

Interactive comment on “Retrospective analysis of a non-forecasted rain-on-snow flood in the Alps – a matter of model-limitations or unpredictable nature?” by O. Rössler et al.

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Received and published: 18 January 2014

The authors thank the anonymous reviewer for his/her very constructive and helpful comments. We now clarified our definition of atmospheric river and its extent on the 9 and 10 Oct. 2011. Confusion about the role of Ophelia is now corrected. We have added isentropic PV in Figure. The reviewer asked several times to justify statements about the extremeness of some parameters when using the word “unusual” or “anomalous”. We analyzed quantitatively the extremeness of those parameters (temperature, temperature increase, moisture) using Era-Interim as a reference and we now make quantitative statements in the text. A whole paragraph on the extremeness calcula-

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tion has been included in section 3.1? We found all suggestions about formulation very helpful and corrected them point by point. Especially the first paragraph of the discussion has been strongly reformulated to meet all the suggestions.

Point-by-point responses to the reviewer’s comments on the manuscript are attached in the pdf File: ResponsetoReferee1_meteo.pdf

Please also note the supplement to this comment:

<http://www.hydrol-earth-syst-sci-discuss.net/10/C7327/2014/hessd-10-C7327-2014-supplement.pdf>

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 12861, 2013.