 and 1800 UTC model cycles (as resources allow)	low		test
6	Software	AWIPS shall have the capability to decode the gridded MOS from its standard compressed format upon receipt	high		test
7	Software	Decoded gridded MOS products shall be stored at the Forecast Office in a standard format (currently netCDF) for use in AWIPS applications	high		test
8	Software	Forecast Offices shall have the capacity to store, retain, and retrieve a minimum of one day of gridded MOS guidance	high		test
9	Software	Gridded MOS shall be displayable in D2D from menus and the volume browser, treatable as another model data source	high		test
10	Software	AWIPS shall provide full capability for the operational gridded MOS products to display and interact in the GFE for use in applications	high		test

11	Software	Software changes shall be incorporated into the GFE to include the gridded MOS into that process and allow forecasters to interact with the grids	high	test
12	Software	Decoding and display capability shall be included in the same AWIPS operational build, as prioritized by the SREC	high	test
13	Software	A GFE Smart Tool shall be developed to interpolate to hourly grids from the 3-h gridded fields (this will allow the hourly temperature grids to be derived from 3-h temperature fields, rather than the daytime maximum and nighttime minimum grids)	medium	demo
14	Configuration	AWIPS shall store and display gridded MOS over an area covering at least adjacent and backup CWAs	high	test
15	Dissemination	Gridded MOS shall be transmitted to and stored on the NWS tgftp server	high	test
16	Dissemination	Gridded MOS shall be disseminated to the field using current methodologies and not adversely affect current systems	high	test
17	Dissemination	The initial CONUS gridded MOS products shall be distributed across the SBN	high	test
18	Dissemination	Gridded MOS shall be transmitted over the SBN in the same standard compressed format in which they are created	high	test
19	Dissemination	Gridded MOS shall be available to the NCEP Centers through DBnet or its replacement	high	test
20	Dissemination	A gridded MOS prototype shall be available for the Western Region, and distributed in a demonstration mode through the LDM	medium	test
21	Dissemination	Gridded MOS shall be accessible to the forecast offices in a timely manner (within 30 minutes of their production)	high	test
22	Dissemination	Gridded MOS products shall be posted in the National Digital Guidance Database (NDGD)	medium	test
23	Dissemination	Gridded MOS shall be made available to customers in convenient and understandable formats such as web graphics and GIS-compatible files	medium	demo

24	Documentation	Documentation shall be provided in the form of Technical Information Notices, Office Notes, Technical Procedures Bulletins, and other appropriate references	high	test
25	Coordination	Implementation of gridded MOS shall be coordinated through NCEP's Central Operations Production Management Branch	high	test
26	Coordination	Transmission of Gridded MOS products shall be coordinated through the Data Review Group	high	test
27	Computing Environment	Development and production support for gridded MOS shall be provided on NOAA's Central Computing System	high	test
28	Training	A training module shall be developed (possibly a 1-hour teletraining conference call)	high	demo
29	Training	The COMET module pertaining to Statistical Guidance shall be modified to incorporate Gridded MOS	medium	demo
30	Training	OCWWS shall provide support for NWS training in gridded MOS	medium	none
31	Training	The Office of Science and Technology (OST) shall prepare a survey to be made available to the Science and Operations Officers to encourage feedback to the developers	medium	demo