INFLUENCE OF PRECIPITATION DOWNSCALING ON RUN-OFF GENERATION IN FLOO

Th. Beckmann (1), F. Hattermann (1)
(1) Potsdam Institute for Climate Impact Research beckmann@pik-potsdam.de

The time and spatial resolution and precision of precipitation from GCM runs is mostly not sufficient for hydrological distributed models, namely on regional scale and for flood forecasting. Nevertheless, for issues like modeling climate change impacts on flood events, the GCM outputs are often the only available data. Therefore, methods have to be applied t o translate the large scale predictions into spatially much finer-scale for inputs to hydrological models. The different downscaling methods simulate different precipitation distributions and thus influence the run-o f and flood generation. The effects of the downscaling approach and ....