EAPS WEEKLY NEWSLETTER
06 April 2020

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

DEPARTMENT NEWS

EAPS NEW PUBLICATIONS


EAPS MEETINGS & EVENTS

EAPS FACULTY MEETINGS
Tuesday’s 3:00 PM
HAMP 2244
April 14
May 5

PRIMARY COMMITTEE MEETINGS
Tuesday’s 3:00 PM
HAMP 2244
April 7
April 21

SPRING 2020 EAPS AWARDS BANQUET
(POSTPONED)

EAPS K-12 OUTREACH CALENDAR OF EVENTS
http://www.eaps.purdue.edu/outreach/Outreach_News.html

REPORT YOUR OUTREACH AND ENGAGEMENT ACTIVITIES

http://www.eaps.purdue.edu/
PHD DEFENSE
Presented remotely

Andrea Orton
Thursday, April 9
2:30PM
https://purdue.webex.com/join/mebaldwi

Licheng Liu
April 20, 2020, 1:00pm
Quantifying Global Exchanges of Methane and Carbon Monoxide Between Terrestrial Ecosystems and the Atmosphere using Process-based Biogeochemistry Models
Advisor: Qianlai Zhuang

MS DEFENSE
Presented remotely

Grant Bonnette
April 17, 2020, 2:00pm
Characterizing Deformation Along an Early-Stage Rift: GPS Observations from the Northern Lake Malawi (Nyasa) Rift
Advisor: Julie Elliott

COMPUTER ISSUES
As everyone is aware no one is in the office to help these days and it seems like our supervisors want to know we are actually doing things remotely ;-) so to that end when you have any computer related issues please email ScienceHelp@purdue.edu when you need any kind of help instead of contacting us directly. That will cover web, Linux, Mac and Windows related issues. It also works for printer problems too but currently no one is servicing those.

Thank you all and when things return to normal please stop by the IT office and say “Hi”; although, emailing ScienceHelp will still work for issues then and our bosses will still appreciate it. Please stay healthy along with your families and friends.

EAPS FRONT OFFICE
Please know that EAPS is here for our students. We want everyone to be safe and healthy. Remember to practice social distancing.

Contact your instructors should you have a question concerning your classes.

To reach the EAPS front office staff, please email Kathy Kincade (kkincade@purdue.edu) or Katherine Huseman (khuseman@purdue.edu). The office phones are also being monitored and you are welcome to call 765-494-3258. The business office can be reached at eapsbo@purdue.edu.

OUTREACH NEWS
The Purdue University Superheroes of Science Podcast is on most podcast players as well as YouTube! Check out some of the latest episodes including interviews with Robert Nowack, Michael Baldwin, Andy Najafiarab, and Greg Nearing.

Interested in upcoming outreach events? Check out our calendar of events: http://www.eaps.purdue.edu/outreach/Outreach_News.html

Did you know that in addition to the Podcast, EAPS K-12 Outreach is on Twitter (@PurdueSOS), YouTube (Superheroes of Science), Facebook (EAPS.out), and Pinterest.

LEARNING REMOTELY OVERVIEW
Students, starting March 23, all teaching and learning is happening online through the end of spring semester. Your instructors worked over spring break to make changes that allow remote course completion, and will contact you about course-specific alterations.

Read Quick Start First

http://www.eaps.purdue.edu/
In the meantime, begin with the newly created Learning Remotely Quick Start. This guide is a checklist to help Purdue students jump-start into remote learning. It also includes hyperlinks to Purdue services being offered remotely, and connects to a list of free wifi hotspots and Internet resources. There is even a sample schedule that you can use to organize your time.

Please bookmark this Learning Remotely webpage, which curates and prioritizes other resources to help you prepare to continue learning in an online environment. The page is updated frequently and new material will be identified.

On this page:
1. What can I expect?
2. How do I learn online?
3. How do I communicate in online classes?
4. How do I work collaboratively with my peers?
5. What accommodations are available?
6. Is there additional software support?
7. What additional student support is available?

