

## NWS Seeking Suggestions for Additional Numerical Weather Prediction Model Output

As many in the weather enterprise are aware, the National Weather Service (NWS) is considering providing more comprehensive access to NWS operational numerical weather prediction (NWP) model information. NWS runs operational numerical weather prediction models on high-performance computers, and samples these models during their execution to produce and disseminate the model output products used by NWS and the entire weather enterprise. This project intends to create an environment to help determine methods by which data from these models may be accessed in higher detail in time and space. Moving forward on this, NWS will comply with all relevant and applicable laws, regulations and policies, including the [NOAA Policy on Partnerships in the Provision of Environmental Information \(Partnership Policy\)](#).

In general, US Government information policies avoid providing privileged access to US government (USG) information, and developing business rules that conform to these policies while investigating more comprehensive access to NWS National Centers for Environmental Prediction (NCEP) NWP data has been challenging. In the end, NWS proposes to proceed under a very simple approach that will clearly comply with open access to USG information, even though it may not be optimal for some of the investigations that the weather enterprise may wish to carry out. This NWS approach is described below.

NWS makes digital output from NCEP NWP models operationally available in near real time on an FTP server (for information on products available from NCEP NWP models see <http://www.nco.ncep.noaa.gov/pmb/products/>), and believes there is capacity to expand delivery of NWP data using this existing infrastructure. This infrastructure makes NWS NWP data accessible to everyone without charge, and thus is fully compliant with USG information policies. Users will be able to download this data and use it as they wish under any computational architecture they see fit to establish – as is true for the NWP data provided by NWS today.

However, the weather enterprise wants to gain access to additional NWP data that NWS does not currently make available. NWS is willing to provide additional information, e.g., by increasing the sampling rate in time or space of its operational NWP models, and to do so NWS is planning to investigate its ability to provide additional access to NWS data by considering the following:

1. What operational model (GFS, GEFS, NAM, etc.) customers would like enhanced output from.
2. What specific output is sought from that model in terms of geographic extent, temporal sampling, vertical sampling, and parameters. For ensemble systems, what are preferences regarding sampling of ensemble members.
3. What output format customers are prepared to use. In particular, NWS will be investigating whether customers are prepared to use NWP model output data in its internal numerical solution form which would allow NCEP to avoid processing steps required to create files organized in common georeferenced coordinates (e.g. GRIB2) and may thus allow NCEP to further increase NWP model sampling.

4. How long customers will need to have access to the enhanced model output to evaluate its usefulness for the intended application.

To provide input into the NWS investigation in this area, please express your interest in accessing additional NWP data from NWS under the arrangement described above. NWS is aware that your statement of interest may disclose your business plans, and is willing to treat your input as proprietary information if you so indicate.

Please send your statement of interest by July 3, 2014 to the following:

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NWS will evaluate these requests, balance them with the capacity of the NWS operational NWP modeling system to service them and the capacity of the FTP service to deliver them, and establish an initial set of enhanced model output products. These enhanced products will be considered “experimental” in the sense adopted in the NWS implementation of the Partnership Policy (see NWS Policy Directive 1-10 at <http://www.nws.noaa.gov/directives/sym/pd00110curr.pdf> and associated NWS Instructions, including 10-102 at <http://www.nws.noaa.gov/directives/sym/pd01001002curr.pdf>). As these policies require, NWS will conduct an open comment period on these enhanced products before a decision regarding whether to continue them in an official/operational status.

In addition to statements of interest in specific enhancements to NCEP model output, NWS is also interested in comments on this overall approach to establishing an environment to evaluate these enhancements. Please send comments of this nature to the following:

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