Interactive comment on “Global meteorological drought: Part 1 – probabilistic monitoring” by E. Dutra et al.

Anonymous Referee #2

Received and published: 14 April 2014

Manuscript Number: HESS-2013-581

Author(s): E. Dutra et al.

Title: “Global meteorological drought – Part 1: Probabilistic monitoring”

1. GENERAL/OVERALL: The paper is well written (outside of some minor edits) and both original and worthy of adding to the knowledge-base in our field. This is a topic (remotely sensed derivatives for drought monitoring/new applications) that needs more exposure in the literature and is a welcome addition to the body of work in my opinion. The abstract is consistent with the findings of the paper. As for the flow of content in the paper, it seemed more intuitive to me that the Precipitation Monitoring section would come before the Drought Monitoring section in laying the foundation for this paper. More on this below. In short though, this is a needed approach at getting at the issue of supplementing in situ observations in near real-time with remotely sensed precipitation/drought indice derivatives.

2. TITLE: Tough to tell w/out reviewing the context of “Part 2:”, or Part X:”. Seems like the “monitoring” reference should come earlier in the title and would better clarify what the paper is about, but again, this may be just fine depending on the other paper titles in this series of papers. …assuming that the other paper is in this same special collection HESS journal issue.

3. ABSTRACT: Concise and representative.

4. INTRODUCTION: Good

5. Sections 2-4: No real major issues except for perhaps a better understanding from the authors as to why they delve into Drought Monitoring (Sec. 3.2) before the Precipitation Monitoring (Sec. 3.3). Perhaps it is the labeling choice of “Precipitation Monitoring” that is throwing me off as there is some explanation as to “why” and not as much of a general intro/background into new applications of satellite based augmentation of in situ networks. That said, this still could have been covered under a new 2.2 following the Precipitation Dataset section. If the other reviewers, or the Editor, aren’t concerned with this progression, then I will yield. Perhaps some explanation from the authors as to the rationale will do the trick.

6. REFERENCES: Good

7. FIGURES AND TABLES: Need to be larger in general, which should make them more legible and easier to understand on their own. Perhaps this will happen anyway in the printed layout in the journal? They are too small as they are currently depicted though, particularly Figures 6 and 7 and even 8.

8. Supplemental Info: Given the focus on “meteorological” drought here, I’m not sure why there is all of the analyses into SPI-12? That seems to get more into agricultural
or, more likely, hydrological drought. Although it was still good to have the additional longer-term context, this could lead to some confusion or mixed messages.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 889, 2014.