

Comments on “egusphere-2025-1595”

The authors provided a thorough revision of the manuscript and detailed responses to the review comments. It is clear that significant progress has been made in addressing the major concerns, also clarifying the UAV thermal data processing and calibration procedures. As such, the manuscript has improved substantially in terms of methodological transparency and overall clarity.

Regarding the thermal calibration, I highly appreciate the two-step approach involving reference panels and emissivity correction based on land cover classification which is state-of-the-art. This addresses the core issue raised in the initial review. However, to fully substantiate that the calibration with reference panels was actually implemented during each UAV flight, I would strongly recommend including supporting evidence in the supplementary materials at this stage, by including e.g.:

- A plot or table showing the linear regression/calibration curve used to correct the raw LST data, including sensor-measured temperatures of the panels and the corresponding raw pixel values, as has been provided with Figure S2 for modelling soil temperature. This will substantially increase transparency.
- An optional photograph or thermal image showing the setup and placement of the hot and cold reference panels on the ground during one of the flights

These additions would greatly enhance the credibility and transparency of the calibration procedure. Including them in the Supplement would allow readers and reviewers to verify that the calibration was actually executed with success as described.

Aside from this remaining point, the revised manuscript is publication-ready.