Conceptual and Modelling Studies of Integrated Groundwater, Surface Water, and Ecological Systems (Proceedings of Symposium H01 held during IUGG2011 in Melbourne, Australia, July 2011) (IAHS Publ. 345, 2011). 133-138

Prediction of ungauged basins – catchment response regionalisation and uncertain criteria conditioning

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Abstract Hydrological modelling of ungauged basins is a common component of larger environmental models that depend on accurate streamflow simulations. It is therefore very important that the simulated streamflow response is as realistic as possible. This paper presents some simple methods of catchment response regionalisation and uncertain criteria conditioning that can be applied to almost any hydrological model to provide some parameter constraint and improve the realism of the streamflow simulations.

Key words prediction of ungauged basins; uncertain criteria; regionalisation; catchment characteristics