



## **DRY AND WARM SPELLS IN EUROPE, BASED ON HADRM3 PRECIS RESULTS**

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A robust result from several climate models is the projection of increased summer drying over continental interiors in future climate. This is of considerable concern, as long-lasting dry weather conditions have a great impact in a number of sectors (water supply, agriculture, forestry, safety). Daily precipitation and temperature data from the Hadley Centre HadRM3-PRECIS regional model simulations, for SRES A2 scenario in three model experiments, over the European continent, were compared for the time periods of 1961-1990 and 2070-2099. Changes in "dry extremes" and "dry and hot extremes" were analyzed using statistical tests. The duration of the longest dry spell in the period 2070-2099 over Europe has been considerably longer than in 1961-1990. Further, bivariate analysis of longest hot and dry spells (with several thresholds of "hot" and "dry") has been carried out, for both the continental European scale and a local scale for the grid cell embracing the town of Poznan. The simulations show that the increase in longer hot-and-dry spells is particularly visible for Southern Europe, northern coast of France, southern parts of the British isles, while the continental part seems to be less affected.