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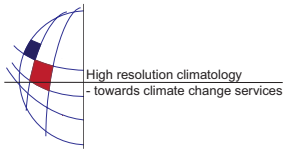

HEAT WAVES IDENTIFICATION IN GALICIA FROM 1986 to 2006.

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Two heat waves were characterized in Galicia (NW Iberian Peninsula) from 1980 to 2006. The first one was detected in July 1990 and the second one in August 2003. Galicia is a region characterized by an aged population which is more sensitive to extreme heat wave episodes. The impact of heat waves on excessive mortality was carried out by means of the temperature exceedence of a 95^{th} percentile of the maximum temperature (T_{exc}) and by means of the number of days with daily maximum temperature above the threshold (N_d).). Both heat waves were similar in Galicia although Spain was not affected by the first one. This fact can be explained by the orientation and the center location of the low- tropospheric air temperature and geopotential height anomaly fields recorded for each date. Both heat waves had a remarkable impact on population health increasing the number of deaths. In July 1990 and in August 2003 Galicia showed two episodes of remarkable anomaly in mortality with a value close to 1.2 (which represents a 20% increase in mortality). The increase in the exceeded mortality is mostly attributed to population older than 65 with a female mortality higher than male one due to the important asymmetry of this age group. Finally, these heat waves were put in the context of changes observed in heat waves intensity and length in Galicia since 1970s showing an increase per decade of 2.3 $\pm$ 1.2 ºC and 0.4 $\pm$ 0.3 days, respectively.