

## **Joint GWSP-WATCH Workshop on Computing the World Water Balance**

The second Workshop will be held in Wageningen, The Netherlands, 22-24 April 2008

There are many uncertainties in our understanding of the current water cycle and how it will develop in the future. To advance research on the global water balance, and to begin a comparison of model-based estimates of the global water system, the Global Water System Project (GWSP, [www.gwsp.org](http://www.gwsp.org)) in April 2007 brought together members of the scientific community concerned with global-scale modeling of the water cycle, followed by an intercomparison of model simulation results of the global water cycle. The Integrated Project Water and Global Change (WATCH, [www.eu-watch.org](http://www.eu-watch.org)), funded under the EU FP6, will bring together the hydrological, water resources and climate communities to analyse, quantify and predict the components of the current and future global water cycles and related water resources states. One of WATCH's unique deliverables is an enhanced modeling framework, consisting of advanced modeling tools and consolidated datasets. GWSP and WATCH are now planning a joint workshop and subsequent modeling intercomparison, which should benefit both GWSP and WATCH. The main goals of the model intercomparison project are:

1. Improved understanding of the uncertainties and the drivers of the global water balance
2. Improving the representation of the global hydrological cycle in Global Circulation Models through the improvement of land surface hydrological models (LSHM)
3. An improved estimation and understanding of the impacts of global change on the global hydrological cycle and water resources
4. Improved parameterization and routines of both LSHMs and global hydrological models (GHM)
5. Facilitation in the design of a modeling framework for an improved simulation of the global water balance

The above mentioned goals will be achieved by intercomparing model parameterizations and simulation results, include and/or improve dominant physical processes and human interactions with the global water cycle within LSHMs and GHMs, exchanging modules, and combining the best aspects of models. Hence, integrated model development and recommendations on model parameterizations will be carried out, mainly focusing on water resources issues.