

Dear editor,

Thank you for handling our paper carefully. Your honest and kind comments convinced my hesitating attitude and I carefully checked the equations, symbols and the text again. I also checked the code and the results, and tested the conservation of the calculated radiation components. The two major revisions are described below. I also updated the supplement file and included a text file for the code, the input and output data.

Please let us know if we need to do anything for the release of the paper.

Thank you very much for your help.

Best regards,

Yu Zhang

The two major revisions

1. The equations for calculating the relative diffuse radiation (Equations 23, 25 and 27) were revised as the average of the sunlit fractions for the elevation angles from 0 to $\pi/2$. Since we assume that the intensity of diffuse radiation is the same in all directions, we do not need to consider the cosine effects of the elevation angles. We tested the results using different plant densities and leaf area index. We deleted the original Equation 23 and revised the associated text (Line 1-4, page 11).
2. We combined the original sections 2.2.1 and 2.2.2 into one section for woody plants, and the original sections 2.2.6 and 2.2.7 into one section for scattered radiation.