For complete information, please visit: https://www.purdue.edu/innovativelearning/learning-remotely/#h07

CIMMS POST-DOCTORAL RESEARCH ASSOCIATE - APPLICATIONS OF UNPILOTED AERIAL SYSTEMS (UAS) IN CHARACTERIZING HIGH WIND DAMAGE

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) working collaboratively with NOAA’s National Severe Storms Laboratory (NSSL), is currently looking for a highly-qualified Post-Doctoral Research Associate to provide scientific and technological expertise in the use of Unpiloted Aerial Systems (UAS) to characterize high wind damage from convective storms. The Post-Doc will provide leadership in the procurement, development, and application of UAS for use in research applications at CIMMS/NSSL, primarily for the use of performing damage surveys to better understand severe convective storms, but collaboration with National Weather Service Forecast Offices and local emergency management for use in operations is encouraged. The position will require close collaboration with the NOAA UAS program office to ensure all FAA and other agency requirements are being followed. Furthermore, the position will require working with agricultural extension agents, and local and state forest services as appropriate. This position will include participation in the field for upcoming research projects and will require the Post-Doc to integrate UAS, and remote-sensing capabilities derived from visible and multispectral imagery for surveying damage, into these field programs. The incumbent will work directly with research scientists at NSSL and will be encouraged to collaborate actively with scientists from other institutions with expertise in UAS (e.g. the OU Center for Autonomous Sensing and Sampling). The position will be based at NSSL in Norman, OK within the National Weather Center (NWC), a highly collaborative forecasting, research, and academic environment containing a number of NOAA and OU organizations.

[See attached flier for additional information]

CIMMS RESEARCH FELLOW – WEATHER AND TRANSPORTATION APPLICATIONS

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma and the National Severe Storms Laboratory (NSSL) is currently seeking a fixed-term (12-24 months) Research Fellow starting in Summer 2020 to assist with the development of impacts-based decision support tools as a part of the Transportation Applications Team. This team works collaboratively with the National Weather Service (NWS) and the Federal Aviation Administration (FAA) to develop the next generation of products and tools for use within operations, with particular focus on decision support for transportation-related warnings/advisories (e.g., blizzards, aircraft hail encounters, icing, etc.).

The duties of this position will be to: 1. Work collaboratively with the NWS and FAA to develop decision-support tools for use in operations; 2. Assist with quality control and evaluation of observations within the Multi-Radar/Multi-Sensor (MRMS) system (http://mrms.nssl.noaa.gov). The minimum qualifications for the position are:

1. A Bachelor’s Degree in Meteorology, Geography, Civil Engineering, or another related area;

http://www.eaps.purdue.edu/
2. Experience in programming (C++, Python, Fortran);

3. Experience with visualization of meteorological datasets.

Please identify experience with programming and meteorological datasets in your cover letter.

Supervision will be provided by CIMMS staff. The incumbent is not expected to supervise other employees. Salary for this position is $40,000. Standard insurance benefits are included (more information may be found at http://www.hr.ou.edu). The incumbent would ideally start in Summer 2020, but the starting date is negotiable.

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

CIMMS Careers
University of Oklahoma
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-careers@ou.edu
ATTN: Transportation Applications

[See attached flier]

DOE PROGRAM CREATES OPPORTUNITIES FOR GRADUATE STUDENTS

Applications now being accepted for 2020 Solicitation 1

Since its inception in 2014, the U.S. Department of Energy (DOE) Office of Science Graduate Student Research (SCGSR) program has helped prepare graduate students for science, technology, engineering, or mathematics (STEM) careers.

The SCGSR program provides supplemental awards to outstanding U.S. graduate students to pursue part of their graduate thesis research at a DOE laboratory/facility in areas that address scientific challenges central to the Office of Science mission. This research opportunity is expected to advance the graduate students’ overall doctoral thesis while providing access to the expertise, resources, and capabilities available at the DOE laboratories/facilities. The SCGSR program is now accepting applications for the 2020 Solicitation 1. Applications are due by 5 p.m. Eastern time Wednesday, May 6, 2020.

Detailed information about the program, including eligibility requirements and access to the online application system, can be found at https://science.osti.gov/wdts/scgsr/

PURDUE UNDERGRADUATE RESEARCH CONFERENCE CALL FOR JUDGES VIRTUAL FORMAT

Attention Grad and Post-Doc students, we are needing judges for this year’s Purdue Undergraduate Research Conference Poster Symposium. The Poster Symposium is Tuesday, April 14th from 9:30am – 12:00pm & 2:00pm – 4:30pm. The Purdue Undergraduate Research Conference is now going to a virtual format where student researchers will present their work online in an asynchronous manner.

Judging these presentations is still a priority for us for our research mentees to receive feedback on how they are presenting their project to others. The Conference presentations will be available to view from April 14-21, 2020, which allows judges a week to review the 5-minute poster presentations. If you are willing to help judge during this time, please consider registering on the Judging Information website. This website also has a test version of the Qualtrics you would use to evaluate the poster presentations.

