The Cooperative Institute for Research in the Atmosphere (CIRA) at Colorado State University (CSU) seeks to fill a professional scientific 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.

The mission of AWC is to enhance safe and efficient flight. 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. The selectee will report to the CIRA Associate Director and work closely with on-site NWS federal collaborators. This position has potential for growth.

**Responsibilities:**

This position may be required to provide operational support during non-business hours since AWC is responsible for providing operational products 24×7.

**Meteorological Tools and Process Development 70%**

- Originate and contribute research-to-operations and operations-to-research initiatives that improve aviation weather forecast services
- 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 with NWS aviation stakeholders to propose, develop, and evaluate forecast and dissemination processes that are operationally viable
- 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
- Engineer and execute interactive AWT experiments partnering with other portions of the NWS, the
FAA, research institutions, and private industry

- Manage and ingest large meteorological data sets to support analysis and processing of experimental products, algorithms, techniques, and decision support tools
- Create and facilitate training to support operationalization of new or updated tools, data, and processes

Collaborative Research Coordination 20%
- Conduct applied operational research to assist the NWS in developing solutions to the meteorological and air traffic requirements for the FAA
- Provide subject matter expertise on aviation weather data transmission and dissemination
- Represent 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
- Prepare and deliver 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.**
- One of the following:
  - Bachelor of Science degree in Meteorology, Atmospheric Science or related scientific field plus 5 years of related experience, **OR**
  - Master of Science degree in Meteorology, Atmospheric Science or related scientific field plus 2 years of related experience, **OR**
  - PhD in in Meteorology, Atmospheric Science or related scientific field
- Scientific programming experience with a scripting or data processing language (e.g., Python, Perl, PHP, MATLAB, Linux/Unix shell scripting)
- Experience with at least one compiled language (e.g., C, C++, FORTRAN, or Java)
- Demonstrated experience with Linux/Unix Operating Systems

Desired Qualifications
- Master of Science degree in Meteorology, Atmospheric Science, or related scientific field
- Demonstrated ability to work well in a dynamic, team environment
- Experience with web application technologies such as HTML, CSS and JavaScript
- Experience handling and interrogating large geophysical data sets
- Experience with geophysical data visualization tools (e.g., McIDAS, GrADS, IDV, or GEMPAK)
- Experience working with weather forecast models and atmospheric data
- Knowledge of environmental and meteorological data formats (e.g. GRIB, NetCDF)
- Familiarity with weather forecasting
- Familiarity with 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. 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.

**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, to ensure full consideration, applications should be submitted by 11:59 PM MDT, June 24, 2018. Apply electronically by clicking “Apply to this Job” at the following website [http://jobs.colostate.edu/postings/56946](http://jobs.colostate.edu/postings/56946). References will not be contacted without prior notification of candidates.

Colorado State University does not discriminate on the basis of race, age, color, religion, national origin or ancestry, sex, gender, disability, veteran status, genetic information, sexual orientation, or gender identity or expression. Colorado State University is an equal opportunity/equal access/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.