



**Support Scientist – Atmospheric Mesoscale Data Assimilation**  
*NOAA Environmental Modeling Center (EMC)*  
*College Park, MD*

I.M. Systems Group, Inc. (IMSG), [www.imsig.com](http://www.imsig.com), a Federal Government Contractor, is seeking to fill a position for a Support Scientist to work at NOAA's Environmental Modelling Center (EMC) of the National Centers for Environmental Prediction (NCEP) located in College Park, MD. The successful candidate will support the further development of the so-called Grid-Point Statistical Interpolation (GSI) system, focusing on its use by the Real-Time Mesoscale Analysis (RTMA) system. The GSI is EMC's analysis system for the atmosphere, which is used for 2DVar, 3DVar, 4DVar, and hybrid ensemble/variational applications. The RTMA system runs the GSI in 2DVar-mode to provide real-time analyses for sensible weather elements of the NWS' digital forecast suite. Most are surface parameters (e.g. 2m-temperature, 2m-dew-point, 10m-wind). The candidate will work to improve analyses of existing RTMA parameters and, especially, to add new control variables to the GSI to analyze new RTMA parameters as they are requested by the National Weather Service forecasters and other RTMA users. Examples of such parameters include cloud amount (aka sky cover), ceiling, max/min Temperature at 2m, snow amount, the Haines Index, PBL height (aka mixing depth), transport wind, surface ozone, and 80-m winds.

**Required Skills:**

- At least a M.S in Meteorology, Atmospheric Sciences, or related field.
- Experience in atmospheric or oceanic data assimilation, or alternatively a graduate-level course in data assimilation or principles of objective analysis.
- Experience in using large atmospheric or oceanic datasets for analysis, assimilation or diagnostic purposes.
- Solid background in calculus, algebra, and statistics.
- Experience with code development in FORTRAN and scripting in Linux/Unix shell environments.
- Good written and oral communication skills.

**Desired**

- Experience with the use of the GSI.
- Experience with the use of high performance supercomputers in a FORTRAN/UNIX environment, including the use of MPI programming.
- Experience with display tools commonly used in atmospheric modeling, such as Grads, GEMPAK and/or Python.

**To Apply:**

Please submit your resume, the contact information for three (3) references, your salary requirements and a cover letter explaining how your qualifications meet the requirements of the position to [jobs@imsig.com](mailto:jobs@imsig.com) with the following subject line: **NOA1422 Support Scientist – RTMA GSI**

IMSG offers an outstanding overall compensation package including health/dental insurance, short term/long term disability insurance, paid-time-off, and a 401(k) plan.

*IMSG is an Equal Opportunity Employer and Veteran friendly.*