Not able to judge in a formal manner? Consider viewing the presentations during this week and writing comments and questions on the videos to help continue the engagement students enjoy from the face-to-face Conference.

Although this year’s Conference is virtual, it has the potential to engage more individuals across campus. Anyone with a Purdue career account can view the presentations. When the link to the presentations is made available, you could consider linking it to your online course platform to encourage students to view some of the presentations they might not have seen.
If you have any questions, please contact the Office of Undergraduate Research at UGresearch@purdue.edu or 765-494-6505.

[See flier for information]

**RESEARCH ASSOCIATE – HAZARDOUS WEATHER TESTBED**

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 implementation of severe weather applications to support research to operations initiative via transition into the National Weather Service’s Advanced Weather Interactive Processing System- 2nd generation (AWIPS2) operational software platform. The position is located in Norman, Oklahoma.

The duties of this position are:
1. Integration of NSSL’s experimental datasets into AWIPS2;
2. Development of new applications and visualization techniques in the AWIPS2 environment and platform;
3. Support and participate in applied research and development and operational experiments in the Hazardous Weather Testbed;
4. Acquire and apply expertise about severe local storms in the warning decision-making process.

[For complete information please see flier]

**CIMMS RESEARCH ASSOCIATE – SCIENTIFIC PROGRAMMER FOR DEVELOPING GRAPHICAL FORECAST EDITOR TRAINING IN AWIPS**

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma (OU) seeks to fill a Research Associate position to support the National Oceanic and Atmospheric Administration (NOAA) Forecast Decision Training Division (FDTD) in Boulder, Colorado, on training for the Advanced Weather Interactive Processing System (AWIPS) Graphical Forecast Editor (GFE).

The principal duties of this position are:
- Development of training and online reference material for new and existing AWIPS GFE Focal Points at NWS Weather Forecast Offices and National Centers
- Analysis of current and future versions of the GFE software, including local settings and implementation at various NWS weather forecast offices, in order to identify operational best practices.

[See flier for additional information]

**ACCEPTING APPLICATONS FOR GRADUATE STUDENT COORDINATORS FOR SUMMER URM PROGRAM**

The Office of Graduate Diversity Initiatives (OGDI) is now accepting applications from Purdue Graduate Students, to participate as Student Coordinators, in the 2020 Summer Research Opportunities Program (SROP).

8-10 Coordinators will be hired for the 8 week program (June 1st through July 24th), at a 50% (20 hrs) position.

Application located here: Summer2020Coordinator.Apply

The deadline for applications is April 17th, with decisions being made by the beginning of May 2020.

[See attached flier for additional information]

**FED PBL MODELER AT NSSL**

NSSL is hiring a Federal scientists with expertise in PBL parameterization on aspects associated with convective scale prediction. If interested, please see:

Job Announcement # (MAP): OAR-NSSL-2020-0010
- [https://www.usajobs.gov/GetJob/ViewDetails/560575900](https://www.usajobs.gov/GetJob/ViewDetails/560575900)

NSSL has posted a Meteorologist, ZP3 or ZP4 with full promotion potential to the ZP4, position within FRDD. These announcements close on 3/10/2020
Job Announcement # (DE): OAR-NSSL-2020-0011

[Link to job announcement]

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**TENURE TRACK OPPORTUNITY – UNIVERSITY AT ALBANY-SUNY**

The Atmospheric Sciences Research Center (ASRC) of the University at Albany, State University of New York, invites applicants seeks to hire a tenure-track Professor of Empire Innovation (rank open), effective Fall 2020. This New York State supported college-year appointment allows for supplementary summer salary from external research funding. We currently seek to fill this position, with an emphasis on the area of High-Resolution Atmospheric Modeling. The ideal candidate will have expertise in meteorological as well as air quality and photochemical modeling, be interested in urban environments and land-sea interaction, be fluent in modern computational methods including data assimilation approaches, and have a firm understanding boundary-layer meteorology. ASRC has a tradition innovation in research, joy in discovery, and enthusiasm for working with colleagues in different disciplines. ASRC also values collaboration with researchers from diverse backgrounds who bring fresh perspectives. The successful candidate will be expected to pursue and secure funding to support a robust research program, publish in relevant academic fields, and lead efforts that support the planned continuing investment in this area of SUNY strength and focus. Priority will be given to candidates willing to engage in cross-disciplinary collaboration, especially with the University’s Public Health program in environmental epidemiology and community health management (e.g., modeling of particulate matter and reactive gases). Outstanding candidates from other areas of Atmospheric Science will also be considered and are encouraged to apply.

