



**Arctic Ecosystem Modeler Opportunity
Job SNRA21**

Falmouth, Massachusetts preferred, remote possible through the COVID-19 pandemic

SUMMARY: We seek an Arctic Ecosystem Modeler (Ecosystem Modeler) to develop and apply a data assimilation modeling system for terrestrial carbon cycling. This person will work closely with a team of researchers at Woodwell Climate Research Center (Woodwell) and collaborating institutions to develop a data assimilation version of the Terrestrial Ecosystem Model (TEM) and apply this across the high latitudes. This position and research are part of a broader project to develop an Arctic Carbon Monitoring and Prediction System (ArctiCMaPS), including field observations, remote sensing, prognostic modeling, data visualization, and policy engagement. The Ecosystem Modeler will supervise a Research Assistant, lead the data assimilation modeling, and engage with the research team, partner institutions, and stakeholders. This position will report to the Arctic Program Director and work closely with Woodwell's Arctic project leads and collaborators.

Responsibilities:

- Work closely with project team including collaborators at the University of Alaska, Fairbanks, to develop a data assimilation framework for the TEM model, including the integration of site-level and remotely-sensed data for parameter optimization, initial conditions, and state variable updates.
- Collaborate on the extension and parameterization of TEM for circumpolar simulations at relatively fine spatial resolution (1-2 km).
- Apply the updated model using supercomputing and/or cloud computing resources for historical analysis, seasonal forecasts, and longer-term projections of carbon fluxes across the Arctic.
- Supervise a Research Assistant at Woodwell to help with data preparation, model development, and/or analysis of model output.
- Collaborate with the project team to include model output in online data visualization applications.
- Participate in meetings and workshops with policy researchers and policy makers.
- Synthesize, present, and publish results.

Required Qualifications, Education, and Experience:

- Ph.D. in ecosystem modeling, Earth system science, ecology, or a related discipline.
- Expertise in prognostic ecosystem modeling.
- Experience with data assimilation techniques and/or TEM strongly desired.
- Knowledge of carbon cycle dynamics in arctic-boreal environments.
- Ability to lead a research project and work both independently and collaboratively.
- Advanced computational and programming skills.
- Excellent written and oral communication skills.

Application Deadline: March 12, 2021 or until filled.

Desired Start Date: May 1, 2021

Location: Falmouth, Massachusetts preferred, remote possible through the COVID-19 pandemic.

Classification and Compensation: This is a full-time, fixed-term, salaried, exempt position. Salary is based upon experience. This position is for a 3-year fixed-term with the potential to extend dependent upon funding. Woodwell offers a very generous benefits package.

Application Instructions: To apply, please send your cover letter addressing your experience and qualifications in relation to the responsibilities of this position, curriculum vitae, and contact information for three references as a **single PDF** to careers@woodwellclimate.org. Incomplete applications will not be reviewed. Please type **SNRA21** in the subject line.

Located on a 10-acre campus near the village of Woods Hole, Woodwell Climate Research Center (Woodwell) is a private, non-profit research center. Woodwell is a leading source of climate science that drives the urgent action needed to solve climate change. Woodwell has 60+ staff members, and attracts some of today's top experts on global climate change science.

Woodwell Climate Research Center is an equal opportunity employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, mental, or physical disability, age, sexual orientation, gender identity, national origin, familial status, veteran status, or genetic information. Woodwell is committed to providing access, equal opportunity, and reasonable accommodation for all individuals in employment practices, services, programs, and activities.