

## Is the Central Europe more inclinable to wildfires?

M. Mozny (1), M. Virag (2), D. Bares (1), M. Trnka (3), Z. Zalud (3), and P. Hlavinka (3)

(1) Czech Hydrometeorological Institute, Doksany Observatory, Doksany, Czech Republic (martin.mozny@chmi.cz), (2) AS&Consulting, METEO systems, Melnik, Czech Republic, (3) Institute of Agrosystems and Bioclimatology, Mendel University of Agriculture and Forestry, Brno, Czech Republic

Many studies indicate a gradual increase in danger of wildfire in Central Europe. The risk of wildfire differs greatly among individual areas (whether regions or districts), and this difference remains, irrespective of the methods used to describe the danger of wildfires. For this study was used the calculation of the FDI (Fire Danger Index) for 200 stations on the territory of Czech Republic in the period 1961-2008. The FDI model is being developed in the Doksany observatory based on evaluation of weather conditions. FDI model describes danger of wildfire for vegetation covered countryside. There are five levels of danger: 1 – very low risk, 2 - low risk, 3 - moderate risk, 4 - high risk, 5 - very high risk. During processing the model compute upper soil profile moisture, surface moistening and the speed of spread of wildfire. Between years 1991-2008 there was an increase in the average monthly FDI indices in comparison to the period 1961-1990. During this period, a statistically significant trend toward higher indices was found (0.02 FDI index/year). The trend of danger of wildfires growth was evident in all months.