Explanation:

My original request to remove LAI from the denominator was incorrect. Equation 7 for dry canopy transpiration, in its original form in the manuscript, is a simplification in that it combines sunlit and shaded portions of the canopy. We would like to correct Equation 7 to exactly represent the model code, which defines separate LAI and stomatal resistance terms for sunny and shaded canopy. Just to be clear, this is not an error in the model transpiration code. It is only a mistake in the way Equation 7 is written in the manuscript. Additionally, there are multiple terms for direct or ground evaporation which will probably cause confusion: Eground (Figure 1), Edir (Equation 1), ETground (line 38), and ETdir (Equation 5). We would like to correct this as well.

Additionally, I have attached a new version of Figure 1, which uses the label Edir (instead of Eground) to correspond to Equation 1.

Updated text:

Shown in Eq. (5), CLM calculates direct evaporation from the ground using the gradient between specific humidity at the ground surface *q*g (MM-1) and at a reference height *q*a (MM-1), along with air density (ML-3), atmospheric resistance *r*d (TL-1), and a soil resistance term (-).

(5)

To calculate actual transpiration, CLM adjusts potential transpiration by stomatal and aerodynamic resistance terms as follows.

(6)

(7)

Potential transpiration (Eq. 6) is a function of leaf and stem area index LAI and SAI (-), boundary layer resistance *r*b (TL-1), air density (ML-3), and the gradient of specific humidity between foliage and canopy *q*f *- q*c (MM-1). Transpiration (Eq. 7) only occurs from the dry fraction of the canopy (*L*d) and further depends on stomatal resistance *r*s (TL-1). In Eq. (7), the sunlit (*sun*) and shaded (*sha*) fractions of the dry canopy are separately defined with their own LAI and stomatal resistance values. Note that the leaf and stem area index and stomatal resistance terms are parameterized by plant functional types and defined per cell, without fractional vegetation, and for a single canopy layer. For a further explanation of ET calculations in ParFlow-CLM, see Jefferson et al. (2017).