EAPS WEEKLY NEWSLETTER
17 December 2018

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BE SURE TO CHECK OUT ALL OF THE EAPS COMMUNICATIONS MEDIA!
Facebook
Twitter
Department Magazine
Website News

DEPARTMENT NEWS

LAST NEWSLETTER OF THE YEAR

Today’s newsletter will be the last for the 2018 year. The next newsletter will come out on January 7, 2019.

Enjoy your Winter Break!

EAPS CROWDFUNDING PROJECT; FORGING OUR FUTURE EARTH & ATMOSPHERIC SCIENTISTS

As part of the University’s 150th anniversary, a crowdfunding website has been created, which provides an opportunity to bolster our outreach and recruitment efforts. This project, titled “Forging Our Future Earth & Atmospheric Scientists,” will help bring high school students to

http://www.eaps.purdue.edu/
LEADERSHIP IN GLOBALIZATION AWARDS

The University’s Office of Corporate and Global Partnerships (OCGP) and the Global Academic Committee (GAC) are soliciting nominations for Outstanding Leadership in Globalization. One faculty member and one staff member will be recognized in 2019. Each will receive a cash award.

Nomination information can be accessed using the following links. Self-nominations are allowed.


All nominations must be routed to OCGP through the College of Science by their deadline of 2/15. Therefore, please send your nomination materials electronically to Robin Sipes (rsipes@purdue.edu) by 5:00 PM on Wednesday, February 13, 2019.

Questions regarding the nomination process can be directed to Professor Elizabeth J. Taparowsky: taparows@purdue.edu

REQUEST FOR PREPROPOSALS FOR USE OF THE U.S. DEPARTMENT OF ENERGY’S ARM USER FACILITY

The U.S. Department of Energy (DOE) is now accepting preliminary proposals from scientists worldwide to use components of the Atmospheric Radiation Measurement (ARM) user facility for field campaigns. Preproposals are due April 5, 2019, for:

- Use of the second ARM Mobile Facility – AMF2 will be available for deployment beginning in January 2022. Note: The Scanning ARM Cloud Radar (SACR) will not be offered with AMF2.
- Supplemental campaigns – Moderate-size campaign proposals to augment an ARM atmospheric observatory will be considered for calendar years 2020–2021.
- Note: The Gulfstream-159 research aircraft will not be available for this call.

Submit preproposals online through the field campaign preproposal form.

Be sure to check the ARM campaign page for more details, including current campaigns and capabilities, and proposal due dates. Proposed deployments should focus on research that addresses the ARM mission of improving the understanding and representation of clouds and aerosols in earth system models, as well as their interactions and coupling with the Earth’s surface.

Priority will be given to proposals that:

- make comprehensive use of the ARM facilities
- focus on strategic goals of the DOE Office of Biological and Environmental Research (BER)
- have the ability to improve regional or global earth system models.

Proposals that coordinate with other BER community capabilities (e.g., Environmental Molecular Sciences Laboratory, AmeriFlux Network, Next Generation Ecosystem Experiments in the Arctic and Tropics, Energy Exascale Earth System Model) are encouraged.

https://www.arm.gov/news/facility/post/52337

CIMMS RESEARCH SCIENTIST – WARN ON FORECAST @ UNIVERSITY OF OKLAHOMA

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma (OU) is currently seeking an
experienced Research Scientist to provide scientific and meteorological expertise for collaborative work to advance NSSL’s storm-scale data assimilation and prediction science within the NOAA Warn-on-Forecast project. Specifically, research will focus on improving short-term predictions of high impact severe convective storms, heavy rainfall, landfalling tropical cyclones and other hazardous weather associated with convective storms. This research will require close collaboration with the Storm Prediction Center, NOAA’s Global Systems Division at the Earth Systems Research Laboratory, and the Environmental Modeling Center in College Park, Maryland. A successful candidate for this position will need high-level abilities to diagnose and understand differences in forecasts between various modeling and data assimilation systems, through expertise in mesoscale and storm-scale dynamics and convection allowing models. Also required are high-level abilities to assess the capabilities of models to properly depict mesoscale convective systems and land-falling tropical cyclones and their attendant hazardous weather, and the ability to develop diagnostics for those weather hazards from convective models. The emphasis of the research will be on Warn-on-Forecast applications (e.g., 0-6 h forecasts of severe wind gusts, storm-scale vortices within mesoscale convective systems, and tornadic supercells within TC rainbands). The position will be based at the National Severe Storms Laboratory (NSSL) in Norman, OK within the National Weather Center, a highly collaborative operational, research, and academic environment containing a number of NOAA and OU organizations.

