

Ocean wave modeling postdoctoral position

Naval Research Laboratory (NRL), Stennis Space Center, MS

NRL is seeking applications for postdoctoral positions with the Oceanography 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. A post-doctoral hire would focus on one of several specific topics. Presently, these include: wave-ice interactions; rogue wave probabilistic forecasting; wave effects on ocean mixing; technical aspects of coupling to other models at high resolution on massively parallel computing systems; wave data assimilation in stand-alone and coupled modeling systems; exploitation of remote sensing (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, and relevant physics (e.g. wave mechanics and dynamical interactions) would be beneficial.

Applicants must be U.S. citizens or permanent residents at the time of application. Positions will be filled through the American Society for Engineering Education (ASEE) or National Academies (NRC RAP). NRL is an Equal Opportunity Employer.

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> .

For this wave modeling opportunity, please email a resume and description of research interests to mailto:contact_waves.postdoc@nrlssc.navy.mil .