



Catalogue of weather compound events for Portugal

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Wind extremes, heavy precipitation events and flooding occurring during extended winter over land in the mid latitudes are mostly associated with extratropical cyclones. It is well known that the Iberian Peninsula is prone to the occurrence of these compound events and associated hazards (Liberato et al., 2013; 2014). In this work a dataset of historical high-impact winter storms for the Iberian Peninsula is used to develop a systematic analysis and a catalogue of weather compound events. Additionally ERA5 reanalysis allow the assessment of the synoptic evolution, dynamical characteristics and the main impacts of the top-10 storms that provoked extreme impacts and considerable economical losses over Portugal.

Liberato et al. 2013 *Nat. Hazards Earth Syst. Sci.*, 13:2239-2251 doi: 10.5194/nhess-13-2239-2013

Liberato 2014 *Weather and Climate Extremes*, 5-6: 16-28 doi: 10.1016/j.wace.2014.06.002

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