

## ***Interactive comment on “Temporal variations of evapotranspiration: reconstruction using instantaneous satellite measurements in the thermal infra red domain” by E. Delogu et al.***

**E. Delogu et al.**

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Unfortunately, I found the paper very difficult to follow. The style and structure of the paper needs to be adjusted to make it easier for the reader to follow. The methodology presentation is complicated as it consists of two methods which run in parallel (The SF and EF method for instantaneous estimates), and then culminates in the testing of both methods as input into the extrapolation of seasonal ET, while at the same time assessing the impact of revisit time on these seasonal estimates. Further, the authors do not appear to have followed accepted norms for what should be included in each

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section of the paper which adds to the difficulty for the reader. The authors should consider illustrating with Figures to help the reader follow the methodology and relate this to subsequent sections and/or consider having consistent numbering/ headings in the text.

The presentation will be improved and a flowchart will be added to help the reader.

The title is a little clumsy, I suggest: "Temporal variation in evapotranspiration: a comparison of patterns derived from thermal infra red domain".

The title will be improved

The authors may also like to consider the main headings in the paper and shuffle the text around to the most appropriate section. In particular, I would suggest having a section on literature review as there is good reference to relevant literature which is included but since it appears in sections such as the methodology, it becomes cumbersome to read.

As suggested by Reviewer 1, an additional section “theoretical background” will be added.

It may also be useful to keep the materials section separate from the methodology and include a map indicating where the study sites are located. Further, this paper could greatly benefit from a discussion section. This would allow for much of the text to be removed from both the methodology and the results section and these sections may be more concise and easy to follow. It is my opinion that much of the value this paper brings should be presented as part of a discussion section.

The results will be presented and commented in a particular discussion section.

On what basis was a “large deviation” established. This appears subjective. Can this be expanded on?.

Due to land-air interactions, a decrease in measured evapotranspiration is often con-

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comitant with a rise in potential evapotranspiration: a lower evapotranspiration means a dryer and a hotter surrounding climate. Stress is therefore often clearly visible in real vs potential evapotranspiration rate time series. Of course, there is some kind of subjectivity associated with the choice of the starting date of the stress, but here we focus on extensive stress events (more than 4 days long).

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Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 1699, 2012.

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