

January 2011 U.S. CLIVAR News-gram



Please forward to interested colleagues. If you have announcements to include in our next issue or if you would like to be removed from the news-gram email list please email Mike Patterson in the U.S. CLIVAR Office (mpatterson@usclivar.org).

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Calendar of Upcoming Events

AMS Annual Meeting	January 22-26	New Orleans, LA
US CLIVAR Hurricane WG Meeting	January 27-28	New Orleans, LA
Ocean Sciences Conference	February 20-24	Salt Lake City, UT
International CLIVAR Town Hall Meeting	February 21	Salt Lake City, UT
International Conference on Opportunities and Challenges Monsoon Prediction in a Changing Climate	February 21-25	Pune, India
CESM Working Group Meetings	February 27-March 2	Boulder, CO

CLIVAR-PAGES Workshop on Using Paleo-Climate Model/Data Comparisons to Constrain Future Projections	March 1-3	Honolulu, HI
WCRP/CLIVAR CMIP5 Analysis Workshop	March 5-9	Honolulu, HI
Workshop on the Physics of Climate Models	March 20-23	Pasadena, CA
Planet Under Pressure International Conference	March 26-29	London, UK
Global Drought Information System Workshop	April 11-13	Frascati, Italy
10 th International Conference on Southern Hemisphere Meteorology and Oceanography	April 23-27	Nouméa, New Caledonia
CFSv2 Evaluation Workshop	April 30-May 1	Camp Springs, MD

Announcements

1. US CLIVAR Panel Member Nominations

The 2012 Call for US CLIVAR Panel Member Nominations **closes this Friday, 20 January 2012**. This is a great opportunity to influence the direction of climate research in the US and its connection with other areas of Earth system science, as US CLIVAR is embarking on the development of a new Science Plan to guide the program directions over the coming decade and beyond.

The Phenomena, Observations and Synthesis (POS) Panel is seeking panelists with experience in ocean observing system design/deployment to help in the evaluation of the adequacy of current observing networks and to identify requirements for enhanced/expanded networks to address CLIVAR research questions and program objectives.

The Process Study Model Improvement (PSMI) Panel seeks members with expertise in coupled air-sea interaction and/or those trained in oceanography and knowledgeable of the development, implementation, and reporting of ocean process studies, including the importance of observational data collection, analysis, and dissemination and how process studies contribute to the improvement of ocean and climate models.

The Predictability, Prediction and Applications Interface (PPAI) Panel seeks members with expertise in ENSO prediction, decadal prediction and initialization, polar climate modeling, modeling of extremes, as well as those interested in the application of seasonal/decadal forecasts.

Qualified nominees are expected to represent the broader interests of the research community, be willing and able to engage in scientific as well as programmatic decision to advance Panel activities, and work with other members of the US and international CLIVAR communities. Further information and terms of reference for these panels can be found at www.usclivar.org/Organization.html.

To nominate others or self nominate, please submit a 2-page vitae noting the most relevant publications and a paragraph describing qualifications, research interests, and the Panel of interest to the US CLIVAR Office (usco@usclivar.org) noting "Nomination" in the subject heading. Nominees will be notified of decisions by Friday, 15 February 2012.

2. Invitation for CLIVAR-PAGES Working Group Membership

The International CLIVAR-PAGES Working Group seeks nominations from scientists across the CLIVAR and PAGES communities who are interested in fostering cross-cutting initiatives that involve the use of paleo-climate data in extending and contextualizing modern observations, using CLIVAR-related insights and understanding to inform the interpretation of past climate data, and/or helping link modeling of past, present and future. The principle foci of the group are highlighted in the Vision document (rewritten in 2009):

http://www.clivar.org/sites/default/files/Clivar-Pages%20Vision_2009.pdf

Members will serve a maximum of 4 years, and will be expected to attend or participate (by Skype) in one meeting a year (usually coincident with other large community gatherings). Activities in the near future involve organizing workshops on areas where PAGES and CLIVAR communities can usefully intersect, updating the Vision document, and making stronger efforts to serve as a nexus for cross-cutting initiatives. More information on the Working Group can be found on its homepage at <http://www.clivar.org/organization/pages>.