Follow link for additional information: [https://www.albany.edu/asrc/job_opportunities.php](https://www.albany.edu/asrc/job_opportunities.php)

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**AMS VIRTUAL CAREER FAIR**

The American Meteorological Society (AMS) is hosting a Virtual Career Fair on April 2nd from 12:00-3:00 p.m. EST. This event is being marketed to 13,000+ AMS members, as well as 14,000+ registered job seekers, and is the perfect way to connect with professionals who are seeking a new career! You can connect with candidates with the qualifications you are looking for, and you can do it without leaving your desk or home computer!

Attached flyer includes a breakdown of the different options, as well as a link to a video to show you how the event works. [Here’s How It Works](#)

[Flier attached for more information]

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**GLOBAL ACADEMIC INVENTORS NETWORK (GAIN)**

Gain advice from the experts. Connect to a Global Network of Inventors. It’s easy and free!

[See flier attached for more information]

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**WUSTL MIDWEST AEROSOL SUMMER SCHOOL**

Aerosol Science and Engineering is an enabling discipline with applications in fields such as environment, Energy, Advanced Materials, Medicine, and Agriculture.

Experience two days of interactive learning with peers from the Midwest! Discussions and activities will be led by leading researchers in the aerosol field.

Registration is required, please visit: [https://sites.wustl.edu/aerosolsummerschool](https://sites.wustl.edu/aerosolsummerschool)

For more information, please contact Katie Bay: k.bay@wustl.edu

[See attached flier more additional information]
OPENING FOR A NUMERICAL WEATHER PREDICTION (NWP)

DTN has an opening for a Numerical Weather Prediction (NWP) Scientist in its Norman, OK, office. The successful candidate will assist with supporting and enhancing DTN’s WRF-based NWP capabilities. Key tasks involve applying WRF data assimilation techniques and developing relevant applications while working in an AWS high-performance computing (HPC) environment. [Job Link]

MOBILE IOS APPLICATION DEVELOPER POSITION

DTN currently has a Mobile iOS Application Developer opening for an individual with a passion for learning and solving challenging problems [Job Link]

METEOROLOGICAL DATA SCIENTIST POSITION

DTN is looking for a Meteorological Data Scientist to join our team! [Job Link]

CIMMS POST-DOCTORAL RESEARCH ASSOCIATE – SEVERE WEATHER

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) is currently looking for a Post-doctoral Research Associate to work with the National Severe Storms Laboratory (NSSL). This position will work at NSSL in Norman, OK, which is located within the National Weather Center (NWC), a highly collaborative operational, research, and academic environment containing a number of NOAA and OU organizations. Here, you will work in an exciting environment focused on the development of operationally relevant severe weather warning applications and techniques and have opportunities to interact with NOAA scientists, NWS forecasters and academic scientists within both the NWC and the broader meteorological community. As a CIMMS Postdoctoral Research Associate working with NSSL, you will provide scientific and meteorological expertise, along with technical support, for the development of severe convective weather applications for the prediction (0-60 minute time scale) and detection of hazards such as tornadoes, damaging wind, large hail, and lightning. This position is heavily oriented in applied research, and the list below describes potential projects:

1. Develop and/or improve calibrated Probabilistic Hazard Information for the prediction of severe weather hazards;
2. Develop, test, and implement new severe weather warning guidance algorithms for use in the Multi-Radar Multi-Sensor (MRMS) system and on the WSR-88D radar network;
3. Develop machine learning techniques for use in severe weather data analysis and short term nowcasting of tornadoes, hail, damaging wind and lightning;
4. Improve lightning forecasts and applications of lightning data in operational use.

The minimum qualifications for the position are:

1) A Doctorate Degree in Meteorology, Atmospheric Science, or related area.

When applying, please indicate your preference(s) as to which project areas in which you are interested. Additionally, please include information related to your experience in software development, web development, graphic design/visualization, and Linux (UNIX) environments including the AWIPS2/N-AWIPS systems. Your ability to communicate clearly is of utmost importance.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments, or workshops conducted at remote locations. General
supervision will be provided by CIMMS staff with technical oversight provided by NSSL and CIMMS management. You will work under general supervision but are expected to work independently and determine action to be taken in handling all but unusual situations. This is a non-supervisory position. Salary is based on your education, experience, skills, and knowledge.

