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Discussions

Interactive comment on "Overview of the first HyMeX Special Observation Period over Italy: observations and model results" *by* R. Ferretti et al.

Anonymous Referee #2

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General comments: The manuscript introduces the Italian contribution to the HyMeX program, a multi-disciplinary research initiative on the Mediterranean water cycle. As such, this article is not a scientific manuscript which provides new results but it gives a detailed description of a new dataset collected over Italy to better understand, simulate and forecast precipitation in Italy.

With respect to the HESS manuscript rating, the article shows well the possible added-value of such new dataset for the Italy centered HyMeX objectives. However I have major concerns that should be addressed before the article can be accepted for publication: 1) I found the description of all models unnecessary, Table 4 is enough. The

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strategy of use of such models should be emphasized. 2) With respect to HyMeX objectives which points out the need to investigate ocean/land surface/atmosphere coupling on heavy precipitation events (HPE) and floods, nothing is mentioned in this paper. How will the Italian community investigate the effect of the Mediterranean Sea and Adriatic Sea on the Italian events? Were Italian oceanographers involved in HyMeX and if yes, what are their contributions to this project? Also, nothing is said on the hydrological response to the heavy precipitating events. There again, HyMeX objectives aims at making the bridge between HPE, floods and soco-economical vulnerability. Are there Italian hydrologists and social scientists involved in HyMeX project? If yes, what are the plans to investigate in an integrated way the full chain between HPE, floods and vulnerability/resilience/risk management? 3) I liked the "pecularities and model simulations" section. But nothing is said on the strategy to use the data to improve HPE/flood forecast. For such paper in which no conclusion is really expected, a "Perspective" section should replace the "Conclusion" section to make clearer the strategy of use of such data and models to improve HPE/flood forecast.

As it is written now, the article can not be published. If the authors only focus their article to HPEs, excluding the rest of the chain (hydrological response in terms of floods, modulation of HPE by the Sea, socio-economical issues), I would reject the paper since I do not see major scientific improvement with respect to previous campaigns such as MAP. If an effort is made to show how the Italian contribution to HyMeX will help in investigating the whole chain from the meteorological hazard, to the hydrological response, to the socio-economical impact, I then think this paper should be published.

Specific comments: p. 11648; l. 4: Davolio et al. (2013) is not referenced in the publication list.

Fig. 9 is difficult to read.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 10, 11643, 2013.