



## **Variability of Maximum and Minimum Air Temperature in Bulgaria**

**V.Alexandrov**

Nnational Institute of Meteorology and Hydrology (Vesselin.Alexandrov@meteo.bg)

Homogenization of long-term series of minimum and maximum air temperature from Bulgaria was done. The currently used in Météo-France homogenization procedure, which does not require computation of regional reference series, was applied on minimum and maximum air temperature. Analysis of climate variability and change in Bulgaria during the 20th century was done on homogenized minimum and maximum air temperature series. The statistical significance of the obtained trends was evaluated by the coefficient of Spearman rank correlation. The last years of the 20th century are among the ones with the highest minimum air temperature. There was a significant increase in annual minimum air temperature during the last century in Bulgaria. The linear trend for the 20th century varies within the interval from  $0.6^{\circ}$  to  $0.8^{\circ}\text{C}$ . Warming in respect of annual minimum air temperature is lower in South Bulgaria and higher in North Bulgaria. The highest warming in the terms of seasonal minimum air temperature is observed in summer. Homogenized annual maximum air temperature shows a lower increasing trend during the previous century in the country.