## **ABSTRACT**

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Session 1) Climatology

Title Atribution of an anomalous summerization of the springtime detected over the Western Mediterranean

Abstract Two additional authors: R. Romero (UIB) and C. Ramis (UIB) Recent papers highlight the extension of summer conditions into spring in the Western Mediterranean area. The months of May-June show a 2-m temperature tendency in Palma exceeding 0.7 <sup>o</sup>C over the 1973-2012 period, the maximum observed throughout the year. These tendencies are also observed across the Iberian peninsula and France and are consistent with a prominent 500-hPa geopotential height tendency over the 1973-2012 period. This study is the natural extension of those papers and explores possible dynamical and thermodynamical causes of the remarkable warming in the Western Mediterranean observed over the last 4 decades. In particular, we analyse the evolution of the large scale energy fluxes and follow the traces of a northward expansion of the subtropical ridge in the region, seeking for interdecadal differences. We will discuss the application of the tendency equation for the temperature to attribute the observed changes to specific terms and processes.

Key words