Individuals interested in serving on the CLIVAR-PAGES Working Group should contact Catherine Beswick (catherine.beswick@noc.ac.uk) with a brief description of their interests and background. **Deadline for submission of nominations is 31 January 2012.**

3. Invitation to Join Madden Julian Oscillation (MJO) Diabatic Hindcast Project

A collaborative effort between the Year of Tropical Convection/MJO Task Force and the GEWEX Atmospheric System Study is coordinating a model and observation intercomparison project on diabatic heating associated with the MJO. Through this project, the vertical structure of the heating and moistening processes associated with the MJO will be examined in three experimental components: i) climatological simulation; ii) short-term/detailed-“physics” hindcasts; iii) less-detailed but longer-lead hindcasts extending from ii); where the hindcasts target MJO events during the YOTC period, and, in time, the DYNAMO field experiment.

Detailed descriptions of the model experiment designs can be found on both the project's web site and wiki page: <http://www.ucar.edu/yotc/mjodiab.html> http://climate.ncas.ac.uk/pmwiki/MJO_Diabatic_Hindcast/index.php/Main/HomePage (if prompted for a password, it is MJOw1k1). An earlier invitation to participate generated commitments from about 20 modeling groups to contribute to one or more of the three components. A table of participants to date can be found at the project web/wiki pages, along with timelines for model output submission, initial analyses and meeting presentation/discussion, etc.

If interested in participating please contact Xianan Jiang (xianan.jiang@jpl.nasa.gov) and Prince Xavier (prince.xavier@metoffice.gov.uk) to express interest and sign up for the project's email list.

Announcements of Opportunity

1. NSF/DOE/USDA Program Solicitation for Decadal and Regional Climate Prediction Using Earth System Models

NSF, DOE and USDA announce the second in a series of Earth System Modeling (EaSM) solicitations to improve on and extend current Earth System modeling capabilities to:

- Achieve comprehensive, reliable global and regional predictions of decadal climate variability and change through advanced understanding of the coupled interactive physical, chemical, biological, and human processes that drive the climate system
- Quantify the impacts of climate variability and change on natural and human systems, and identify and quantify feedback loops
- Maximize the utility of available observational and model data for impact, vulnerability/resilience, and risk assessments through up/downscaling activities and uncertainty characterization
- Effectively translate climate predictions and associated uncertainties into the scientific basis for policy and management decisions related to human interventions and adaptation to the projected impacts of climate change

A time span of several decades is chosen because within this timeframe modeled climate change responses appear to be insensitive to CO₂ forcing scenarios. Moreover, adaptation planning and implementation is carried out on roughly these time scales. This solicitation will not consider research involving varying CO₂ forcing scenarios beyond the next several decades.

Full proposals are due Friday, May 11, 2012. Please visit <http://www.nsf.gov/pubs/2012/nsf12522/nsf12522.htm> for the full solicitation, providing more detailed description of research areas of interest.

Meetings and Workshops

1. Planet Under Pressure 2012 London, UK 26-29 March 2012

Conference website: www.planetunderpressure2012.net

Poster and early registration deadline: 20 January 2012

Registration website: <http://www.planetunderpressure2012.net/registrationInfo.asp>

The 2012 Planet Under Pressure International Conference, sponsored by IGBP, Diversitas, IHDP and WCRP, will provide a comprehensive update of our knowledge of the Earth system and the pressure our planet is now under. The London conference will focus the scientific community's and the wider world's attention on climate, ecological degradation, human well-being, planetary thresholds, food security, energy, governance across scales and poverty alleviation.

2. Global Drought Information System (GDIS) Workshop
Frascati, Italy
11-13 April 2012

Workshop website: <http://www.clivar.org/organization/extremes/activities/GDIS-workshop#Overview>

The workshop, sponsored by WCRP, GEO, the European Space Agency, NASA, NSF and NOAA/NIDIS and hosted by the European Space Agency's centre for Earth observation (ESRIN), will focus on the steps necessary to develop a GDIS that build upon the extensive world-wide investments that have already been made in developing drought monitoring, drought risk management, and short term climate prediction capabilities.

Travel grants for students and early career scientists will be available. Visit the workshop website for details and deadlines.

3. Coupled Forecast System Version 2 (CFSv2) Evaluation Workshop
College Park, MD
30 April-1 May 2012

Abstract submission deadline: 1 March 2012

Submission website: <http://www.joss.ucar.edu/events/2012/cfsv2/index.html>

NOAA NCEP and Climate Program Office are sponsoring the 2-day workshop to evaluate CFSv2 in terms of its utility for climate modeling research and as a climate forecasting tool. The objectives of this workshop are to bring NCEP and the broader climate community together to

- document progress in model performance from CFSv1 to CFSv2, including the impacts of reanalysis, initializing atmosphere/ocean/land, and the change in the model itself;
- identify key model biases and deficiencies in the CFSv2;
- help identify most promising research directions for the development of CFSv3, for example, to design experiments to understand how to incrementally improve upon CFSv2, and to test coupling of the latest GFS with state-of-the-art model components.

