

***Interactive comment on “Multilevel and multiscale
drought reanalysis over France with the
Safran-Isba-Modcou hydrometeorological suite”
by J.-P. Vidal et al.***

J.-P. Vidal et al.

jean-philippe.vidal@cemagref.fr

Received and published: 15 February 2010

I agree with the other reviewers that the authors are to be commended for this comprehensive analysis of drought in France and also recommend the paper for publication.

The authors thank the referee for his/her fruitful comments (in italics below) on the manuscript.

The paper would, however, benefit from more concise and more scientific presentation. In particular, it is very descriptive and mixes discussion into the presentation of the re-
C3360

sults, which makes it difficult for the reader to extract the key findings about propagation of drought and scale. These could definitely be highlighted better.

The text has been revised and the Discussion part expanded to hopefully better highlight the key findings.

The abstract should not only state what was analyzed but also needs one or two sentences on the findings/results.

Summary sentences have been added to the abstract.

The introduction lists a lot of studies, but falls short on summarizing what groups of studies actually found and which conclusions they drew that are relevant to this study. The aims are a bit hidden within the text and could be brought out better, preferably together with some research questions such as in the beginning of section 5 (where there should be only results and no repetition of research questions).

The introduction text has been revised and now includes the questions that were initially in section 5.

In sections 2.2 and 2.3 in particular I found it difficult to distinguish between review of methods and the exact choice of methods that were applied in this study and why. This needs to be made clearer.

Section 2.2 has been restructured in order to make clearer the distinction between review and approach chosen. The text in section 2.3 has been modified to hopefully make clearer such distinctions.

The presentation of drought characteristics are very good and illustrative. By immediately jumping into comparisons with the literature, however, the great results of this

study seem to drown a bit. The work would be highlighted better if the results were presented plainly first just as they are, and all discussion with respect to the literature was moved to a more structured and more expansive discussion section.

Indeed, comparisons with literature do closely follow the presentation of examples of drought propagation, and reviewer #1 found that it increases confidence in the modelling results. However, no immediate comparison with literature has been made for drought event characteristics, as no previous study looked at them in France. Some comments/comparisons have been moved to an expanded Discussion part.

Discussion and conclusion would benefit from more focus on the multi-level and multi-scale aspects that were actually found. Otherwise the title promises too much.

The discussion and conclusion parts have been expanded and some more comments on multilevel and multiscale aspects have been added.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 6, 6455, 2009.