[See attached flyer for complete information]

10 PAID SUMMER INTERNSHIPS OFFERED BY NCEP

The National Weather Service (NWS) National Centers for Environmental Prediction (NCEP) is accepting applications for its 2019 summer student internship program.

NCEP is offering up to 10 paid summer internships targeted towards current undergraduate and graduate students to work in areas that will meet the future needs of the ever-broadening weather-climate-water user community. Each student will collaborate with one or more scientists at our five centers located in College Park, MD: Climate Prediction Center, Environmental Modeling Center, NCEP Central Operations, Ocean Prediction Center, and Weather Prediction Center.

Potential projects could include the following:

- Improve understanding of forecasting problems
- Address some critical aspect of operational model development
- Create new data analysis techniques with wide application and usefulness in operational forecasting
- Develop improved forecast tools (including use of GIS)
- Conduct IT related activities, such as reviewing operational process documentation, website maintenance, and auditing websites
- Develop datasets for the Science on a Sphere
- Incorporate social science to improve communication of forecast uncertainty

Applications are due February 1, 2019.

For more information and to apply: https://ncepinternship.smapply.io

CIMMS POST-DOCTORAL RESEARCH ASSOCIATE – FACETs

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a postdoctoral research associate to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development of probabilistic severe convective weather guidance for the Forecasting A Continuum of Environmental Threats (FACETs) project. The goal of FACETs is that future warnings will be probabilistic, spatially coherent forecasts.

[For complete information see attached flyer]
The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development and assessment of scientific applications, algorithms, and applied research that assists forecasters in the warning decision-making process for severe convective weather events. The incumbent will lead the development of severe convective weather guidance applications for the Multi-Radar / Multi-Sensor system, which is widely used in the National Weather Service, private sector, and in academia for analyzing thunderstorm events.

[See attached flyer for complete information]

CIMMS PETER LAMB POSTDOCTORAL FELLOWSHIP

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is seeking excellent candidates for the prestigious Peter Lamb Postdoctoral Fellowship. CIMMS is a research organization that promotes collaborative research between National Oceanic and Atmospheric Administration (NOAA) and University of Oklahoma (OU) scientists on problems of mutual interest to improve basic understanding of mesoscale and storm-scale meteorological phenomena to help produce better forecasts and warnings that save lives and property and to understand the societal impacts of such phenomena. Research scientists within CIMMS use observations, analysis and models to improve the understanding and prediction of high-impact weather elements and systems and climate anomalies ranging in size from cloud nuclei to multi-state areas.

Although the position is not project-specific, proposals for the CIMMS Postdoctoral fellowship should address at least one of CIMMS’ research themes: 1) weather radar research and development; 2) storm-scale and mesoscale modeling research and development; 3) forecast improvements research and development; 4) impacts of climate change related to extreme weather events; and 5) societal and socioeconomic impacts of high-impact weather systems. The CIMMS website http://cimms.ou.edu/index.php/research has more information on projects underway within these research themes as well as contact information for CIMMS scientists working on these themes. It is suggested but not required that those applying contact a CIMMS scientist before writing their research proposal to receive guidance when drafting a proposal.

[See attached flyer for complete information.]

CIMMS RESEARCH ASSOCIATE – SEvere CONVective WEATHER RADAR APPLICATIONS

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research associate to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development and testing of new severe weather applications for the detection and diagnosis of tornadoes and hail.

[For additional information, see attached flyer]

CIMMS RESEARCH ASSOCIATE – MRMS SEVERE WEATHER APPLICATIONS

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development of scientific applications, algorithms, and applied research that assists forecasters in the warning decision-making process for severe convective weather events. The incumbent will work to develop severe convective weather guidance applications for the Multi-Radar / Multi-Sensor project, which is widely used in the
National Weather Service, private sector, and in academia for analyzing thunderstorm events.

[See attached flyer for complete information]

**INSTRUCTOR/LECTURERE/TEACHING ASSISTANT PROFESSOR AT UNIVERSITY OF ILLINOIS**

The Department of Atmospheric Sciences at the University of Illinois at Urbana-Champaign invites applications for a mission-critical undergraduate teaching and academic advising position in our undergraduate program. This is a 9 month (paid over 12), full-time academic appointment (non-tenure track) at the rank of Instructor, Lecturer, or Teaching Assistant Professor (title commensurate with experience and qualifications), but with opportunities for summer salary through online course instruction.

