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For Your Information

XIX Computational Methods in Water Resources (CMWR2012) Conference — June 17-21, 2012 — University of Illinois at Urbana-Champaign, Urbana, Illinois, USA — see cmwr2012.cce.illinois.edu — **Abstract Deadline Extended to October 14, 2011**

Fall AGU December 5-9 — CUAHSI in booth #1116/1118 on NSF Street

Fall AGU Sessions of Interest - see [Selected Water Science-related Sessions](#)

Travel Grants Available: CUAHSI HydroGeoPhysics Facility. For additional information see the [CUAHSI HydroGeoPhysics Facility](#) web page.

Browse our postings page for interesting [Career Opportunities](#)

Check out the [CUAHSI Services page](#) for ways in which we can support your research!

Upcoming Events

December 3, 2011

- **2011 CTEMps Hands-on DTS Workshop** - Stanford University ([Download the flyer](#))

December 5-9, 2011

- [AGU Fall Meeting 2011](#), San Francisco, CA
- [select Hydrology sessions](#)

December 6, 2011

- **CUAHSI Reception** - Grand Hyatt @ 6:30pm ([more info](#) ; [directions](#))

February 19-22, 2012

- [AGU Chapman Conference on Remote Sensing of the Terrestrial Water Cycle](#) - Kona, HI

June 17-21, 2012

- **XIX Computational Methods in Water Resources (CMWR2012) Conference** - University of Illinois at Urbana-Champaign

July 22-27, 2012

- [2nd International Conference of](#)

CUAHSI Fall Cyberseminar Series Highlights Environmental Observatories

CUAHSI's fall Cyberseminars semester begins this month! CUAHSI is organizing an academic year-long (Fall and Spring) series, "Earth Observatories for Interdisciplinary Science: Reports from Critical Zone Observatories and Water, Sustainability and Climate Studies." The Critical Zone Observatories (www.criticalzone.org), supported by the National Science Foundation, are environmental laboratories established to study the chemical, physical and biological processes that shape the Earth's surface and their coupling by modeling and monitoring at the watershed scale. NSF's [Water, Sustainability and Climate Program](#) supports research that aims to "to understand and predict the interactions between the water system and climate change, land use (including agriculture, managed forest and rangeland systems), the built environment, and ecosystem function and services through place-based research and integrative models." CUAHSI thanks the various principal investigators from the CZOs and WSC projects that have agreed to share their vision and experiences with the water science community. Scheduled for the fall are:

October 28, 2011; 3:00pm ET

- **Suzanne Anderson (Boulder Creek CZO)**

Title: Boulder Creek CZO: Natural experiments to study Critical Zone evolution and function

Description: NSF established Critical Zone Observatories in late 2007 to promote interdisciplinary research on integration and coupling of Earth surface processes. Glaciers, knickpoint migration, and post-orogenic decay have shaped different parts of the Boulder Creek watershed in the Colorado Front Range over the Cenozoic. At the largest scale, we examine how these different erosion regimes shape the landscape and subsurface Critical Zone architecture. We use cosmogenic radionuclides to establish timing, and models to test possible erosion drivers. We also look at current processes operating at the hillslope scale. In one subwatershed, contrasting slope aspect provides an experiment on water delivery to the subsurface. Water flowpaths from melt of a seasonal snowpack are compared with flowpaths on adjacent slopes that experience only intermittent snow. The depth to fresh rock differs on these slopes, presumably reflecting the long-term effect of differing weathering processes and rates. Modeling will be required to link modern processes through past climates and vegetation regimes to the Critical Zone structure we see.

November 4, 2011; 3:00pm ET

- **Jon Chorover (Jemez-Catalina CZO)**

November 11, 2011; 3:00pm ET

- **Chris Duffy (Shale Hills CZO)**

November 18, 2011; 3:00pm ET

- **Mike Goulden (Southern-Sierra CZO)**

Additional information about attending the CZO Cyberseminars is available at cuahsi.org/sem-current.html.

CUAHSI Outreach Effort Compiles A List of Graduate Water Programs

When CUAHSI has its booth at professional society meetings—such as AGU, GSA, AWRA, or EWRI—we are often asked by students attending the meeting about the availability and benefits of graduate programs in Water Science at our member universities. We have listened to your questions and requests and we have responded. CUAHSI recently launched a web page that consists of graduate water programs at many of our member universities. And in response to your comments, we are expanding this outreach service to include programs from any qualified university in the U.S. and abroad. Thus far we have listed programs from 37 universities and organizations in 24 U.S. states as well as for four international locations. To view this listing, please visit the [Graduate Water Programs](#) web page.

All universities are welcome to submit multiple programs for listing if different programs are offered in different departments or colleges (e.g., engineering, earth sciences, natural resources, etc.) Interdisciplinary programs are often of particular interest to students. You **do not** need to be a CUAHSI member university to have your program(s) listed.

We simply ask you to supply (1) the logo you would like displayed (generally your university logo), (2) a sentence or two describing the program, and (3) the URL a student can follow to see more information. Please send the information to Conrad Matiuk (cmatiuk@cuahsi.org) for posting to the web site. Again, multiple programs may be included for each university, and our international affiliates and non-members are welcome to list their programs as well.

We encourage universities who have not yet submitted their programs to actively participate in this important outreach effort. Thanks.

