The manuscript by Rodrigues et al. provides an interesting and clear analysis of evaporation from a large reservoir where two different direct measurement methods are compared. By establishing a pan coefficient that is a function of identified governing factors is was shown that on a daily timescale pan measurements can be used to resemble the evaporation rates measured by an eddy covariance installation. The study is straightforward and concise, and the results presented follow directly from the aims and hypotheses of the study. In general, the study provides a good base for further exploration of total reservoir evaporation in the Mediterranean climate using simple measurement instruments, and with that provide information to support the management of the reservoir. With this I think that this study is interesting for publication. However, I would like to suggest the need of minor revisions, which is mainly related to the structure of the manuscript, and the reproducibility of the study.

**General comments**

In terms of reproducibility of the study, I think that in general the description of some of the methods that are applied are not sufficient. This includes:

- The quality control process of the Class A pan in section 2.2. Please elaborate on what method this quality control process is based on.
- The sensitivity analysis - I would like to read more on how the authors have performed the sensitivity analysis. This does not become clear from the Methodology section, nor from the results in section 4.4.
- The factors governing evaporation – it needs more clarity on how the factors governing evaporation were determined. These factors are mentioned in the Methodology section, and form the base of the pan coefficient function that is developed. Are these governing factors identified based on literature or other results that are not shown here?
- The multivariable nonlinear pan coefficient function - could the authors explain how they came to the form of the multivariable nonlinear pan coefficient function, apart from the explanation that a linear function would not describe the correlation between EC evaporation and pan evaporation well.

A clear description of the figures that are presented as results is sometimes lacking in my opinion. This is the case for figures 3, 7 and 9. What do we see in this figure, how do we read it, what is the main message that the reader can take from it? I think this will help your story to come across more direct and focussed, and will improve the guidance of the reader towards the conclusions that are well supported by the results.

Another general comment that I would to make is to see if a better balance can be achieved between the size of the sections. Sections 3 and 4.4 are relatively short and misses information. Probably this can already be improved by applying the two comments mentioned above.

The conclusions section somewhat misses a concluding statement and is now presented more as a summary. Furthermore, some new numbers are shown in this section, which is not the appropriate place to present new results. Referring to p.13 l.253.

**Specific comments**

p.2 lines 46-48; how was the total reference evapotranspiration calculated? Using Penman-Monteith as mentioned at p.12 line 236?

p.3 lines 77-82; I would like to suggest to describe at what timescales the study focusses.
p.5 lines 134/135; please check if the negative latent heat fluxes found are indeed erroneous, or is there condensation happening?

p.5 lines 137-141; it does not become clear how the authors have applied this filter. Does the wind direction filter have a range of 180° and 100° respectively, or is there a filter from 180° and 100° towards 360°? Please clarify from which to which wind direction the filter is applied.

p.7 line 146/147; What conditions surrounding a site can influence the pan coefficient? Could the authors further explain if indeed those conditions can be ignored because the fetch in the wind direction was found not to be relevant.

p.7 line 161; How did the authors deal with the data that was filtered out in calculating the total evaporation amount?

p.7 line 173/174; The authors mention that the delay of evaporation is related to the variation in the energy storage in the water body, however this is not shown in figure 5. Do the authors have data on this that could be presented?

p.7 lines 174/175; I think this argumentation could be written down more clearly. The increase in energy storage in the water body by solar radiation is not depending on the gradient of air-water temperature. The solar radiation will penetrate the water surface in any case.

p.7 lines 176-178; at line 166 it is presented that there no correlation was found between open water evaporation and incoming solar radiation. However, in line 176-178 it is presented as if there is a direct correlation between the variables. Please elaborate.

p.10 lines 205-207; which results support this statement? As far as I can see there is no data presented on heat storage.

p.12 lines 243/244; it would be interesting to know whether the method presented in this study can indeed be applied to other reservoirs with a Mediterranean climate. Could the authors discuss further on this?

Technical corrections
p.2 line 28, 29; not sure if hm³ is a common unit to use. Consider changing.

p.2 line 31; (Kohli and Frenken, 2015) -> Kohli and Frenken (2015)

p.2 lines 55/56; This sentence seems not in the right place in this location in the paragraph. Consider bringing it forward.

p.3 line 59; add ‘it’ to the sentence: ‘which means that it is not possible…’

p.3 line 64; waterbodies -> water bodies

p.3 lines 83-85; This paragraph might be redundant. Especially mentioning about section 1, which the reader at that moment has just read.

p.7 line 164 and other lines; trend should be correlation?

p.7 line 166; open evaporation -> open water evaporation

p.8 line 187; The most importance differences with what?

p.8 lines 187/188; The dominance of wind speed over solar radiation in relation to open water evaporation? Please clarify.

p.12 line 230; (Rodrigues, 2009) -> Rodrigues (2009)
p.12 line 239; please clarify what is meant with ‘high measured evaporation’? High evaporation rates? High measurement frequency?

p.13 line 257; significative -> significant. Or should it be ‘weak’ instead of ‘no significant’ following from section 4.2.