

Experience in modelling runoff formation processes at different scales using data of water-balance stations

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Abstract Focusing research on analysing observational data of two well monitored Russian sites with differing geographical conditions, several scientific issues of recent hydrology are being addressed, e.g. the problem of heterogeneity of landscapes and its representation in models as well as the scale problem. The deterministic distributed hydrological model “Hydrograph” developed by the State Hydrological Institute (St Petersburg, Russia) is used to simulate hydrological processes in scales ranging from meteorological plots to large basins.

Key words hydrological model “Hydrograph”; principle of universality; water-balance stations; variable states; systematization of model parameters; Kolyma and Don River basins
