

## **Hydroclimatic aspects of the dry spells formation in Lithuania**

A. Bukantis, G. Stankunavicius, and E. Stonevicius

Vilnius university, Hydrology and Climatology, Vilnius, Lithuania (arunas.bukantis@gf.vu.lt)

Drought is a slow creeping phenomenon which lacks a standard universal definition and recognition as to when it onsets and what are its extent and severity. As such it rarely draws public sentiment and the response is generally lacking as compared to the dramatic hazards such as floods. Indeed drought characteristics differ for different climate regimes and the impacts are directly proportional to the vulnerability of the society. The impact of drought in a region depends on the adaptive capacity of communities or the ecosystems to cope.

Drought intensity as well as the length of dry spells are analysed from the hydrological point of view using the effective drought index (EDI). The EDI index has long memory of moistening conditions in particular territory and seems to be the efficient indicator of low flow conditions in different Lithuanian river catchments with various feeding conditions. Mild winters prevailed during last 30 years served as precursors for the lower than normal run-off conditions in the late spring and early summer. Lowest restoration rate from the low flow to the normal conditions found in the southeastern part of Lithuania and for the large rivers, while the fastest response to the dry spell formation was found in Middle Lithuanian rivers.