Extreme temperature forecast and warning system in the Valencia region (Spain)

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Since 2006 an early heat wave forecasting system is running in the Valencia region (Spain) in a joint effort from CEAM meteorology department and the Valencian health authorities. Through the years the early forecasting system evolved from a simple text forecast to a more complex system by establishing a regional thermoclimatic areal division across the region. From the analysis of maximum and minimum temperature historical data, a set of thermally homogeneous, both in terms of absolute values and annual cycle, areas were identified across the Valencia region. Grouping temperature data, both maximum and minimum, for each of those areas a set of thresholds have been identified for each thermoclimatic area that triggers different warning levels. This work shows a description of the warning system, based on the operational running of a meteorological model for temperature forecasting, and the latest update of the threshold values and areas in a context of raising temperatures inside global change.