Position Summary:
The Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University (CSU) in Fort Collins, CO, seeks to hire a full-time Postdoctoral Fellow with expertise in using satellite altimetry data for sea ice studies, to work at NOAA/NESDIS/STAR in College Park, MD. We seek an enthusiastic candidate with a suitable Ph.D. degree, proficient programming skills, and demonstrated ability to present and publish research findings at conferences and through peer-reviewed journal articles to advance the field.

The individual in this fellowship will report to CIRA’s NESDIS Environmental Application Team (NEAT) PI, work collaboratively with federal researchers at NOAA’s Center for Satellite Applications and Research, and focus on projects dedicated to estimating sea ice thickness using lidar and radar satellite altimetry observations. This project aims to address the validation of a highly innovative algorithm for microwave altimeter-based sea-ice freeboard relevant for numerous applications such as sea ice forecasting, modeling, and ice charting for navigation and safety at sea. The work will include activities on product calibration, validation, and applications in both the Arctic and Antarctic.

This Postdoctoral Fellowship is a 12-month position planned to start as soon as August 2023, and will receive an extension of up to two years contingent upon performance and funding. Onsite presence at the NOAA/NESDIS/STAR in College Park, MD is preferred, but flexible work arrangements, including hybrid office/telework, are negotiable.

CSU recognizes the importance of supporting its employees as they balance their career, personal and family life, and that employees must be able to recharge, feel protected in their employment, and take the time they need to improve their overall productivity and health. Faculty, Administrative Professional, and other Non-Classified Staff are provided with paid and unpaid leave benefits to support them and their family and enhance financial security. Paid time off accrual rates for full-time Postdoctoral Fellows = 10 hours of sick leave per month and 11 legal holidays, and paid time off for jury duty and bereavement leave. CSU’s Commitment to Campus offers employees a healthy work-life balance through a wide variety of programs, discounts, and special benefits. This includes Employee Study Privilege (nine free credits per year available through CSU, CSU Global, CSU Online Plus, and University of Northern Colorado), Family Tuition Scholarship Program (50% reduction in tuition), Discounted Veterinary Care, Wellness Membership Discounts, Volunteers in Public Schools Leave Program, Athletic Ticket Discounts, and much more! Visit www.facultyandstaff.colostate.edu to learn more about working at CSU. This information is a summary of commonly used benefits and is not all inclusive of benefits offered at CSU.

Decision Making:
The individual in this fellowship will execute a plan of research that will resonate with the underpinning science objectives of the supporting project. Key decisions will include scientifically-sound approaches and technological innovations to address the needs of the proposed work. They will be accountable for the successful planning and execution of the plan. The decisions they will make and approaches they will take will be determined by the individual’s scientific acumen and in consultation with the Principal Investigator. Ultimately this decision-making process will lay a foundation for success in future proposals. Similarly, the individual in this fellowship will conduct their research with an eye toward establishing solid partnerships with both CIRA research staff and NOAA sponsors.

Essential Job Duties:
Applied Remote Sensing – 90%
• Create remote sensing products of sea ice thickness derived primarily from satellite altimetry data, such as from CryoSat-2 and ICESat-2;
• Perform state-of-the-art altimeter freeboard validations spanning several seasons in the Arctic and Antarctic;
• Validate observation data using available satellite, airborne, and in situ data;
• Integrate snow depth data to convert sea ice freeboard into thickness.

Documentation & Reporting 10%
• Prepare annual project reports;
• Present at national/international conferences as needed;
• Routinely provide updates to PI & NOAA lead;
• Publish results in conference proceedings and journal articles.

Required Qualifications:
In your cover letter, please address EACH required qualification related to your experience. A cover letter that fails to address the required qualifications for this position may not be considered further after review by the search committee.
• Ph.D. in Physical Science or a related field such as Remote Sensing, Atmospheric Sciences, or Geoscience by the start of the position;
• At least one year of Programming experience in Python or languages such as IDL, MATLAB, R;
• Working knowledge of and/or practical experience in relevant remote sensing observations;
• Ability to pass a National Agency Check with Inquiries (NACI, Tier 1 federal background check) because the position is located inside a federal US National Oceanic and Atmospheric Administration (NOAA) building.
• Must be legally authorized to work in the United States by the proposed start date because CIRA will not sponsor a visa for this position now nor in the future.

Preferred Qualifications:
In your cover letter, please specifically address the applicable preferred qualifications for this position. A cover letter that fails to address the preferred qualifications for this position may not be considered further after review by the search committee.
• Experience working with Geographical Information Systems (GIS) such as QGIS, ArcGIS;
• Practical experience with satellite altimetry;
• Practical experience manipulating varied, complex satellite sea ice products;
• Demonstrated scientific communication abilities, e.g., presented and published in peer-reviewed journal articles with high-quality research results that have advanced the field.

Annual Salary Range: $65,000 - $70,000 as commensurate with experience and qualifications.

Background Check:
Colorado State University strives to provide a safe study, work, and living environment for its faculty, staff, volunteers and students. To support this environment and comply with applicable laws and regulations, CSU conducts background checks. The type of background check conducted varies by position and can include, but is not limited to, criminal history, sex offender registry, motor vehicle history, financial history, and/or education verification. Background checks will also be conducted when required by law or contract and when, in the discretion of the University, it is reasonable and prudent to do so.

Commitment to Diversity and Inclusion:
Reflecting departmental and institutional values, candidates are expected to have the ability to advance the Department’s commitment to diversity and inclusion.
Application Deadline:
Applications will be accepted until the position is filled; however, applications should be submitted by 11:59 PM MT on August 20, 2023, to ensure full consideration. For a full position announcement and to apply, please click “Apply to this Job” at the following website: https://jobs.colostate.edu/postings/131510. NOTE: In your cover letter, please specifically address the required and preferred qualifications of this position. A cover letter that fails to address the qualifications of this position may not be further considered after review by the search committee.

Colorado State University is committed to providing an environment that is free from discrimination and harassment based on race, age, creed, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, gender identity/expression, or pregnancy in its employment, programs, services and activities, and admissions, and, in certain circumstances, marriage to a co-worker. The University will not discharge or in any other manner discriminate against employees or applicants because they have inquired about, discussed, or disclosed their own pay or the pay of another employee or applicant. Colorado State University is an equal opportunity and equal access institution and affirmative action employer fully committed to achieving a diverse workforce and complies with all Federal and Colorado State laws, regulations, and executive orders regarding non-discrimination and affirmative action. The Office of Equal Opportunity is located in 101 Student Services. The Title IX Coordinator is the Director of the Office of Title IX Programs and Gender Equity, 123 Student Services Building, Fort Collins, CO 80523-0160, (970) 491-1715, titleix@colostate.edu. The Section 504 and ADA Coordinator is the Director of the Office of Equal Opportunity, 101 Student Services Building, Fort Collins, CO 80523-0160, (970) 491-5836, oeo@colostate.edu. The Coordinator for any other forms of misconduct prohibited by the University’s Policy on Discrimination and Harassment is the Vice President for Equity, Equal Opportunity and Title IX, 101 Student Services Building, Fort Collins, Co. 80523-0160, (970) 491-5836, oeo@colostate.edu. Any person may report sex discrimination under Title IX to the Office of Civil Rights, Department of Education.