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Drying and Transport Processes in Distributed Hydrological Modelling Based on Finite Volume Schemes (Iber Model)

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Abstract : The drying-wet process is one of the topics to be more careful in distributed hydrological modeling using finite volume schemes as a means of solving the equations of Saint Venant. In a hydrologic and hydraulic computer model, surface flow phenomena depend mainly on the different flow accumulation and subsequent runoff generation. These accumulations are generated by routing, cell by cell, from the heights of water, which begin to appear due to the rain at each instant of time. Determine when it is considered a dry cell and when considered wet to include in the full calculation is an issue that directly affects the quantification of direct runoff or generation of flow at the end of a zone of contribution by accumulations flow generated from cells or finite volume.

Keywords : hydrology, transport processes, hydrological modelling, finite volume schemes
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