



A new PUB-working group on SLOpe InterComparison Experiments (SLICE)

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The IAHS decade on Prediction in Ungauged Basins (PUB) has the scientific goal to shift hydrology from calibration reliant models to new and rich understanding-based models. To support this, six PUB science themes have been developed under the PUB Science Steering group. Theme 1 covers basin inter-comparison and classification.

The SLOpe InterComparison Experiment (SLICE) is a newly-formed working group aligned with theme 1. Its 2-year target is to promote the improved understanding of regional hydrological characteristics via hillslope inter-comparison studies and top-down analysis of data from hillslope experiments from around the world. It will further deliver the major building blocks of a catchment classification system.

A first workshop of SLICE took place 26-28 September 2005 at the HJ Andrews Experimental Forest, Oregon, USA. 40 participants from seven countries were in attendance. The program consisted of keynote presentations on the state-of-the-art of hillslope hydrology, outlining a hillslope classification system, and through small group discussion, a focus on the following questions:

1. How can we capture flow path heterogeneity at the hillslope scale with residence time distributions?

2. Can networks help characterize hillslope subsurface systems?
3. What patterns are useful to characterize in a hillslope comparison context?
4. How does permeability condition hillslope response?
5. Can we actually observe pressure waves in the field and/or how likely are they to exist at the hillslope continuum scale?

The poster presents an overview of the workshop outcomes and directions of future work.