



The benefits of daily data and scale up issues in hydrologic models-SWAT and CRAFT

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Abstracts:

When modelling the flow pathways for nutrient transport, the lack of good data and limitation of data resolution become the key cause of low quality output in various hydrologic models. The scale of catchment being studied would present the main issues of the sensitivity and uncertainty expected on the hydrologic modelling. Equally, the time step chosen is also important to nutrient dynamics.

This study aims to evaluate the benefits of using both monthly and daily data in hydrologic models, and to address the issues of catchment scale when using the two hydrologic models, the Soil and Water Assessment Tool (SWAT), and Catchment Runoff Attenuation Flux Tool (CRAFT), by comparing the difference between SWAT and CRAFT in flow pathways and sediment transport. The models are different in terms of complexity, therefore the poster will discuss the strengths and weakness of the models. Also we can show the problems of calibration and how the models can be used to support catchment modelling.