

Interactive comment on “Downslope windstorm study in the Isthmus of Tehuantepec using WRF high-resolution simulations” by Miguel A. Prósper et al.

Anonymous Referee #2

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The paper discusses simulations of one downslope wind event with the limited-area model WRF using multiple nests down to very high resolution (444 m). The study is mostly well written and interesting but needs some substantial editing. I also think it would gain a lot if an additional small sample of Isthmus events could be simulated and discussed (perhaps not using the innermost expensive WRF nest). Doing so would allow to inter-compare events and discuss similarities/differences. Still, the paper might be publishable without doing so.

Additional minor comments:

Page 4, line 21: missing equation P5, l2: Figure 2c missing P6, l 13: 0.5 deg x 0.5

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deg P6, l20: rugosity is surface roughness length Table 2: station elevations correct? Figure 2: Why before and after the event and not at peak intensity? P9, l3: In the results section there should be no hypothesis ("which can potentially) P9, l10: whose positions P10, l20: Where can this perfect match be seen? Figure 5: It is difficult to understand what is what cross section? Mention "up1" in the caption. Figure 9b,c: Easier to compare if you use the same domains? Did you discuss the missing northern stratiform cloud deck in the simulations?

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