

CIRES/NGDC Research Associate

The Cooperative Institute for Research in Environmental Sciences (CIRES) at the University of Colorado Boulder has an opening for a Professional Research Associate. This position supports NOAA's Solar-Terrestrial Physics Ionosphere Ground Sensor Program at NOAA's National Geophysical Data Center (NGDC), 325 Broadway, Boulder, CO. Contact Terence Bullett, 303-497-4788, <mailto:Terry.Bullett@noaa.gov>

Background:

The successful candidate will be responsible to obtain, analyze and archive ionosonde data to achieve specific scientific data stewardship objectives. This will involve obtaining data from and performing scientific data analysis with ionospheric sensing instruments, both in-situ and ground based, with emphasis on ionosondes. Familiarity with ionosondes, ionosonde data analysis, and radio wave-plasma interactions is required. Sensors will be operated both routinely for long term monitoring and in campaign modes, specifically ionospheric sounding rocket experiments, so related experience is required. International travel to experiment and sensor locations will be required. Candidate will be involved with research in ionospheric radio propagation and remote sensing topics including ionospheric specification, energy coupling mechanisms between atmospheric regions, gravity waves, traveling ionospheric disturbances, radio absorption, scattering, scintillation, radio blackout, space weather and global space climate change.

The candidate will also participate in the collection, analysis and archival of real time ionosonde data. The data suppliers will be predominantly international agencies and institutions, and are from sensors of numerous ages and capabilities. Analysis tasks include considerations as to the quality, sensor type, data timeliness and impacts of these data on ionospheric specification and forecasting. The focus will be on uniform, quality and timely data that meet the requirements of modern data-assimilation, ionospheric specification, forecast and climate models. This work supports NOAA's Space Weather Program.

Principal Duties

- Analyze data from various generations of ionosondes to support scientific data stewardship goals in ionospheric physics related to Space Weather.
- Participate in conferences, workshops and meetings involving Space Weather with emphasis on ionospheric observations, ionospheric research, ionosonde development, and related topics.
- Assist in the real time collection, analysis, quality control, distribution and archive of ionosonde data from various instruments and data providers worldwide.
- Assist in the design, test, installation and operation of advanced ionospheric sensing instruments worldwide.
- Participate in research campaigns and sounding rocket flights involving ionosphere instruments.
- Publish scientific papers on research results.

Requirements

- Doctoral degree in Space Science, Physics or related field.
- Course work in Ionospheric Physics and/or Electrical Engineering
Familiarity with ionosonde instrumentation and data analysis.
- Strong communication skills and ability to work in a team environment.
- Computer and ionosonde data analysis skills in C, FORTRAN, MATLAB and/or IDL.

The position will be filled as a Research Associate in CIRES at the University of Colorado, Boulder, and will be eligible for employee benefits.

To apply go to: www.jobsatcu.com/applicants/Central?quickFind=59450

Please upload resume/vita, letter of recommendation (Document 1) Proof of degree (Document 2)

Job Code NGDC-16

The University of Colorado at Boulder is committed to diversity and equality in education and employment, and conducts background checks for all final applicants being considered for employment.