4. 4th World Climate Research Programme International Conference on Reanalyses
Silver Spring, Maryland
7-11 May 2012

Conference website: <http://icr4.org/index.html>

Travel grant deadline: Extended to 27 January 2012

Abstract submission deadline: Extended to 13 February 2012

Abstract submission website: <http://icr4.org/registration.html>

The 4th World Climate Research Programme (WCRP) International Conference on Reanalyses provides an exciting opportunity for the modeling community to review and discuss the major observations and modeling research associated with reanalyses. Conference objectives include:

- Sharing understanding of the major challenges facing reanalyses: the changing observing system and Integrated Earth system

- Assessing the state of the disciplinary atmospheric, ocean and land reanalyses, including the needs of the research community for weather, ocean, hydrology and climate reanalyses
- Reviewing the new developments in the reanalyses, models and observations for study of the Earth System
- Exploring international collaboration in reanalyses including its role in regional and global climate services.

As part of WCRP's ongoing commitment to education and capacity development and to train the next generation of climate experts, travel grants are available to enable and support participation of students, early career scientists and scientists from developing countries to attend the conference. Please promote this opportunity among students and early career scientists. Information on eligibility for travel support can be found at <http://icr4.org/support/>.

5. NCAR Advanced Studies Program Summer Colloquium on The Weather-Climate Intersection: Advances and Challenges
Boulder, CO
4-22 June 2012

Colloquium website: http://www.asp.ucar.edu/colloquium/summer_colloquia.php

Application deadline: 31 January 2012

Application website: <http://www.regonline.com/2012aspsummercolloquium>

NCAR's Advanced Studies Program, NOAA's Earth System Research Laboratory, and the University of SUNY-Albany are cosponsoring a three-week Summer Colloquium on the Weather-Climate Intersection, emphasizing advances in observations, modeling and theory in tropical convection and the challenges in predicting atmospheric variability on subseasonal timescales. The Colloquium is designed to provide focused training of graduate students who have completed at least two years of doctoral-level study in atmospheric science or related disciplines. Students will participate in a three-week program organized as follows:

- Week 1: An educational component that introduces students to basic aspects of observations, modeling and theory, and orientates them for the following two weeks
- Week 2: A researcher colloquium geared toward the state-of-the-art for observations, numerical modeling and theory at the weather-climate intersection, and elucidation of the scientific challenges
- Week 3: A project component where the students work (in groups) on selected projects, assisted by discussions of real-time meteorological events, and talks by early-career scientists on their research results and experiences

NCAR ASP will fund travel and local expenses for about 25 students. Interested students should apply online at the application website above by the end of January 2012.

6. European Space Agency (ESA) Summer School on Earth System Monitoring and Modelling
Fascati, Italy
30 July-10 August 2012

Summer school website: <http://earth.eo.esa.int/eosummerschool/envschool/>

Application deadline: 30 January 2012

Application website:

<http://earth.eo.esa.int/eosummerschool/envschool/index.php?page=PAR&type=a>

The two-week course, held at Earth Space Research Institute (ESRIN) near Rome, Italy, aims to provide students with an integrated end-to-end perspective going from measurement techniques to end-user applications. Courses include lectures covering issues related to:

- **Global Observing Systems:** Capabilities and applications of Earth Observation, physics of remote sensing measurement, concept of integrated Observing Systems of Systems
- **Earth System Modeling:** Basics of ocean, atmosphere, land and ice modeling, Numerical Weather Prediction, ensemble forecasting
- **Data Assimilation:** Theory of data assimilation techniques (e.g. optimal interpolation, variational methods, Kalman filter, ensemble filtering) and applications (e.g. re-analysis, inverse modeling, state estimation, control theory, design of optimal observing system, targeting observations)
- **Global Change:** Observation of global change from space, use of Earth System model to understand, forecast and manage environmental issues

Students will have the opportunity to present their work during a poster session. The three best posters will receive an award from the European Meteorological Society. Keynote lectures on global change issues are also given to discuss the current state of the science of global change and its relationship to society in order to help students appreciate how their specific field fits into a broader scientific and political context.

The school is open to Early Career Scientists (i.e. Ph.D. students, young post-doctoral scientists) who are specialized in a variety of Earth Science disciplines and wish to expand and improve their knowledge and skills. Participation is limited to a maximum of 60 students and is highly competitive. There is no fee for the school but students are expected to cover their own travel and accommodation cost (unfortunately, financial support is not available). All enquiries should be addressed to envschool@esa.int.