**Closing date: 1/4/19**

[For complete details see attached flyer.]

**TENURE-TRACK FACULTY POSITION IN ATMOSPHERIC REMOTE SENSING**

The Department of Atmospheric and Oceanic Sciences at McGill University is seeking outstanding applicants for a tenure-track Assistant Professor position in remote sensing of the atmosphere, the ice or the ocean surface to strengthen its leadership in remote sensing and earth system science. The successful applicant will be expected to develop an active research program, supervise graduate students, and teach a variety of undergraduate and graduate courses in the Department of Atmospheric and Oceanic Sciences and in the Earth System Science program. A relevant doctoral degree in physical sciences or engineering is required.

The preferred starting date for this position is August 1, 2019. **Review of the applications will begin on January 21, 2019,** and continue until the position is filled.

[For complete details see attached flyer]

**AGI HARRIET EVELYN WALLACE SCHOLARSHIP**

AGI is seeking women pursuing thesis-based Master’s and Doctoral degrees in the geosciences for the 7th Harriet Evelyn Wallace Scholarship. Applications are being accepted now for the 2019-2020 academic year. Successful applicants will be full-time students and must be U.S. citizens or permanent residents.

To find out more information about application credentials and procedures please visit:  
www.americangeosciences.org/scholarships

**Application deadline is January 4, 2019**

[See attached flyer for addition information]

**LECTURER – UNIVERSITY OF GEORGIA**

The University of Georgia, Geography Dept., is advertising for a full-time non-tenure-track lecturer who would teach synoptic, mesoscale, weather forecasting seminars, and physical geography, with a PhD who is interested in, and excels, at teaching weather-related subjects. The salary is circa $60K/9-month appointment. A diverse applicant pool is highly desireable.

Job ad link is here:  
https://www.ugajobsearch.com/postings/35012?fbclid=IwAR0WH1Fi7sdlzyy-PJPZuJLoqP1ff3Uq9qYjql-1fgeJiXCOlkHqsngM4

**2019 SUMMER ASSOCIATE PROGRAM**

Institute for Defense Analyses (IDA) in Alexandria, VA has a great student internship program for undergraduate and graduate students. IDA is currently looking for applicants for the 2019 Summer Program with potential opportunities in meteorology/atmospheric science.

Applications are due by January 5, 2019.

Click the link below to see the details of the position:  
ILS 695 DATA SHARING AND PUBLICATION

- Wrapping up your PhD dissertation?
- Ready to share your data with your research group?
- Excited to publish your data sets along with your thesis?

A new course available to our Graduate Students that will walk students through the process of preparing a data set for sharing with both internal and external audiences, in conjunction with their thesis deposit.

- Work closely with your supervisor to determine an authoritative data set
- Create data documentation
- Apply metadata
- Choose a data sharing platform as appropriate for your project

3 Credit
Spring 2019
Monday
8:30-9:20 (Lecture)
9:30-11:20 (Lab)
WALC 3049 & 3045

Questions? Contact Megan Sapp Nelson: msn@purdue.edu or Nichole Kong: kongn@purdue.edu

MS SCHOLARSHIPS AND FELLOWSHIPS

AMS scholarships and fellowships range from $1,000 to $25,000 and are open for applications — whether you will be a college freshmen or a graduate student. AMS supports your education and pursuit of a career in the atmospheric and related oceanic or hydrologic sciences.

- 21 Senior Scholarship awards ranging from $2000 to $10,000 are available in 2019 for outstanding undergraduate students entering their final year of study. Applications are due on 8 February 2019.

AMS Graduate Fellowships include a $25,000 stipend and partial travel support to attend the AMS Annual Meeting. Applications are due on 11 January 2019.

The AMS Freshman Undergraduate Scholarship program is open to all high school students and designed to encourage study in the atmospheric and related sciences. Applications are due on 8 February 2019.

AMS Minority Scholarships award funding to minority students who have been traditionally underrepresented in the sciences, especially Hispanic, Native American, and Black/African American students. Applications are due on 8 February 2019.

To learn more and apply click here.

FACULTY SEARCH COMMITTEE WORKSHOP SET FOR JAN. 28

ADVANCE-Purdue is offering a session of the "ADVANCE-Purdue/OVPEC Faculty Search Committee Workshop" on Jan. 28.

The workshop, which is open to all faculty and required for serving on a search committee, will be held 1:15-5 p.m. in Purdue Memorial Union's West Faculty Lounge.

