



Support Scientist – Sea Ice Modeler

NOAA Environmental Modeling Center (EMC)
College Park, MD

I.M. Systems Group, Inc. (IMSG), www.imsg.com (<http://www.imsg.com/>), a Federal Government Contractor, is seeking to fill a position for a Support Scientist to work at NOAA's National Centers for Environmental Prediction's (NCEP) Environmental Modeling Center (EMC), located in College Park, MD. The successful candidate will support NCEP's EMC with sea ice model and NEMS development work as part of the mesoscale coupled Arctic System model. Activities will include coupling sea ice models to ocean, atmosphere, and wave models, with extensive objective model skill evaluation. This will also include developing additional objective skill measures.

Job Duties:

The candidate will perform the functions of the job in a high-quality, independent and collaborative way, assisting in managing projects, and developing and applying innovative methods for the primary work areas below. The candidate will work with scientists in EMC to couple sea ice models to existing atmosphere (NMMB), ocean (HYCOM), and wave (WAVEWATCH III (tm)) models. The candidate will work on several tasks, including the programming associated with this coupling, and transitioning the resulting system to operate within NOAA's supercomputing environment. Specific activities will include:

- Develop NEMS wrapper for the KISS sea ice model to the NMMB/HYCOM system
- Adapt NEMS wrapper and couple CICE, SIS2 sea ice models to the NMMB/HYCOM system
- Validation of the performance of the coupled system, including developing skill measures for sea ice thickness and concentration forecasts.
- Implementation of the developed modeling system into NOAA's supercomputing environment enabling.

Required Skills:

Education and Experience:

- A PhD or equivalent experience in Physical Oceanography, Glaciology, or a closely-related physical or applied mathematical science, with at least 10 years of experience in the area of numerical modeling, general circulation modeling.

Knowledge, Skills and Abilities:

- Experience with sea ice modeling and running models within a supercomputing environment
- Experience with code development in FORTRAN, scripting in Linux/Unix shell environments and Matlab, Python, GrADS, or IDL for visualization.
- Experience with running complex jobs, and processing large amounts of observed and modelled output data.

Desired Skills:

- Experience in using mainframe supercomputers and/or workstations in a FORTRAN/UNIX environment, using statistical and display tools,
- Proven ability to work well in a team environment,
- Relevant peer-reviewed publications.
- Good written and oral communication skills.
- Knowledge of sea ice remote sensing
- Knowledge of data assimilation
- Experience with CICE, SIS, or other community sea ice model

To Apply:

Please submit your resume, the contact information for three (3) references, and a cover letter explaining how your qualifications meet the requirements of the position to: jobs@img.com with the following subject heading: **NOA1523 Social Scientist: Sea Ice Modeler.**

IMSG offers an outstanding overall Benefit Package including company paid leave, medical, dental, vision, and 401K. Please indicate your timeline of availability and preferred salary level for consideration.

IMSG is an Equal Opportunity Employer and Veteran Friendly.