

Interactive comment on “Predictive skill of Atmospheric Rivers in western Iberian Peninsula” by Alexandre M. Ramos et al.

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Received and published: 17 October 2019

General comment This paper evaluates the ECMWF ensemble forecasts up to 15 days for AR that make landfall on western Iberian Peninsula. The paper is straightforward, reads well, their results have important relevancies for weather forecasting in the region. My criticism is minimal and relates to the presentation in some parts of the manuscript which may need to be improved. Overall, this article is welcome to the weather forecasting and atmospheric community in the region, and my recommendation is to publish this article in Nat. Hazard journal after considering some minor comments provided below to improve the presentation.

Minor Comments – Line 53: Replace “cost” by “coast” – In the section 3, the com-

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parison of the model output forecasts against the observations were done considering separately the sites or point with observations or using a regional average with observation? Please explain a little bit more about this point. – In line 132: what period does it correspond to the model climatologies? Please specify. – In line 133: what does it mean a sufficient number of ensemble members? Please specify. – In Fig 3 may be is not necessary adding all subpanels with all the days. Perhaps the authors can incorporate subpanels only every 3 days would be sufficient to show the idea and not overcharge the figure. These are very small and hard to visualize. – Fig 8 has too much information and of the different type. Considering splitting into two figures: the upper (percentages) and lower (contingency tables) panels. In caption indicate that the percentages correspond to the case study shown in Fig 3. The shading color codes of bars in contingency tables could be discrete (using the 5 subdivision) rather than continuous to better visualize the percentages. The first sentence in caption for these contingency tables could be rewritten as follow: Contingency tables for the accuracy of AR-related IVT forecasts by the ECMWF ensemble system, for lead times ranging between 1 and 15 days during winters spanning 2012-2016.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2019-317>, 2019.

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