

# **Review of the article: "Evaluation of Globally Gridded Precipitation Data and Satellite-Based Terrestrial Water Storage Products Using Hydrological Drought Recovery Time" by Çakan et al.**

## **1. Overview**

I appreciate the efforts made to better outline the objectives in the abstract, introduction, and conclusion, as well as the proposed discussion section. The objectives are more clearly defined, which makes it easier to follow the structure and flow of the article. However, the manuscript still lacks a robust discussion and does not sufficiently highlight the key insights of the study.

## **2. Major comments**

### **Abstract:**

The abstract would benefit from more information on the implications of the analysis, particularly which product performs better and in which contexts. Highlight the key insights more explicitly to provide a clearer summary of the manuscript's findings.

### **Discussion:**

The section titled 3.4 "Discussion" has been included within section 3 "Results." A discussion cannot be a subsection of the results. I recommend renaming section 3 to "Results and Discussion."

The current 3.4 "Discussion" does not provide a proper discussion but rather a detailed description of the results. While this description is interesting and useful, it lacks a synthesis and a discussion of the main findings.

The discussion should address key questions such as for example:

- What do the analyses reveal overall?
- Which precipitation product performs better, and why?
- Which TWSA product performs better, and why?
  - For example, what are the implications of JPL Mascon showing, on average, a DRT that is 2.6 months longer than that derived using G3P?

Additionally, the discussion should address potential limitations of the study to provide a more balanced evaluation.

### **Conclusion:**

The manuscript appears to provide an innovative and interesting method for evaluating precipitation products but neglects the main conclusions and their implications regarding the evaluation of GPCC, GPCP, G3P, and JPL Mascon. The conclusion should explicitly state which products show the best performance and in which contexts, along with the broader implications of these findings.

### **3. Minor comments**

**Line 24:** The term “performance” is too vague. Please specify what aspect of performance is being referred to.

**Line 27:** The phrase “difference between the two methods” is too vague. Provide a concise explanation of what the difference entails.

**Figure 5:** Avoid showing panels (b) and (d) if there are no precipitation data used in the DRT estimation and they have no impact on the results.

**Figure 8:** If the DRT values presented in this figure are derived as an average between DRT calculated from storage deficit and DRT calculated from required precipitation, this should be clarified explicitly in the caption.