

Subject: Training Workshop - The Community WRF-Hydro Modeling System, and Runoff Predictions in Ungauged Basins (PUB) Summer Short Course

Registration is now open for:

- **Training Workshop: The Community WRF-Hydro Modeling System**
- **Runoff Predictions in Ungauged Basins (PUB) Summer Short Course**

A very limited number of **student travel grants** are available on a **first come, first served basis to help defray the cost of travel to these courses**. Contact Elizabeth Tran at etran@cuahsi.org for more information.

Training Workshop: The Community WRF-Hydro Modeling System

May 2 – 4, 2016 || Boulder, Colorado

A 3 day hands-on training workshop on the use and applications of the Community WRF-Hydro Modeling System.

Course details:

This training workshop will provide graduate students and early career scientists with formal instruction on the structure and application of the WRF-Hydro system and will offer hands-on experience in setting up and running the system for several different research and prediction applications.

Specific topics to be covered during the workshop include:

- Conceptualization and structure of the WRF-Hydro system
- Description of physics components options within WRF-Hydro v3.0
- Model porting and compilation and overview of parallel computing with WRF-Hydro
- Model input data preparation
- Model configuration and execution
- Visualization and post-processing of model output
- Case studies (participants learn how to use the system in both one-way uncoupled and two-way coupled modes with the community WRF atmospheric model)
- Highlight presentation on the implementation and use of the RAPID channel routing model within the WRF-Hydro system
- Open discussion on class participant interests and applications

Class participants will receive in-depth training via lectures and hands-on activities on the implementation and use of the WRF-Hydro system where all hands-on tutorial activities will be conducted in a formal computer laboratory located at NCAR.

Prerequisites:

Prior hydrologic and/or atmospheric modeling experience is advised. Unix/Linux command line operation strongly recommended.

The course will be held at the [Foothills Campus](#) at NCAR in Boulder, Colorado. Tuition, breakfast and lunch (Monday – Wednesday), and shuttle transportation from the Holiday Inn Express to the Foothills Campus (Monday – Wednesday), and to the Denver International Airport (Thursday) are included in the registration fee.

Visit the [event website](#) for more information and to [register](#).

Runoff Predictions in Ungauged Basins (PUB) Summer Short Course

June 6 – 10, 2016 || Fort Collins, Colorado

This U.S.-based summer short course, previously offered in Europe in 2015, is devoted to runoff prediction in ungauged basins (PUB), i.e., predicting water runoff at locations where no runoff data are available.

Course details:

This course is aimed at training students in methods to estimate streamflow at ungauged locations across different time and spatial scales. Students will be introduced to approaches through a series of lectures that are supplemented by complimentary in-class exercises using data and catchments from the United States. Through this combination of lectures and hands-on experiences, the course will emphasize the larger concepts of catchment processes and behavior and deepen the students' understanding of catchment hydrology.

Prerequisites:

Students will benefit most from this course if they have completed the following course work:

- Introductory hydrology course with understanding of catchments and river networks, river monitoring, hydrologic modeling, and the water cycle.
- Environmental statistics course covering basic statistical concepts such as the mean, median, probability distributions, hypothesis testing, and regression analysis.
- All course exercises and examples will be conducted in the freely-available statistical software R. You will need to have the current version of R installed on your computer; however, is not required that you are proficient in the software.

The course will be held at the [Powell Center](#) in Fort Collins, Colorado. Only tuition is included in the registration fee.

Visit the [event website](#) for more information and to [register](#).

Questions?

Contact Elizabeth Tran at etran@cuahsi.org