



Ocean Dynamics and Prediction Branch


Ocean wave modeling

NRL is seeking applications for postdoctoral positions with the Ocean Dynamics and Prediction branch of the Ocean Sciences Division, for numerical modeling of wind-generated ocean waves. The postdoctoral fellow will be developing, applying, and evaluating the phase-averaged wave models WAVEWATCH III® and SWAN. Specific topics that we are working on now include: wave breaking effects on passive and active acoustics; wave effects on ocean mixing; wave-ice interactions; ensemble wave forecasting; technical aspects of coupling to other models at high resolution on massively parallel computing systems; improvements to prediction of air-sea momentum fluxes; wave data assimilation in stand-alone and coupled modeling systems; exploitation of novel remote sensing and in situ observations (for improved forcing fields and especially for data assimilation); and optimization for efficient simultaneous real-time forecasting for over 100 coastal regions.

Applicants must be experienced with Fortran and able to work efficiently on Linux-based computing systems. Strong proficiency in either MATLAB or Python is also required. Familiarity with numerical modeling (e.g. CFD methods), model optimization, parallel processing, high-performance computing, and relevant physics (e.g. wave mechanics and dynamical interactions) would be beneficial.

This is an excellent opportunity to work with some of the best modelers and data analysts in the ocean community. The Naval Research Laboratory has access to the major supercomputer sites in addition to excellent local computer resources. The laboratory at Stennis Space Center is co-located with the Naval Oceanographic Office and Fleet Numerical Meteorology and Oceanography Center, which together are the largest national operational forecast center for oceanography.

For a quick overview of some of the research done by our group, please peruse recent publications at: <https://www7320.nrlssc.navy.mil/pubs.php> , or <https://scholar.google.com/citations?user=atCgUG8AAAAJ>



Annual postdoctoral salary is \$79,363. Applicants must be a US citizen or US permanent resident at time of application. NRL is an equal opportunity employer. Send resume and references to:

Erick Rogers
NRL Code 7322
Stennis Space Center, MS 39529
via e-mail: erick.rogers@nrlssc.navy.mil

MINIMUM REQUIREMENTS

Security clearance is not required, but applicants must be eligible for a DoD Security Clearance.

JOB BENEFITS

The post doctorate programs at NRL offer benefits including health and life insurance.

NRL is an Equal Opportunity Employer

Cleared for public release
