

# A User Friendly Way of Displaying GFS Ensemble MOS Data along with HPC 3-7 Day Forecasts via the Intranet

Don Moore  
National Weather Service Weather Forecast Office  
Billings, Montana

There is a variety of information available on the internet to help assist forecasters in creating medium range forecasts that are not available in AWIPS. However to access much of the data, forecasters need to view web pages from many different sources such as HPC and MDL. This can be a time consuming task and all of the information can be difficult to comprehend since it is scattered throughout many different web pages. To help alleviate this problem, a perl script was developed that acquires temperature data from several web page sources and displays on a single web page. The script takes about a minute to acquire all of the information, but since the data is consolidated forecasters can interpret the data quicker than could have been done otherwise. Among some of the temperature data displayed are the 00Z GFS ensemble MOS extremes and averages, the operational 00Z GFS, and HPC's 3-7 day forecast (Figure 1). All of the individual members are also displayed so that forecasters can see exactly what each member is predicting (Figure 2). Links to HPC's "medium range graphic descriptive", HPC's 500mb height forecast, along with the 00Z GFS MSLP/QPF and 500mb height forecasts from each ensemble member are also provided to better understand the temperature predictions. The GFS MOS data are available between 0930Z and 1000Z and the HPC temperature forecast data are available between 1430Z and 1500Z. Running the script will always acquire the latest data.

This script is run using a web browser, preferably Internet Explorer, in the cgi-bin directory of the intranet (the author runs the script in cgi-bin/mos). The script is easily configured to display the locations the user desires by just modifying two lines. These two lines in the script are shown below.

Line 17: @all\_mos\_points = ("LVM", "BIL", "MLS", "BHK", "SHR");

This line is used to determine which MOS sites are displayed. Locations should be in all caps, surrounded by quotes, and separated by a comma.

\$hpc\_forecast\_points = ("MLS|BIL|SHR");

The line is used to determine which HPC forecast points are displayed. Locations should be in all caps and separated by the pipe symbol. The entire string should be surrounded by quotes.

Figure 1

BIL	MON 02	TUE 03	WED 04	THU 05	FRI 06	SAT 07	SUN 08	MON 09
Highest Min/Max issued 2/02/2004	27	9 / 20	15 / 39	23 / 37	22 / 42	23 / 38	21 / 36	19 / 35
Lowest Min/Max issued 2/02/2004				4 / 17	7 / 21	11 / 27	12 / 28	12 / 25
Ave Min/Max issued 2/02/2004	24	7 / 10	10 / 32	16 / 28	15 / 34	17 / 33	18 / 33	16 / 31
Operational issued 2/02/2004	23	4 / 20	11 / 35	18 / 26	12 / 26	15 / 34	17 / 36	18 / 32
HPC Forecast, issued 02/02/2004 by RAUSCH				18 / 26	12 / 26	15 / 34	17 / 36	18 / 32

Figure 2

BIL, issued 2/02/2004	MON 02 500mb Heights MSLP/QPF	TUE 03 500mb Heights MSLP/QPF	WED 04 500mb Heights MSLP/QPF	THU 05 500mb Heights MSLP/QPF	FRI 06 500mb Heights MSLP/QPF	SAT 07 500mb Heights MSLP/QPF	SUN 08 500mb Heights MSLP/QPF	MON 09 500mb Heights MSLP/QPF
Operational	23	4 / 20	11 / 35	18 / 26	12 / 26	15 / 34	17 / 36	18 / 32
Control	24	7 / 15	11 / 37	17 / 24	11 / 27	13 / 29	16 / 34	15 / 32
Neg. Pertabation 1	22	5 / 10	4 / 20	5 / 21	11 / 33	16 / 33	15 / 28	13 / 30
Neg. Pertabation 2	22	6 / 12	7 / 20	15 / 28	16 / 34	15 / 32	18 / 31	16 / 31
Neg. Pertabation 3	23			17 / 24	14 / 34			16 / 30
Neg. Pertabation 4	24			18 / 33	21 / 41			16 / 31
Neg. Pertabation 5	26	8 / 20	14 / 39	23 / 35	21 / 42	23 / 36	16 / 31	15 / 29
Pos. Pertabation 1	26	9 / 20	12 / 36	23 / 37	22 / 40	17 / 27	12 / 30	18 / 35
Pos. Pertabation 2	26	8 / 20	15 / 36	19 / 30	18 / 41	19 / 37	21 / 36	19 / 34
Pos. Pertabation 3	26	8 / 12	5 / 30	19 / 35	21 / 42	22 / 38	21 / 35	16 / 31
Pos. Pertabation 4	27	8 / 18	12 / 35	16 / 26	9 / 21	11 / 29	16 / 32	16 / 34
Pos. Pertabation 5	23	7 / 10	3 / 15	4 / 17	7 / 29	13 / 31	17 / 30	12 / 25