



**Support Scientist – Atmospheric Mesoscale Data Assimilation  
(Model Downscaling)**

*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 EMC's unified empirical downscaling package, currently based largely on the application of similarity theory and mass conservation principles. The candidate will work closely with the Real-Time Mesoscale Analysis (RTMA) team, which uses downscaled forecasts from the North American Mesoscale Model (NAM), Rapid Refresh (RAP), High- Resolution Window (HiResW), and Global Forecast Model (GFS) as a component of a variational analysis. Feedback from field forecasters on the RTMA performance in conjunction with the analyzed observations will provide important guidance to improve the downscaling algorithms, including experimenting with statistical downscaling procedures available in the literature and new ideas. The candidate will also create a 10-year retrospective dataset of model downscaled forecasts to feed the RTMA companion system, the UnRestricted Mesoscale Analysis (URMA).

**Required Skills:**

- At least a M.S in Meteorology or Atmospheric Sciences.
- Experience in atmospheric modeling.
- Experience in using observations of the atmosphere for diagnostic and/or modeling purposes.
- Experience with code development in FORTRAN and scripting in Linux/Unix shell environments.
- Experience with running complex jobs, processing, and performing comprehensive analyses of large amounts of observed and modeled output data.
- Good written and oral communication skills.

**Desired**

- Experience with manipulating large datasets in GRIB1/GRIB2 formats.
- Experience with displaying tools commonly used in atmospheric modeling, such as Grads and Python.
- Experience in using high performance supercomputers in a FORTRAN/UNIX environment, including the use of MPI programming.

**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: **NOA1423 Support Scientist – Model Downscaling.**

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.*