

## Reviewer comments

### Recommendation: Minor revision

This manuscript examines how tidal state may affect the use of an instantaneous mangrove FAPAR estimate as a proxy for the daytime mean. The topic is relevant, the analysis is clearly presented, and the authors are appropriately cautious about the limits of a single-site study. I recommend minor revision. No additional field experiments are needed.

1. The main claim should be narrowed slightly. The study shows a tidal-state difference in the apparent FAPAR proxy and a separate instantaneous-to-daily scaling difference, but it does not directly show that tide caused the 28% reduction in RMSE. Please describe tide as a possible source of sampling uncertainty rather than a validated correction factor. This distinction should be clear in the title, Abstract, and Conclusion.

2. Please use “EC/LUE-derived apparent FAPAR proxy” consistently. Some figures and sections shorten the term to “FAPAR,” although the variable may also reflect changes in realized light-use efficiency, micrometeorology, and flux processing. The state-specific  $\epsilon_{\text{max}}$  analysis shows limited sensitivity to the selected calibration, but it does not exclude these other explanations.

3. The half-hourly observations are serially correlated. The reported p values should therefore be treated as descriptive within-record statistics rather than tests based on independent replicates. Please report the number of days represented in each tidal class and provide an effect size. The changepoint should likewise be described as an estimated site-specific breakpoint near  $-0.3$  m, and the basis of the  $\pm 0.3$  m sensitivity band should be explained.

4. The spatial analysis needs more cautious interpretation. Please clarify whether FES2014 water levels and SRTM elevations use compatible vertical datums. The random-forest and SHAP results should also be shortened or moved to the Supplementary Material because  $0.5^\circ$  meteorological predictors provide little independent spatial information within a  $31.9 \text{ km}^2$  reserve. These rankings should not be interpreted as 10 m pixel-scale environmental controls.

Please also report the absolute RMSE values for the unity and calibrated ratios, retain “in-sample” wherever the 28% reduction is mentioned, and check why Sentinel-2 FAPAR is much lower than the tower-derived and MODIS values.

The paper provides a useful assessment of tidal-state-related sampling risk. After these clarifications, it should be suitable for publication.