

**Review of “Matching scales of eddy covariance measurements and process-based modeling - Assessing spatiotemporal dynamics of carbon and water fluxes in a mixed forest in Southern Germany” by Moutahir et al., submitted to EGU sphere, 2025.**

(all line indications refer to the track-change version)

## **Response to reviewer #2**

We thank the reviewer for the positive evaluation of the revised manuscript and for highlighting the importance of transparency and replicability in the data selection procedure. We have revised the Methods section indicating that more quality control and data filtering were needed during model calibration referencing to more details in the supplementary materials (**L241-245**).

Specifically, we now explicitly document: the use of ICOS quality flags, the 70% threshold for retaining daily NEE values, the additional filtering applied at the Speulderbos site due to incomplete gas concentration measurements for WPL density corrections, and the exclusion of specific years at the Campbell River site based on inconsistencies between tower-based meteorological measurements and ERA5 reanalysis data (**see first section of Supplementary Materials**).