Geophysical Research Abstracts Vol. 13, EGU2011-5014-2, 2011 EGU General Assembly 2011 © Author(s) 2011



Comparing the Palmer Drought Index and the Standardized Precipitation Index for Pannonian Part of Croatia

Kreso Pandzic and Tanja Likso

Meteorological and Hydrological Service, Weather and Climate Observation Division, Zagreb, (pandzic@cirus.dhz.hr)

Conventional Palmer Drought Index (PDI) and recent Standardized Precipitation Index (SPI) are compared for Pannonnian part of Croatia. Historical time series of PDI and SPI are compared using spectral analysis technique. For that purpose monthly precipitation, air temperature and air humidity data for Northern Croatia and period 1951-2005 are used. The results indicate that SPI is simpler for interpretation and spatially more coherent than PDI. On the other side, lack of temperature within SPI, make impossible application of it on climate change applications. Further development of both indices is required. Possible applications of them in irrigation scheduling system is considered as well for drought risk assessment.