

## ***Interactive comment on “Modeling photosynthesis of discontinuous plant canopies by linking Geometric Optical Radiative Transfer model with biochemical processes” by Q. Xin et al.***

### **Anonymous Referee #2**

Received and published: 27 March 2015

This revised manuscript has incorporated most of the comments previously issued by the reviewer, and properly addressed reviewer's questions. Now it is easier to follow, so I suggest it to be published with following minor revisions.

1. This manuscript has been based on some previous work of the community, e.g., some coefficients, so I suggest to have a table to contain the values of the coefficients, as VPD\_min in current Page 3691 Line 4, and their sources.
2. What is the solar zenith angle for Figure 3b?
3. Suggest to add two scatter plots in Figure 4 to emphasize the correspondence between measured radiation and modeled radiation.

C852

4. Figure caption and text relating to Figure 13 is very hard to follow, consider revising.
5. The assertion of the last sentence in Section 5.2 has potential conflict with the statement in Ni-Meister et al., 2001, which mentioned that not accounting for the clumping and discontinuous plant canopies will lead to underestimation of biomass. Suggest to revise or delete.

---

Interactive comment on Biogeosciences Discuss., 12, 3675, 2015.