## U.S.NAVAL RESEARCH LABORATORY

# Ocean Dynamics and Prediction

### Variational Assimilation

The Naval Research Laboratory has openings for post-doctorate researchers to advance capabilities in ocean data assimilation and probabilistic forecasting. This includes applications of advanced data assimilation methods such as 3DVAR, 4DVAR, ensemble methods and continuous data assimilation; the exploitation of new observation types and functionals. High priority efforts presently include the assimilation of observations from wide-swath altimeter observations, images, ocean velocity, wave spectra, in-direct observation assimilation, assimilation of correlated observations, and the application of machine learning to data assimilation. This long term work is developing cutting edge capabilities that transition to operational forecast centers.

Candidates are encouraged to apply with expertise in one or more areas of sequential and variational data assimilation (including ensemble methods), ocean modeling, wave modeling, ice modeling, computational fluid dynamics, HPC, MPI, applied mathematics, physics, data analysis, numerical analysis, wavelets.

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 collocated with the Naval Oceanographic Office and Fleet Numerical Meteorology and Oceanography Center, which are the largest national operational forecast center for oceanography.

For a quick overview of some of the research publications within the NRL Ocean Dynamics and Prediction Branch at Stennis Space Center and systems transitioned to operations, visit the web site: <u>https://scholar.google.com/citations?user=atCgUG8AAAAJ</u>

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

Hans Ngodock NRL Code 7321 Stennis Space Center, MS 39529 via e-mail: hans.ngodock@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