The workshop provides an interactive opportunity to explore and discuss search strategies and challenges. It is research-based and includes important information on unintentional bias. The workshop is conducted in a roundtable format that offers opportunity for an in-depth discussion of faculty search best practices with other faculty members across campus, including how to build a robust and diverse candidate pool.

Those faculty planning to attend can click the link to register for the workshop here. Those interested in
being on search committees in the fall should register for this workshop.

Any questions should be directed to De Bush at djbush@purdue.edu. The workshop and registration information is also available here.

The Office of the Vice President for Ethics and Compliance is committed to making all programs accessible to participants with disabilities. Those who require an accommodation or assistance due to a disability for this program should contact the office before the program begins at 765-494-6373, or vpeceducation@purdue.edu.

IMPORTANT NOTICE ABOUT THIS NEWSLETTER

This newsletter is used as the primary information source for current and upcoming events, announcements, awards, grant opportunities, and other happenings in our department and around campus. Active links to additional information will be provided as needed. Individual email announcements will no longer be sent unless the content is time-sensitive. We will continue to include our publications, presentations and other recent news items as well.

Those using paper copies of the newsletter should go to our newsletter archive on the EAPS website at http://www.eaps.purdue.edu/news/newsletters.html and Click on News to access active links as needed. Material for inclusion in the newsletter should be submitted to Katherine Huseman (khuseman@purdue.edu) by 5:00pm on Thursday of each week for inclusion in the Monday issue.

If it is in the newsletter, we assume you know about it and no other reminders are needed. For answers to common technology questions and the latest updates from the EAPS Technology Support staff, please visit:


Also, as an additional resource for information about departmental events, seminars, etc., see our departmental calendar at http://www.EAPS.purdue.edu/events-calendar.html

CELEBRATIONS

Harshvardan
Qianlai Zhuang
Sarah Flook

January 1
January 2
January 3

http://www.eaps.purdue.edu/
The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma (OU) is currently seeking an experienced Research Scientist to provide scientific and meteorological expertise for collaborative work to advance NSSL’s storm-scale data assimilation and prediction science within the NOAA Warn-on-Forecast project. Specifically, research will focus on improving short-term predictions of high impact severe convective storms, heavy rainfall, landfalling tropical cyclones and other hazardous weather associated with convective storms. This research will require close collaboration with the Storm Prediction Center, NOAA’s Global Systems Division at the Earth Systems Research Laboratory, and the Environmental Modeling Center in College Park, Maryland. A successful candidate for this position will need high-level abilities to diagnose and understand differences in forecasts between various modeling and data assimilation systems, through expertise in mesoscale and storm-scale dynamics and convection allowing models. Also required are high-level abilities to assess the capabilities of models to properly depict mesoscale convective systems and land-falling tropical cyclones and their attendant hazardous weather, and the ability to develop diagnostics for those weather hazards from convective models. The emphasis of the research will be on Warn-on-Forecast applications (e.g., 0-6 h forecasts of severe wind gusts, storm-scale vortices within mesoscale convective systems, and tornadic supercells within TC rainbands). The position will be based at the National Severe Storms Laboratory (NSSL) in Norman, OK within the National Weather Center, a highly collaborative operational, research, and academic environment containing a number of NOAA and OU organizations.

The principal duties of this position are:
1. Conduct original research and solicit funding for new research on diagnostics, verification, and predictability for frequently updating storm scale data assimilation and prediction systems with a focus on understanding model dynamics and representation of physical processes associated with extreme high impact weather.
2. Collaborate with NOAA testbeds such as the Hazardous Weather Testbed, Hydro-Meteorological Testbed, and Aviation Weather Testbed, to design real-time forecasting experiments using experimental storm-scale modeling and data assimilation systems, and lead/organize post-experiment evaluations.
3. Contribute to scientific publications and attend off-site conferences, workshops, symposia and NOAA testbed-related outreach events as needed.
4. Provide leadership within CIMMS and the Forecast Research and Development Division of NSSL through mentorship of students and junior colleagues.

The minimum qualifications for the position are:
1. A PhD in Meteorology, Atmospheric Science, or related area.
2. Demonstrated excellence in mesoscale and convective-scale dynamics via his/her publication record and conference presentations.
3. Experience with mentoring students and/or colleagues in these areas.

Excellent oral and written communication and public speaking skills are highly desired, as well as proficiencies in weather visualization software (e.g., GrADS, NCL, GEMPAK, etc.) and coding languages like Python and/or Fortran. Applicants should identify experience in graphic
design/visualization, programming and scripting languages, as well as skills using numerical weather prediction models.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. CIMMS staff will provide general supervision with technical oversight provided by NSSL staff and management. The incumbent works under general supervision, but is expected to work independently and determine action to be taken in handling all but unusual situations.

