



TREND OF *FLASH HEAT* EVENTS IN THE IBERIAN PENINSULA DURING THE PERIOD 1900-2010.

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By using daily temperature series recorded at several cities of the Iberian Peninsula the trend of so-called flash heat events has been analysed since 1900. Mazon *et al.* (2014) proposed to call flash heat those events of a rapid and sudden increase of temperature in an intermediate scale between heat wave (at least two consecutive days with abnormal high temperature) and heat burst (few minutes of abnormal high temperature).

In the analysis, it is assumed that a flash heat event occurred if the maximum daily temperature exceeds at least 5°C the maximum daily temperature of the previous and next days. By using this criterion, the temporal evolution from 1900-2010 of this type of events has been analysed in some cities over the Iberian Peninsula covering the Atlantic, Continental and Mediterranean climatic zones.

The results show a clear positive trend of flash heat cases in the northern regions especially during summertime (e.g. San Sebastian) since the decade of 80's, and spring and autumn (e.g. Barcelona). In the southern Iberian Peninsula (e.g. Seville) there is not a clear trend; constant values and event a decrease tendency has been observed since the decade of the 90's. Only during wintertime in this area the number of flash heat cases increases.

Moreover, a certain irregularity in the number of flash heat events per decade is observed in the temporal evolution since 1900 in some cities, which correspond with the variability of the average temperature within the XX century.

KEY WORDS: Daily temperature, XX century, flash heat event, Iberian Peninsula, trend.

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