



Panta Rhei – Everything Flows Change in Hydrology and Society IAHS Scientific Decade 2013-2022 www.iahs.info/pantarhei

Summary of the activity of the Panta Rhei Working Groups – Year 2014

Title of the Working Group: Hydrologic services and hazards in multiple ungauged basins

Report of the activity of the working group in 2014

Our working group met in Fort Collins, Colorado, as part of the USGS-funded Powell Centre project on streamflow estimation for ungauged basins across the US. In this workshop, we shared experiences and methods for nationwide hydrology predictions, and also discussed methods for data interpretation and visualisation across multiple catchments. We are in the process of preparing a commentary paper for WRR, titled "Continental scale hydrologic modeling: Filling the gap between engineering hydrology and global land-surface modeling", which will be submitted to the 50th anniversary edition of WRR. Our working group also met during AGU, and we will hold a day-long workshop prior to EGU to finalise work on our commentary.

Members of our working group are taking leading roles in the EU project 'Sharing Water-related Information to Tackle Changes in the Hydrosphere - for Operational Needs (SWITCH-ON)'. This project sets out to explore the potential of Open Data for water security and management, and development of tools using Open Data for societal needs. We are organising a session at EGU 2015, HS2.3.12 "Open data, Virtual laboratories and Large samples in comparative hydrology and multi-basin modelling".

Description of the opportunities provided by Panta Rhei

We found that Panta Rhei gives us an opportunity to publicize our collaborative work through the USGS Powell Centre, which would not otherwise have been widely visible to the hydrological community. It also provides an overarching framework that encourages us to think about how different strands of work on multi-basin predictions fit together, how they relate to societal needs, and how they incorporate anthropogenic changes in the hydrosphere. We appreciate being part of this grassroots IAHS initiative, including many other groups working on important hydrological research questions.

Suggestions for the future development of Panta Rhei

Panta Rhei has proved to be very visible during its first two years, at conferences and through encouragement of many talk/seminars relating to human impact on hydrology. A suggestion to continue people's engagement could be to make a draft plan of Panta Rhei's proposed activities over the remainder of the decade (or at least the next couple of years) and then circulate this. For example, planned papers to be written, etc.