The beginning salary is commensurate with educational background and experience, with OU benefits. Information on OU benefits can be found at http://www.hr.ou.edu/.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke, Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu
Attn: Warn-on-Forecast

The University of Oklahoma is an Equal Opportunity/Affirmative Action employer.
CIMMS Post-Doctoral Research Associate - FACETs

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a postdoctoral research associate to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development of probabilistic severe convective weather guidance for the Forecasting A Continuum of Environmental Threats (FACETs) project. The goal of FACETs is that future warnings will be probabilistic, spatially coherent forecasts.

The duties of this position are:

1. Apply diverse data sets to produce storm-based probabilistic trends and historical distributions of convective storm features to produce probabilistic hazard information.
2. Develop and test new multi-sensor (e.g., satellite, lightning, numerical models, radar) algorithms and techniques (e.g., machine learning) for short-term probabilistic prediction and nowcasting;
3. Acquire and apply expertise in severe local storms and the warning-decision-making process;
4. Design and lead applied research and operational experiments with National Weather Service Forecasters and end-users in the Hazardous Weather Testbed’s Experimental Warning Program.
5. Attend meetings and professional conferences to present research results and interact with collaborators and users; formally publish results when appropriate;
6. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science.

The minimum qualifications for the position are:

1. A Ph.D. Degree in Meteorology, Atmospheric Science, or related area;
2. Experience with scientific programming on UNIX/Linux using a high level language (e.g. C++, Java, Python)
3. Experience with statistical methods or software for meteorological data analysis and visualization
4. Ability to communicate scientific research through conference presentations, formal publications and technical documents

Applicants should identify expertise with any of the following areas: Severe Local Storms; Using Large Datasets; Data Mining; Machine Learning; Statistics; Warning Decision Making; Weather Radar; Lightning Data; Numerical Modeling; Remote Sensing and Satellite. Strong oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems, programming skills (including web-based and mobile applications) and Geographic Information Systems.
Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Works under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams and supervise students.

The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at http://www.hr.ou.edu. The position is expected to begin February 2019.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke  
Executive Director, Finance and Operations  
University of Oklahoma CIMMS  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
treinke@ou.edu  
ATTN: Post-Doc FACETs

_The University of Oklahoma is an equal opportunity/Affirmative Action employer._
The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development and assessment of scientific applications, algorithms, and applied research that assists forecasters in the warning decision-making process for severe convective weather events. The incumbent will lead the development of severe convective weather guidance applications for the Multi-Radar / Multi-Sensor system, which is widely used in the National Weather Service, private sector, and in academia for analyzing thunderstorm events.

The duties of this position are:

1. Lead development and assessment of techniques and algorithms that utilize a variety of sensors (e.g., satellite, lightning, polarimetric radar, or numerical models) to improve the short-term prediction of high impact weather including tornadoes, hail, lightning, and damaging wind.
2. Design and lead applied research and operational experiments in the Hazardous Weather Testbed’s Experimental Warning Program that facilitate the evolution of how severe convective weather threats are analyzed and communicated;
3. Develop scientific talent and enhance diversity within the field through the advisement of undergraduate and graduate students.
4. Attend meetings and professional conferences to present research results and interact with collaborators and users; formally publish results when appropriate;
5. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science.

The minimum qualifications for the position are:

1. A Ph.D. Degree in Meteorology, Atmospheric Science, or related area;
2. Experience with statistical methods or software for meteorological data analysis and visualization
3. Experience with scientific programming on UNIX/Linux using a high level language (e.g. C++, Java, Python)
4. Interest in new severe and convective applied research and operational applications of research
5. Ability to communicate scientific research through conference presentations, formal publications and technical documents

Applicants should identify expertise with any of the following areas: Severe Local Storms; Machine Learning; Statistics; Warning Decision Making; Weather Radar; Lightning Data; Numerical Modeling; Remote Sensing and Satellite. Strong oral and written communication skills
are needed for the position, including the ability to collaborate on proposals and reports. Please indicate experience with Linux (or UNIX) operating systems, programming skills (including web-based and mobile applications) and Geographic Information Systems.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Works under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams and supervise students.

