

Interactive comment on “Medicanes in an ocean–atmosphere coupled regional climate model” by N. Akhtar et al.

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Since I am interested in Medicanes, I read with attention your manuscript that provides a new perspective with respect to previous studies in the field. Hereafter, a few suggestions on some points that, I believe, should be better addressed in the paper. I hope that these indications can be useful for improving your paper: - Page 2122, Line 15-16: the way the horizontal diffusion parameters is tuned should be better explained; - Page 2122, Line 26: some indications on how the spectral nudging technique is implemented (I suppose you force the forecasts to reanalyses) should be provided; - Page 2123, Line 17-19: I suppose that uncoupled simulations without nudging can have some problems in following the real atmospheric evolution without any forcing (apart from the boundary

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conditions) in a period of one month. I think this point should be better explained. - Page 2125 Line 24: the criteria for Mediane are never mentioned. I suppose you do not apply the Hart (2003) diagram, but you just looked at the thermal structure at 700 hPa. This should be indicated explicitly.

REFERENCES: Hart R.E. (2003) A cyclone phase space derived from thermal wind and thermal asymmetry. Mon Weather Rev 131:585–616

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