

Comments

I have thoroughly reviewed the manuscript "Developing Spring Wheat in the Noah-MP LSM (v4.4) for Growing Season Dynamics and Responses to Temperature Stress." All the comments have been incorporated well and improved the quality of this manuscript. Overall, it is a very good piece of work. The authors have conducted a comprehensive study that significantly contributes to understanding spring wheat growth and its response to temperature stress in the Noah-MP LSM. With a minor revision this paper is good to publish.

Previous comment:

In section 2.3, it is important to note that the Y-axis in figure 2b represents $V(T)$ and not $f(TV)$, and the equation for the blue line is Wang 2017, not Wang-Engel (1998). Additionally, the plots in figure 2 should be labeled as a and b, and the Y-axis labels should match the text.

Furthermore, the manuscript's novelty is the new heat stress function, but it is not adequately explained. Therefore, it is essential to provide a detailed scientific explanation of the function to help readers better understand it.

Follow up on the comment:

With the added equations making the comparison between temperature stress function $f(TV)$ and Rubisco capacity (V_{cmax25}) parameter responses to temperature $V(TV)$ in default and old function is possible. TV is defined as canopy temperature. Default and modified $f(TV)$ are represented by eq. 5 and 7, respectively; similarly, for $V(TV)$, it is eq. 6 and 9.

However, the respective figure (Figure 2) has different X and Y axis acronyms defined nowhere. The X-axis ($f(TV)$ and $V(TV)$) and Y-axis (TV) degree Celsius labels in Figure 2 should be consistent with the corresponding equations for consistency and clarity.