The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at http://www.hr.ou.edu. The position is expected to begin February 2019.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke  
Executive Director, Finance and Operations  
University of Oklahoma CIMMS  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
treinke@ou.edu  
ATTN: MRMS Scientist

*The University of Oklahoma is an equal opportunity/Affirmative Action employer.*
CIMMS Peter Lamb Postdoctoral Fellowship

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is seeking excellent candidates for the prestigious Peter Lamb Postdoctoral Fellowship. CIMMS is a research organization that promotes collaborative research between National Oceanic and Atmospheric Administration (NOAA) and University of Oklahoma (OU) scientists on problems of mutual interest to improve basic understanding of mesoscale and storm-scale meteorological phenomena to help produce better forecasts and warnings that save lives and property and to understand the societal impacts of such phenomena. Research scientists within CIMMS use observations, analysis and models to improve the understanding and prediction of high-impact weather elements and systems and climate anomalies ranging in size from cloud nuclei to multi-state areas.

Although the position is not project-specific, proposals for the CIMMS Postdoctoral fellowship should address at least one of CIMMS’ research themes: 1) weather radar research and development; 2) storm-scale and mesoscale modeling research and development; 3) forecast improvements research and development; 4) impacts of climate change related to extreme weather events; and 5) societal and socioeconomic impacts of high-impact weather systems. The CIMMS website http://cimms.ou.edu/index.php/research has more information on projects underway within these research themes as well as contact information for CIMMS scientists working on these themes. It is suggested but not required that those applying contact a CIMMS scientist before writing their research proposal to receive guidance when drafting a proposal.

Terms of appointment are for one (1) year, renewable for a second year subject to satisfactory performance. An annual salary of $60,000 and a research budget of up to $5,000 per year is included in the award, along with a modest relocation stipend. Successful applicants must have obtained a Ph.D. within the last five years; proof of a Ph.D. is required before assuming the post-doctoral position, but those in the final stages of Ph.D. dissertation completion are encouraged to apply provided a finish date before July 31, 2019 is anticipated.

Applicants are asked to submit electronically: (1) a curriculum vitae; (2) a list of all products (e.g., papers, patents, technology transfers, licensed software, etc.) generated over the course of their career; (3) a cover letter which includes the expected start date and any non-standard resources that might be needed to complete the proposed work; (4) a brief proposal (no more than 4 pages, double-spaced, excluding the list of references and figures) describing the work to be pursued during a 2-year tenure at CIMMS; and (5) a list of three references. In addition, applicants should request that their referees directly send their reference letters to CIMMS at the email address listed below.

To receive full consideration, applications and supporting material should be received prior to January 30, 2019. All materials should be sent electronically to:

Tracy Reinke, Executive Director Finance and Operations
Cooperative Institute for Mesoscale Meteorological Studies (CIMMS)
120 David L. Boren Blvd, Norman, OK, 73072
treinke@ou.edu
ATTN: Peter Lamb Postdoctoral Fellowship
**CIMMS Research Associate - Severe Convective Weather Radar Applications**

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma currently is seeking a research associate to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development and testing of new severe weather applications for the detection and diagnosis of tornadoes and hail.

The duties of this position are:

1. Development of new applications and techniques for the analysis of WSR-88D data, including tornado and mesocyclone detection algorithms;
2. Evaluation of existing Radar-based products and applications, specifically focusing on data quality control and short-term nowcasting (0-2 hour) of severe and convective events;
3. Acquire and apply expertise in severe local storms and the warning-decision-making process;
4. Attend meetings and professional conferences to present research results and interact with collaborators and users;
5. Meet with collaborators and provide regular summaries of work accomplished;
6. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science;
7. Plan and execute the evaluation of new applications and techniques in the Hazardous Weather Testbed.

The minimum qualifications for the position are:

1. A Masters Degree in Meteorology, Atmospheric Science, Geographic Information Systems, or related area;
2. Computer programming and scripting experience (e.g. C++, Java, Python);
3. Skills in the interpretation of weather radar data.

Applicants should identify expertise with any of the following areas: Computer Programming; Weather Radar; Visualization; Geographic Information Systems; Warning Decision Making; MRMS; WDSS-II. Good oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems and programming skills (including application development and scripting).

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.
General supervision will be provided by the CIMMS leadership. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Appointee will work under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams.

The beginning salary will be dependent on experience, with University of Oklahoma benefits. Information on benefits may be found at http://www.hr ou.edu. The position is expected to begin February 2019.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke
Executive Director, Finance and Operations
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
treinke@ou.edu
ATTN: Severe Weather Radar Applications

The University of Oklahoma is an equal opportunity/Affirmative Action employer.
CIMMS Research Associate - MRMS Severe Weather Applications

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research scientist to collaborate with scientists in the National Severe Storms Laboratory’s (NSSL) Warning Research & Development Division on the development of scientific applications, algorithms, and applied research that assists forecasters in the warning decision-making process for severe convective weather events. The incumbent will work to develop severe convective weather guidance applications for the Multi-Radar / Multi-Sensor project, which is widely used in the National Weather Service, private sector, and in academia for analyzing thunderstorm events.

