The Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University (CSU) seeks to fill a professional position designed to perform full-time collaborative research with the National Oceanic and Atmospheric Administration (NOAA) located at the National Weather Service (NWS) / Aviation Weather Center (AWC) / Aviation Weather Testbed (AWT) in Kansas City, MO. This position is located in a federal facility in Kansas City, MO and requires the ability to pass a National Agency Check with Inquiries (NACI, federal background check) for building access.

The AWC in Kansas City, Missouri has a long history of supporting and transitioning research into operations for the NWS to support the Federal Aviation Administration (FAA) and other aviation partners. Contained within AWC, the AWT provides the infrastructure and facilities to develop, test, and evaluate new and emerging scientific techniques, products, and services. The AWT actively engages in the research-to-operations process by supporting applied research, verifying the quality and scientific validity of new techniques and products, and providing a common venue for both forecasters and researchers to engage in developing and testing state-of-the-art aviation weather services.

The AWC and AWT collaborate with universities, governmental forecast centers and research laboratories, FAA and other aviation partners, International Meteorological Watch Offices, and other NOAA and NWS organizations. The AWC maintains 24×7 global forecasting and warning operations, and the AWT supports aviation meteorology hazards training, applied research, and transitioning research-to-operations. CIRA is a collaborating partner with the AWC on a number of research projects and activities. CIRA professionals assist the AWC/AWT in supporting, developing, testing, and transitioning aviation weather research into NWS operations.

Decision Making Statement:
Decision making depends on the analysis of the user requirements, software architecture constraints, or technical issues involved with each software development activity; the chosen implementation approach may need to be selected from many alternatives. This position normally receives instruction on day-to-day work and receives general guidance on the overall software development work conducted. The individual will be given a set priorities which accurately reflect the relative importance of particular software development and other work activities as well as established software release deadlines.

Position Summary:
This position is a first level, introductory researcher of Meteorology, with potential for considerable growth. The individual in this position will work closely with aviation partners and a federal advisor to improve NWS aviation weather services using research to create, test, and implement meteorological tools. This position may be required to provide operational support during non-business hours since AWC is responsible for providing operational products 24×7. The selectee will report to the Senior Program Developer/Project Manager and work closely with NWS federal collaborators.

Responsibilities:
Meteorological Tools and Process Development 70%

- Learn to develop and support aviation services, capabilities, and tools within an assortment of NWS systems [e.g., Advanced Weather Interactive Processing System (AWIPS), NOAA Integrated Dissemination Program (IDP), AWC data center, NOAA Weather and Climate Operational Supercomputing System (WCOSS)]
• Work toward interacting with NWS aviation stakeholders to propose, develop, and evaluate forecast and dissemination processes that are operationally viable
• Learn to design, evaluate, and implement new forecast techniques and aviation impact diagnostics using operational observations and forecast models, particularly emerging high-resolution models and ensemble forecast systems
• Participate in engineering and executing interactive AWT experiments partnering with other portions of the NWS, the FAA, research institutions, and private industry
• Work toward managing and ingesting large meteorological data sets to support analysis and processing of experimental products, algorithms, techniques, and decision support tools

Collaborative Research 20%
• Work to conduct applied operational research to assist the NWS in developing solutions to the meteorological and air traffic requirements for the FAA
• Work toward representing the AWT by contributing to formal scientific publications and attending off-site conferences, symposia, and aviation weather-related outreach events

Documentation and Reporting 10%
• Prepare software and system documentation in collaboration with team members
• Prepare status reports as required by the project sponsor and CIRA
• Work toward preparing and delivering technical talks and presentations, as requested

Required Qualifications
• This position is located in a federal facility in Kansas City, MO and requires the ability to pass a National Agency Check with Inquiries (NACI, federal background check) for building access.
• Bachelor of Science degree in Meteorology
• Scientific programming experience with a scripting OR data processing language (e.g., Python, Perl, PHP, MATLAB, Linux/Unix shell scripting)
• Experience with weather forecast models and atmospheric data
• Demonstrated experience with Linux/Unix Operating Systems

Preferred Qualifications
• Experience with or willingness to learn about web application technologies such as HTML, CSS and JavaScript
• Experience with or willingness to learn a compiled language (e.g., C, C++, FORTRAN, or Java)
• Experience or willingness to learn how to handle and interrogate large geophysical data sets
• Experience with or willingness to learn geophysical data visualization tools (e.g., McIDAS, GrADS, IDV, or GEMPAK)
• Ability to adapt as needed and work well in a dynamic, team environment
• Knowledge of and willingness to learn environmental and meteorological data formats (e.g. GRIB, NetCDF)
• Familiarity with weather forecasting
• Familiarity with and willingness to learn about code management tools (e.g., svn, git)

Salary: Commensurate with qualifications and experience.

Background Check:
Colorado State University is committed to providing a safe and productive learning and living community. To achieve that goal, we conduct background investigations for all final candidates being considered for employment. Background checks may include, but are not limited to, criminal history, national sex offender search, and motor
vehicle history. In addition, this position is located in a federal facility and requires the ability to pass a National Agency Check with Inquiries (NACI, federal background check) for building access.

**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:** To apply, submit a cover letter which addresses the minimum and preferred qualifications, a resume, and the names and contact information for three professional references. References will not be contacted without prior notification of candidates. Applications will be accepted until all positions are filled; however, to ensure full consideration applications should be submitted by 11:59PM MST on December 16, 2018. Apply electronically by clicking “Apply to this Job” at the following website: [http://jobs.colostate.edu/postings/62400](http://jobs.colostate.edu/postings/62400). References will not be contacted without prior notification of candidates.