



Data Rescue for precipitation station network in Slovak Republic

Pavel Fasko, Oliver Bochníček, Marek Švec, Zuzana Paľušová, and Ladislav Markovič
Slovak Hydrometeorological Institute, Bratislava, Slovakia (pavol.fasko@shmu.sk)

Transparency of archive catalogues presents very important task for the data saving. It helps to the further activities e.g. digitalization and homogenization. For the time being visualization of time series continuation in precipitation stations (approximately 1250 stations) is under way in Slovak Republic since the beginning of observation (meteorological stations gradually began to operate during the second half of the 19th century in Slovakia). Visualization is joined with the activities like verification and accessibility of the data mentioned in the archive catalogue, station localization according to the historical annual books, conversion of coordinates into x-JTSK, y-JTSK and hydrological catchment assignment. Clustering of precipitation stations at the specific hydrological catchment in the map and visualization of the data duration (line graph) will lead to the effective assignment of corresponding precipitation stations for the prolongation of time series. This process should be followed by the process of turn or trend detection and homogenization. The risks and problems at verification of records from archive catalogues, their digitalization, repairs and the way of visualization will be seen in poster. During the searching process of the historical and often short time series, we realized the importance of mainly those stations, located in the middle and higher altitudes. They might be used as replacement for up to now quoted fictive points used at the construction of precipitation maps. Supplementing and enhancing the time series of individual stations will enable to follow changes in precipitation totals during the certain period as well as area totals for individual catchments in various time periods appreciated mainly by hydrologists and agro-climatologists.