The duties of this position are:
1. Developing and/or testing new multi-sensor (e.g., satellite, lightning, numerical models) algorithms and techniques (e.g, machine learning) for short-term probabilistic prediction and nowcasting;
2. Acquire and apply expertise in severe local storms and the warning-decision-making process;
3. Participate in applied research and operational experiments in the Hazardous Weather Testbed’s Experimental Warning Program that facilitate the evolution of how severe convective weather threats are analyzed and communicated;
4. Attend meetings and professional conferences to present research results and interact with collaborators and users; formally publish results when appropriate;
5. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science.

The minimum qualifications for the position are:
1. A Masters Degree in Meteorology, Atmospheric Science, Geographic Information Systems, or related area;
2. Experience with scientific programming on UNIX/Linux using a high level language (e.g. C++, Java, Python)
3. Experience with statistical methods or software for meteorological data analysis and visualization
4. Interest in new radar algorithm development for severe storm detection and diagnosis
5. Ability to communicate scientific research through conference presentations, formal publications and technical documents

Applicants should identify expertise with any of the following areas: Severe Local Storms; Machine Learning; Statistics; Warning Decision Making; Weather Radar; Lightning Data; Numerical Modeling; Remote Sensing and Satellite. Strong oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems,
programming skills (including web-based and mobile applications) and Geographic Information Systems.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Works under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams and supervise students.

The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at http://www.hr.ou.edu. The position is expected to begin February 2019.

To apply for the position, please forward your resume, cover letter and list of three references to:

Tracy Reinke  
Executive Director, Finance and Operations  
University of Oklahoma CIMMS  
120 David L. Boren Blvd., Suite 2100  
Norman, OK 73072-7304  
treinke@ou.edu  
ATTN: MRMS Severe Weather Applications

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Job Details

Description:

Instructor/Lecturer/Teaching Assistant Professor
Department of Atmospheric Sciences
University of Illinois at Urbana-Champaign

The Department of Atmospheric Sciences at the University of Illinois at Urbana-Champaign invites applications for a mission-critical undergraduate teaching and academic advising position in our undergraduate program. This is a 9 month (paid over 12), full-time academic appointment (non-tenure track) at the rank of Instructor, Lecturer, or Teaching Assistant Professor (title commensurate with experience and qualifications), but with opportunities for summer salary through online course instruction.

The University of Illinois is an Equal Opportunity, Affirmative Action employer. Minorities, women, veterans and individuals with disabilities are encouraged to apply. For more information, visit http://go.illinois.edu/EOE. To learn more about the University’s commitment to diversity, please visit http://www.inclusiveillinois.illinois.edu

Responsibilities

The successful applicant will serve as the primary academic advisor and professional mentor to 80-100 undergraduate students, and will be expected to meet with prospective students and their parents during campus visits. She will also teach two courses per semester, including preparing and presenting lectures, writing and grading examinations, holding office hours to meet with students outside of class time, monitoring teaching assistants, and assigning grades. She will be encouraged to develop new courses and experiment with novel teaching techniques. Applicants for the Teaching Assistant Professor level will also be expected to engage in scholarly research and service to the Department/College/University.

Qualifications

The appointment requires experience in college- or university-level teaching. Instructor title requires a M.S. in atmospheric sciences, meteorology, or a closely related field. Lecturer/Teaching Assistant Professor title requires a Ph.D. in atmospheric sciences, meteorology, or a closely related field. Interest or experience in education research, curriculum development, current educational technologies, and a strong desire to create new and innovative course materials and experiments will enhance an application. Teaching Assistant Professor title applicants must demonstrate the ability to make an instructional and curricular impact both within the Department and beyond, either through scholarly publications, invited talks, or other related activities involving their discipline, pedagogy and student interactions.

The successful applicant should possess: excellent interpersonal communication skills, a desire to interact with prospective students and their parents, excellent organization and time management skills, and demonstrated excellence in teaching and advising at the UG level.

SALARY AND APPOINTMENT INFORMATION

Title and salary are commensurate with experience and qualifications. The preferred start date is August 16, 2019.