Information on University of Oklahoma benefits may be found at https://hr.ou.edu.

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

CIMMS Careers
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-careers@ou.edu
Job Requisition: Severe Weather Post-Doc

CIMMS RESEARCH SCIENTIST – SEVERE WEATHER RESEARCH SCIENTIST

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at The University of Oklahoma (OU) is currently looking for a Research Scientist to work with the National Severe Storms Laboratory (NSSL). These positions will work at NSSL in Norman, OK, which is located within the National Weather Center (NWC), a highly collaborative operational, research, and academic environment containing a number of NOAA and OU organizations. Here, you will work in an exciting environment focused on the development of operationally relevant severe weather warning applications and techniques and have opportunities to interact with NOAA scientists, National Weather Service forecasters and academic scientists within both the NWC and the broader meteorological community.

As a CIMMS Research Scientist working with NSSL, you will provide scientific and meteorological expertise, along with technical support, for the development of severe convective weather applications for the prediction (0-60 minute time scale) and detection of hazards such as tornadoes, damaging wind, large hail, and lightning. This position is heavily oriented towards the Research-to-Operations process, and the list below describes potential projects:

1. Develop and/or improve calibrated Probabilistic Hazard Information for the prediction of severe weather hazards;

2. Develop, test, and implement new severe weather warning guidance algorithms for use in the Multi-Radar Multi-Sensor (MRMS) system and on the WSR-88D radar network;

3. Develop machine learning techniques for use in severe weather data analysis and short term nowcasting of tornadoes, hail, damaging wind and lightning;

4. Improve lightning forecasts and applications of lightning data in operational use.

The minimum qualifications for the position are:

1) A Doctorate Degree in Meteorology, Atmospheric Science, or related area;

When applying, please indicate your preference(s) as to which project areas in which you are interested. Additionally, please include information related to your experience in software development, web development, graphic design/visualization, and Linux (UNIX) environments including the AWIPS2/N-AWIPS systems. Your ability to communicate clearly is of utmost importance. Please indicate any experience with writing proposals and managing projects as well.

Normal working hours will be observed except for occasional irregular hours during data collection, warning/forecast experiments, or workshops conducted at remote locations. General supervision will be provided by CIMMS staff with technical oversight provided by NSSL and CIMMS management. You will work under general supervision but are expected to work independently and determine action to be taken in handling all but unusual situations. This is a non-supervisory position, although you may serve as a leader of technical teams. Salary is based on your education, experience, skills, and knowledge. Information on University of Oklahoma benefits may be found at https://hr.ou.edu.

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

http://www.eaps.purdue.edu/
CIMMS Careers
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-careers@ou.edu

Job Requisition: Severe Weather RS

FRENCH CULTURE, FOOD, & HEALTH

May 23-31, 2020
Roanne, France
NUTR 39800

[See attached flier for additional information]

DTN IS HIRING AN NWP SCIENTIST

DTN is hiring a WRF/NWP scientist at their Norman, OK, location. This would be a great opportunity for a recent MS or PhD graduate, particularly someone with strong cloud computing or data assimilation experience. We also have an opening for a supporting AWS Cloud Engineer. Thanks.


WORKING PAPER SERIES – FALL 2020 ISSUE
CALL FOR ABSTRACTS

The Susan Bulkeley Butler Center for Leadership Excellence, in partnership with ADVANCE-Center for Faculty Success, is continuing the Working Paper Series focusing on navigating careers in the academy. This peer reviewed series includes work by senior scholars, graduate students, and faculty at all stages as a space for the discussion of issues related to academic careers. The series will serve as a means for documenting and sharing interventions and/or practices and/or processes developed by and/or utilized by faculty and post-docs for navigating careers.

The call for abstracts for the fall 2020 issue is now open - nationally and globally. Complete details are in the attached pdf, as well as on the Working Paper Series website.

Abstracts must be 150 words or less and must be submitted via email to butler-advance@purdue.edu by Friday, August 21, 2020.

Any abstracts sent early in the spring semester may receive a response by the end of the spring semester. Abstracts received by the deadline of Friday, August 21st will receive a reply early in the fall semester.

[See attached flier for more information]
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](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: [http://www.eaps.purdue.edu/resources/information_technology/index.htm](http://www.eaps.purdue.edu/resources/information_technology/index.htm).

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](http://www.EAPS.purdue.edu/events-calendar.html)