

**MedCLIVAR: Tropical influence on the summer Mediterranean Climate**

Teresa Losada<sup>†</sup>; Belen Rodriguez-Fonseca; Fred Kucharski

<sup>†</sup> UCM, Spain

Leading author: [tldoval@fis.ucm.es](mailto:tldoval@fis.ucm.es)

This work investigates the impact of the after 70's Atlantic-Pacific NiÑos connection in the relationship between the tropical variability and the late summer Mediterranean precipitation. During 1979-2001, the Atlantic NiÑo is related to an increase of the precipitation over the central Mediterranean, and a decrease in the western and eastern parts of the basin, a relation absent in the previous decades. Results of different GCM simulations show that the observed response is reproduced only when taking into account the observed SST variability in the whole tropics and the influence of the thermodynamic feedbacks in the North Atlantic.