- [13th Plinius Conference on Mediterranean Storms](#) - Priamar Fortress, Savona, Italy

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CUAHSI-HIS Tutorial Webinar Schedule



CUAHSI is also presenting a series of webinars this Fall on various topics related to using the CUAHSI Hydrologic Information System (HIS). These webinars will highlight how to use some of the features and functions of the HIS system. All webinars will be recorded and

posted to the CUAHSI website. The following three webinars will be presented:

October 31, 2011; 3:00pm ET

- **Tim Whiteaker, The University of Texas at Austin**

Title: HydroDesktop Metadata Fetcher - Accessing Services That Are Not Registered at HIS Central

November 08, 2011; 3:00pm ET

- **Jon Goodall, University of South Carolina**

Title: Component-based Modeling Using the HydroModeler Plug-in

The recording for the October 18 webinar by Daniel P. Ames and Jiri Kadlec from Idaho State University on **Accessing the Water Data of the World Using HydroDesktop** is available for viewing by [clicking this link](#) or going to the CUAHSI home page.

Full descriptions and additional information about attending the HIS tutorials is available at cuahsi.org/his-webinars.html.

Special Presentation: Hydroinformatics Webinars featuring CUAHSI HIS

As a complement to our Fall Webinar series on Using CUAHSI-HIS and HydroDesktop, CUAHSI is hosting two special seminars on advanced topics in Hydrologic Data and Information Systems featuring CUAHSI-HIS standards and components. These webinars will showcase some of the additional tools and techniques that developers have created that are compatible with the CUAHSI-HIS system. While the CUAHSI-HIS team has developed many of the key tools and techniques for HIS, the team is only producing a few of the many possible pieces that could be incorporated into this system. This leaves open numerous opportunities for others, throughout the hydrologic community, to contribute to HIS, by developing additional tools and techniques. These two webinars feature members of the HIS Users Forum presenting their work. If you are a developer who would like to share your experience or contribution with the HIS User community, consider joining our HIS Users Forum or contacting Yoori Choi (ychoi@cuahsi.org) for more information.

November 10, 2011; 2:00pm ET

- **Tim Whiteaker, The University of Texas at Austin, Ernest To, Espey Consultants, Inc.**

Title: WOFpy - Publishing Your Data in WaterML Using Python

November 15, 2011; 3:00pm ET

- **Dharhas Pothina, Texas Water Development Board**

Title: PyHIS: A cross-platform toolkit to access HIS data

Full descriptions and additional information about attending these webinars is available at cuahsi.org/his-webinars.html.

CUAHSI to Participate in Two Sustainability Research Coordination Networks

CUAHSI will be a partner on two of the Research Coordination Network (RCNs) projects recently announced by NSF as the first grants under its Science, Engineering, and Education for Sustainability (SEES) effort. The first is the **Marcellus Shale Research Network**, under the direction of Susan Brantley, Penn State University, in which CUAHSI will assist volunteer monitoring networks collecting data in areas potentially impacted by gas shale development to share data using the CUAHSI Hydrologic Information System. The second project is **A Global Water Diplomacy Network: Synthesis of Science, Policy, and Politics for a Sustainable Water Future**, under the direction of Shafiq Islam, Tufts University. This project is global in scope with participants from Latin America, Asia, the Middle East and Africa. CUAHSI will assist in deploying HIS for this international partnership.

USGS Powell Center - Call for Proposals - Synthesis Activities in Earth System Science



CUAHSI is pleased to announce that the USGS and the National Science Foundation (NSF) Division of Earth Sciences recently concluded an [agreement](#) for a pilot effort to host synthesis projects at the Powell Center in Fort Collins, Colorado. The USGS Powell Center and the NSF will jointly fund two to three proposals for Working Groups in both 2012 and 2013.

The U.S. Geological Survey's John Wesley Powell Center for Earth System Science Analysis and Synthesis fosters innovative thinking in earth system science. Interdisciplinary working groups comprising USGS

researchers and their national and international colleagues in academia and government will collaborate on analysis and synthesis of existing data and information.

Groups that submit successful proposals will receive computing and data management support and use of meeting facilities in Fort Collins, CO. This invitation to submit proposals must meet the following deadlines: Proposals for Powell Center 2012 Working Groups are due by **November 30, 2011**. Proposals for Powell Center 2013 Working Groups are due by **April 30, 2012**. Proposal preparation details differ slightly between submissions to USGS and jointly-funded USGS/NSF, so be sure to read the instructions carefully. See the [USGS Powell Center](#) web page for more information or download the [fact sheet](#) and the [Joint Agreement](#).

Distributed Temperature Sensing (DTS) Workshop - December 3rd at Stanford University



Are you planning to be in the Bay Area for the Fall AGU Meeting? You could plan ahead now and come to San Francisco a couple of days early and spend the Saturday in Palo Alto at a DTS workshop: **The Cutting Edge of Temperature Measurement in Earth Sciences** — Principles, Applications, Operational Factors, and Demonstrations of Distributed Temperature Sensing (DTS) for Environmental Sensing — Saturday December 3, 2011 at Stanford University. This workshop presents an overview of the technique, including discussion of applications to date, fiber and instrument selection, fiber placement, fiber repair, data acquisition, and data analysis. The workshop will be held at the Stanford University campus. In addition to lectures, the participants will handle the equipment, and observe demonstrations of all the operations required to employ this technique. The goal of the workshop is to provide enough information for participants to accurately identify the potential role of this method in their research. This workshop is part of the NSF funded center which has made five complete DTS systems available to the community through the [CTEMPs](#) DTS center. CTEMPs provides field-deployable high-precision fiber optic temperature measurement systems and wireless self-organizing multi-parameter sensor stations. [Use fees](#) are very low, and experiment design, installation, and data analysis is supported by a staff of scientists. Instruments are available now, obtained rapidly through an [online request form](#). All non-commercial projects for discovery and education are welcome.

Participation in the Workshop is a great way to gain access to these tools and support staff. Contact [Jennifer Eaton](#) to register. Download the workshop flyer for [more information](#).