APPLICATION PROCEDURES AND DEADLINE INFORMATION

Create your application through http://jobs.illinois.edu and upload PDF files of your cover letter, curriculum vitae, and statement of teaching philosophy. The online application will require names and contact information for three references. Teaching Assistant Professor applicants must also upload PDF files of the following:

- Sample syllabi, assignments, and other teaching materials that provide evidence of the quality of their instruction so far, or of instruction that they hope to do.
- A 1- to 3-page narrative that describes their current and/or future plan for contributing scholarship that enhances the Department and University and make an impact beyond the campus. Research discussed can be disciplinary, pedagogical, or both.
- Copies of any published works completed.

Please contact Jill Randell at randell@illinois.edu if you have questions. In order to ensure full consideration, applications (in PDF format only) must be received by January 4, 2019. Applicants may be interviewed before the closing date; however, no hiring decision will be made until after that date.

The University of Illinois conducts criminal background checks on all job candidates upon acceptance of a contingent offer.
Tenure-track Faculty Position in Atmospheric Remote Sensing

The Department of Atmospheric and Oceanic Sciences at McGill University is seeking outstanding applicants for a tenure-track Assistant Professor position in remote sensing of the atmosphere, the ice or the ocean surface to strengthen its leadership in remote sensing and earth system science. The successful applicant will be expected to develop an active research program, supervise graduate students, and teach a variety of undergraduate and graduate courses in the Department of Atmospheric and Oceanic Sciences and in the Earth System Science program. A relevant doctoral degree in physical sciences or engineering is required.

The successful candidate is expected to pursue research in remote sensing of the atmosphere, the ice or the ocean surface with a strong modelling and/or observational component. The range of possible research areas is broad and includes but is not limited to: 1) the development of retrieval methods for studies of atmospheric composition, temperature, wind, precipitation, air-sea interactions, surface ocean temperatures and circulation 2) the use of measurement data for the characterization and understanding of processes affecting weather, air quality, climate, sea ice and 3) the development and validation of remote sensing instruments. The Department of Atmospheric and Oceanic Sciences has strong ties with the Departments of Mathematics and Statistics, Chemistry, and with the Earth System Science Program. Access to high performance computing is available through Compute Canada.

McGill University is an English-speaking university located in Montreal, one of North America’s most cosmopolitan cities. For more information about McGill University and the Department of Atmospheric and Oceanic Sciences, please see http://www.mcgill.ca/meteo

Qualified candidates are invited to submit an application, including a curriculum vitae, a statement of research interests, a statement of teaching interests, and names and contact information for three references. Following a preliminary screening, we will contact the references directly. Applications can be sent via email in pdf format to remotesensing.aos@mcgill.ca or by post to Dr. John R. Gyakum, Chair, Department of Atmospheric and Oceanic Sciences, McGill University, 805 Sherbrooke Street West, Montreal, QC H3A 0B9, Canada (Telephone: 1-514-398-3760; fax: 1-514-398-6115).

The preferred starting date for this position is August 1, 2019. Review of the applications will begin on January 21, 2019, and continue until the position is filled.

McGill University hires on the basis of merit and is strongly committed to equity and diversity within its community. We especially welcome applications from visible minority group members, women, Indigenous persons, persons with disabilities, persons of minority sexual orientations and gender identities, and others with the skills and knowledge to productively engage with diverse communities. We encourage members of equity-seeking groups to self-identify within their letter of intent in their application. Persons with disabilities who anticipate needing accommodations for any part of the application and hiring process may contact, in confidence, Professor Angela Campbell, Associate
Provost (Equity and Academic Policies) at (514) 398-1660 or at Angela.Campbell@mcgill.ca. Associate Provost Campbell can also answer questions related to equity, diversity and inclusion, or privacy concerns the candidate may have related to self-identifying. All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.
The American Geosciences Institute

Harriet Evelyn Wallace Scholarship

WHAT
AGI is seeking women pursuing thesis-based Master’s and Doctoral degrees in the geosciences for the 7th Harriet Evelyn Wallace Scholarship. Applications are being accepted now for the 2019-2020 academic year. Successful applicants will be full-time students and must be U.S. citizens or permanent residents.

APPLICATION PROCESS
To find out more information about application credentials and procedures please visit: www.americangeosciences.org/scholarships

HOW MUCH
$5,000 for 2019-2020. Successful Scholars are eligible to compete for a second scholarship in future years, given that they continue to be full-time geoscience students. There is a 2-term life maximum for the scholarship.

APPLICATION DEADLINE
January 4th, 2019