



## **Trends and other statistical characteristics of a temperature-humidity index (ITU) in the southern part of Romania**

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During the last decades a growing number of heat waves have been observed in Romania during summer. The current index used in the National Meteorological Administration in Bucharest for quantifying human comfort is a temperature-humidity index (ITU). The heat warning is issued by the National Forecasting Center in two stages: warning stage 1 (alert stage) when the ITU value is between 66 and 79 units and, warning stage 2 (risk stage) when the ITU value is greater than 80 units.

This paper presents the trends of the number of days with warnings (alert and risk, separately) at 15 stations located in the south and south – east of Romania's territory during summer for the period 1961-2007.

Hourly data of air temperature and relative humidity for the interval 12-18 local time have been used for the study. The frequency of warnings during that hourly interval is assessed for each month (June, July and August) based on ITU thresholds. Finally, the spatial distribution of the warning frequencies is drawn as useful information for tourism and other environmental activities.