



## **Mapping runoff based on water balance: a case study of upstream Bengbu in the Huaihe River Basin**

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This presentation aims at describing a hydro-stochastic approach method for producing choropleth maps of average runoff and computing mean discharge along the main river network. The approach applied to mean annual runoff is based on geostatistical interpolation procedures coupled with water balance and data uncertainty analyses. It is proved by an application in Upstream the Bengbu in the Huaihe River Basin, a typical basin in China. By disaggregating the mean annual streamflow measured at the outlet of a basin to estimate water depths on elements of an exact partition of this basin, it works out grid runoff yield maps with  $10 \times 10$  km<sup>2</sup> resolution and the discharge map along the river with the 1 km basic length unit. These results consist with water balance. The method in this study is easy to be used widely because it avoids the complexity of hydrology model and does not depend on the meteorological data.