

NOA1651 Support Scientist Utilization of Remotely Sensed Winds and Seas for Verification of Warnings and Forecasts and Probabilistic Guidance

All times are in India Standard Time.

Job ID

2016-1074

of Openings 1

Job Locations US-MD-College Park

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Category Scientific

Overview

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 the Ocean Prediction Center of NOAA's National Centers for Environmental Prediction (NCEP) in College Park, MD. The candidate will work within the Ocean Application Branch of the Ocean Prediction Center (OPC). The OPC is one of the service centers that make up the National Centers for Environmental Prediction and is responsible for weather warnings and forecasts for the offshore and high seas waters of the north Atlantic and Pacific oceans.

Responsibilities

The oceans remain relatively data sparse for conventional in-situ observations. The OPC has relied on satellite derived ocean vector winds from scatterometers, wind speeds from microwave radiometers, and wave heights from radar altimeters to enhance situational awareness, determine appropriate warning categories, and for forecasters to assess and validate in real-time numerical model guidance. In spite of these critical applications, remotely sensed winds and waves are not integral to formal

verification and skill assessments of OPC warnings and forecasts and the deterministic and probabilistic guidance used by the forecasters. This position will address these deficiencies.

To better utilize remotely sensed observing capability for winds and waves and assess the skill level of forecasts and guidance, the OPC is proposing to: a) facilitate the availability of remotely sensed winds and waves in operational workstations, b) establish formal verification processes for wind speed, wave heights, warnings, and extratropical cyclones, c) assess the skill of deterministic and probabilistic guidance with a focus on marine hazards, d) assess probabilistic guidance as the source for probabilistic based hazard polygons, and d) provide feedback to developers of probabilistic systems.

Qualifications

Required skills:

- This position requires a PhD (post-doctoral) or M.S. in meteorology or atmospheric science, with a strong background in generating or manipulating data for application.
- Experience with scripting, working within the Linux operating system, and an understanding of grid manipulation and production methods.
- Experience utilizing and developing verification methods and statistical techniques as applied to meteorological parameters.
- The candidate must also possess the capability to work as part of a small collaborative team with good written and oral communication skills.

Desired Skills:

- Experience working in support of an operational environment, within the requirements for configuration and code management.
- Knowledge of Python, scripting in Linux, and the development of meteorological applications utilizing gridded data sets.
- Knowledge of air sea interaction challenges, operational oceanography, and marine meteorology.

Please include information regarding your current U.S. citizenship or current visa status.

- Green Card holder preferred.