2. Workshop on Dynamics and Predictability of High-Impact Weather and Climate Events

Kunming, China
6-9 August 2012

Workshop website: <http://icdm2012.csp.escience.cn/>

Abstract submission deadline: 31 March 2012

Online registration deadline: 31 May 2012

This international workshop, sponsored by International Commission on Dynamical Meteorology, will bring together leading international scientists to explore the dynamics and predictability of high impact weather on timescales from short-range weather forecasting, through seasonal to decadal to climate prediction. The topics covered will include:

- Tropical cyclones
- Asian monsoons
- Drought
- Heat-waves
- Madden-Julian Oscillation (MJO)

- El Niño Southern Oscillation (ENSO)
- Mid-high latitude annular modes
- Mid-latitude cyclones
- Prediction of extreme events

The workshop will assist some early career scientists and post-graduate students working in those fields to participate, with a reduced registration fee for students. A limited amount of financial assistance will be available to support attendance by students, early career scientists and scientists from developing countries. Grants will be distributed on the basis of financial need and scientific merit.

Position Announcements

1. Assistant Professors of Oceanography, University of Washington

The School of Oceanography at the University of Washington announces two full-time tenure-track faculty positions at the Assistant Professor level with an anticipated start date of Fall 2012. The areas of interest are:

- Climate-Related Ocean Modeling: Applicants should have demonstrated expertise in quantitative modeling of the interactions between climate and ocean circulation, biogeochemical cycles and/or marine ecosystems.
- Ocean Acidification: Applicants should have demonstrated expertise in ocean acidification and its consequences to marine organisms, ecosystems and/or biogeochemical cycles.

The successful candidates will join an Oceanography faculty of 43 leading state-of-the-art research programs and nationally renowned graduate and undergraduate educational programs in the ocean sciences. They will be expected to teach courses at undergraduate and graduate levels in the core curriculum and in their focal areas. The candidates' research is expected to integrate across oceanography and related fields within the College of the Environment and complement relevant programs on campus and at regional facilities (e.g., the Ocean Observatories Initiative, Applied Physics Laboratory, Friday Harbor Laboratories, NOAA's Pacific Marine Environmental Laboratory and National Marine Fisheries Services).

A Ph.D. is required on the date of appointment. Applicants should submit a cover letter, curriculum vitae, teaching and research statements, along with contact information for three references to:

Dr. E. Virginia Armbrust
School of Oceanography
University of Washington
Box 357940
Seattle, WA 98195-7940
Email: armbrust@u.washington.edu.

Applications received by February 1, 2012, will be given full consideration, although the search will continue until the position is filled.

2. Assistant or Associate Professor in Meteorology, University of Oklahoma

The School of Meteorology at the University of Oklahoma (OU) invites applications for a tenure-track or tenured faculty position at the Assistant or Associate Professor level to begin in the academic year 2012-2013.

An applicant should have demonstrated the potential to establish and sustain a strong research program in climate studies using observational and/or modeling approaches with an emphasis on research related to regional-scale climate variability and change. Applicants also should have demonstrated a commitment to teaching at the undergraduate and graduate levels and a willingness to participate in department, University, and professional service. We seek an outstanding candidate with a PhD in meteorology, atmospheric science or closely related field. The candidate must be capable of research excellence in regional climate with the ability to work in a team environment with potential collaborations that include research activities within the School of Meteorology and the newly established Department of the Interior South-Central Climate Science Center. Downscaling global climate projections, addressing the uncertainty in estimates of regional climate variations, determining how to best treat convective precipitation, spatial variations in surface properties and other physical processes are topics relevant to the success of this center, along with assessing the impacts of climate variations on regional issues including water resources, ecosystems, fish and wildlife. Other opportunities to collaborate include working with researchers in the university, state and federal entities within the National Weather Center and with faculty within the College of Atmospheric and Geographic Sciences.

To apply, please submit a letter of interest including a statement of research goals and teaching vision, current *curriculum vitae*, and the names of three or more people who can serve as references (with full mailing and e-mail addresses, telephone, and fax numbers) as soon as possible. **Screening of applications will begin on 30 January 2012 and will continue until the position has been filled.** Please address all correspondence to:

Prof. Michael B. Richman School of Meteorology
Search Committee Chairperson School of Meteorology University of Oklahoma
20 David L. Boren Blvd., Rm. 5900
Norman, OK 73072
Phone: 405-325-6561
Fax: 405-325-7689
Email: mrichman@ou.edu.

