



## **Mapping snow cover characteristics in the European part of Russia**

L. Holko (1), V. Khan (2), J. Parajka (3), Z. Kostka (1), and A. Shmakin (4)

(1) Institute of Hydrology, Slovak Academy of Sciences, Liptovsky Mikulas, Slovakia (holko@uh.savba.sk, +421 44 5522522), (2) Hydrometeorological Center of Russia, Moscow, Russia, (3) Vienna University of Technology, Institute of Hydraulics and Water Resources, Vienna, Austria, (4) Institute of Geography, Russian Academy of Sciences, Moscow, Russia

Hydrological characteristics of snow cover such as snow water equivalent for large river basins can be obtained from several sources. Simulation by means of snow accumulation and melt models used in smaller catchments may not be feasible in large river basins. Spatial resolution of global data, e.g. from reanalyses may be rather coarse. Interpolation of measured snow characteristics from national networks may represent an alternative to obtain snow data for the larger scale studies that need finer resolution. Monitoring of snow characteristics in the former USSR and later in Russia was performed in a unique network of snow transects that operated since 1966. Depending on the landscape, the transects were 500-2000 m long. Every 5-10 days at least 20 probes were made along a transect. We have used the data from the snow transects to prepare the maps of snow depth and water equivalents in the European part of Russia for selected dates in period 1966-2000. Kriging with extended drift was used as the main interpolation method. The maps were validated against measured values, snow patterns and satellite data. The results will be briefly presented in the proposed poster.