



The effect of length and starting year on trend analyses of temperatures in Spanish mainland (1951-2010). Seasonal analyses: Autumn (V)

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In this poster we applied the moving window approach (see Poster I of this collection) to analyze trends of autumn and its corresponding months (September, October, November) temperature mean values of maximum (Tmax) and minimum (Tmin) in Spanish mainland to detect the effects of length period and starting year. Monthly series belong to Monthly Temperature dataset of Spanish mainland (MOTEDAS). Database contains in its grid format of 5236 pixels of monthly series (10x10 km).

The threshold used in spatial analyses considers 20% of land under significant trend ($p < 0.05$). The most striking results are as follow:

- Seasonal trend analyses of Autumn Tmax show no significance at any temporal Windows. Trends of Tmin are significant in more than 20% of land until 1974-2010. The area affected in Tmin progressively increase from SE to NW.
- Monthly trend analyses not detect any significance in Tmax, while in Tmin, particularly in October, an extended area is detected in temporal windows in between 1951-2010 to 1978-2010, but clearly concentrated in the starting years of initial 70's. Spatial pattern of areas affected significantly seems to be from SE to NW for October, and South-North in September.

To conclude autumn trend analyses of Tmax and Tmin in Spanish mainland only detect significant trend in Tmin, mostly located in the 70's and extending from SE to central areas of study area.