

**Line 230 and Line 540:** how did you take into account the shadows for the soil and canopy temperatures ? (cf. Mwangi et al., 2023). What is the impact of the shadows actually ? (needs more analysis and comment than what is written in line 535 to 539)

Shaded pixels were not excluded from the calculation of soil and canopy temperature. The total canopy and soil temperature (all pixels) should be considered to estimate ET fluxes in TSEB-2T models. Therefore, the TSEB model does not account for shadow effects and could be sensitive to Sun position and shadow. We add more analysis to that point between lines 545 and 553.

*The thermal images captured at 7:00, 9:00 and 16:00 hours were more susceptible to thermal radiation directionality (TDR) and shadow effects resulting from the higher zenith angle of the sun. Moreover, the significant contrast between inter-row soil and canopy leads to considerable directional variability in the thermal images (Mwangi et al., 2023). Although TSEB-2T accounts for radiation directionality when estimating H (Norman et al., 1995) and shortwave transmittance (Parry et al., 2019), it may still be susceptible to shadow effects because it does not distinguish between sunlit and shaded sources. To address this issue, Mwangi et al., (2022) proposed a four-component scheme (SPARSE4) as an option to account for sunlit/shaded soil/vegetation energy sources. This scheme couples a dual-source energy balance (SPARSE) model with the physically based unified four-component radiative transfer (UFR97) model.*