



## **Assessment of the WNPSM-ENSO teleconnection with CMIP5 models**

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After developing a new long-term series of the Western North Pacific Summer Monsoon (WNPSM) intensity recently, Vega et al. (2018) found both a period (1918-1948) characterized by an unusual persistence of strong WNPSM and an unsteady teleconnection between the WNPSM and the ENSO along the 20th century. In particular, the WNPSM tended to be strong (weak) during La Niña (El Niño) decaying year since the late 1950s, supporting the results of Chou et al. (2003), whereas the opposite occurred in the first half of the 20th century.

In order to gain a deeper insight into the causes of the instability of the WNPSM-ENSO teleconnection, CMIP5 models have been used. Firstly, we simulated the WNPSM through the index developed by Vega et al. (2018), focusing on its annual cycle and interannual variability, to know whether the models are able to reproduce periods with persistence of extreme monsoons. In addition, we assessed the WNPSM-ENSO correlation, obtaining a relatively high dispersion of the results when considering ENSO decaying years.

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