3. Post-Doctoral Associate in Climate Sciences, University of Oklahoma

In cooperation with the U.S. Geological Survey, the South Central Climate Science Center at the University of Oklahoma in Norman, Oklahoma, is seeking a recent Ph.D. graduate interested in advancing the understanding and evaluation of statistical downscaling for climate impacts research. This post-doctoral associate will examine the strengths and limitations of multiple statistical downscaling techniques by quantitatively assessing the extent to which downscaled datasets add value to output from state-of-the-art global climate models. This researcher will be an employee of the University of Oklahoma; **will be located at the Geophysical Fluid Dynamics Laboratory in Princeton, New Jersey**; and will work closely with principal investigators at the Geophysical Fluid Dynamics Laboratory of the National Oceanic and Atmospheric Administration (NOAA). The maximum term of this appointment is 30 months.

Applicants must have a Ph.D. in atmospheric sciences, applied statistics, or a related field. Ideal candidates will have the many of the following attributes:

- previous experience in working with and analyzing global climate model outputs
- multivariate statistical climate data analysis skills
- a strong understanding of and experience with statistical climate data downscaling techniques
- advanced programming skills;
- excellent verbal and written communication skills
- knowledge of USA/North American continental climates, including regional climate anomalies
- a willingness and temperament to facilitate the communications bridge between climate scientists/modelers, climate impacts researchers, and users of downscaled climate products from local, state, and federal agencies, industry, and non-profit organizations.

The salary will be competitive and commensurate with experience. It is hoped that the candidate could start no later than late summer of 2012, but other start dates can be considered.

The successful candidate will perform quantitative assessments of the skill of a range of statistical downscaling methods and participate in the analysis of the global climate model (GCM) simulations. The goal will be to develop one or more generalizable methods of evaluation to serve the climate assessment, impacts, and services communities, ultimately leading to better regional climate projections for resource managers. The successful candidate will identify high-priority variables and derivative products to be downscaled, post-process GCM datasets to generate derivative products, conduct downscaling with a variety of techniques, and evaluate the results across different regions, including the south-central United States. This process will require engagement of climate scientists and climate impacts specialists. The successful candidate will produce peer-reviewed publications, present results at scientific conferences, develop and document software code, and write clear and succinct briefing documents for climate services entities.

The South Central Climate Science Center is one of eight regional centers funded by the U.S. Department of the Interior that provides the scientific talent for understanding how climate change and other landscape stressors will change the face of the United States and how the Department of the Interior, as the nation's chief steward of natural and cultural resources, can prepare and respond. The University of Oklahoma leads a consortium that includes Texas Tech, Oklahoma State, and Louisiana State universities, the Chickasaw Nation, the Choctaw Nation of Oklahoma, and NOAA's Geophysical Fluid Dynamics Laboratory. The consortium is partnered with the U.S. Geological Survey of the Department of the Interior to operate the South Central Climate Science Center.

Applicants are asked to submit vitae, a statement of research experience and interests, and names and contact information of at least 3 academic references to

Dr. Berrien Moore
College of Atmospheric and Geographic Sciences
120 David L. Boren Blvd.
Norman, OK, 73072

For further information about the position, please contact Dr. Berrien Moore at berrien@ou.edu.

4. Post-Doctoral Researcher, Scripps Institution of Oceanography

Applications are being accepted for a postdoctoral research position in the Climate, Atmospheric Sciences and Physical Oceanography Division of Scripps Institution of Oceanography. Research will focus on mesoscale advection and stirring in the mid-latitude western Pacific and the Southern Ocean. The project will use ocean general circulation models and will analyze model results in the context of in situ observations collected as part of the Kuroshio Extension System Study (KESS) and the Diapycnal and Isopycnal Experiment in the Southern Ocean (DIMES) program.

Applicants should have a Ph.D. in physical oceanography, meteorology or a related field. Prior experience in numerical modeling and data analysis is desirable. The initial appointment will be for one year with a possibility of renewal. Questions about the position may be directed to Julie McClean (jmcclean@ucsd.edu) or Sarah Gille (sgille@ucsd.edu).

Salary commensurate with qualifications and experience and based on UC salary scales.

Applicants should send a statement of research interests, current curriculum vitae including a publication list and names of three references to:

Ms. Tomomi Ushii
Scripps Institution of Oceanography - 0230,
University of California-San Diego,
9500 Gilman Drive, La Jolla, CA 92093-0230

Closing Date: February 15, 2012, or until filled.