Replies to Reviewer #2

Listed comments

1. *Figures are OK in color but almost illisible in BW.*

We believe that this is not truly an important concern given that the on-line version will be kept in color.

2. *Day is not an SI unit, but accepted as such with symbol d. In text one can write mm per day, mm/day, mm/d or even mmd(with -1 as exponent) I think only the mmday(with -1 as exponent) is not very good. One has to apply a unique reference to the day unit or at maximum one for the text, say "mm per day" and one for numerical data, say "300.0 mm/d", but not mix many different expressions.*

Thanks for observing this. The use of mmday-1 was our typo (at P2327 L8 and P2336 L27), while the writing mm d^{-1} comes from the journal editing process. We surly agree that a unique reference should be used and thus we have changed the text using mm/d.

3. *Introduction is OK, but it could also been abbreviated, as there is no big need to suppport the methodology applied in the paper by too many references (it is a "classic" methodology).*

The introduction provides a comprehensive overview of the trend analyses conducted throughout the world and the Mediterranean area, in terms of methodology, main findings and analyzed rainfall variables. This description made probably the section too long, but we still believe it gives an overall framework that allows one to better interpret the main outcomes of our study. Anyway, in order to make it shorter, we slightly modified the text of the introduction by removing some lines (P2326 L3-9; P2327 L2-4).

4. *Symbols like _ [alpha greek] and _ [lamda greek] are not established as symbols of rainfall intensity and frequency. Also "sig" is not established as "significance" indice. It would be better to avoid them, or supply a symbol table as annex*

In some fields of hydrology, authors use to indicate rainfall intensity and frequency with the greek symbols alpha and lambda, as for example, in the case of Iturbe and Porporato (2004), Laio (2006), Preti et al. (2010) and Pumo et al. (2012). Moreover, we have clearly defined them at P2333 L3-6, and consequently we refer to these variables as alfa greek and lambda greek. The significance level alfa_sig is instead defined at P2330 L5.

5. *The paper is presents a useful applied research work in the area of the "Climate Change" (Climate variability) study.*

We are glad the reviewer appreciated our work and recognized the useful contribution in the Climate Change analyses.

References

Iturbe I.R., Porporato A. (2004) Ecohydrology Of Water-Controlled Ecosystems: Soil Moisture And Plant Dynamics University Press.

Laio F. (2006) A vertically extended stochastic model of soil moisture in the root zone. Water Resources Research 42:W02406. DOI: 10.1029/2005wr004502.

Preti F., Dani A., Laio F. (2010) Root profile assessment by means of hydrological, pedological and above-ground vegetation information for bio-engineering purposes. Ecological Engineering 36:305-316.

Pumo D., Noto L.V., Viola F. (2012) Ecohydrological modelling of flow duration curve in Mediterranean river basins. Advances in Water Resources. DOI: 10.1016/j.advwatres.2012.05.010.