## Response to associate editor decision - Minor revision

Dear Dr. Akihiko Ito,

We are deeply grateful for your thorough review and insightful comments on the revised manuscript. Your comments are valuable in enhancing the quality of the manuscript. Enclosed below is our response addressing your comment.

Comment: I studied the discussion and the manuscript and confirmed that most technical points were revised adequately. However, I have still a small concern about your response to the specific comment #1 by referee #1 saying that "the scientific question is not clear". Your response focused on technical points about root water uptake and did clarify what is the scientific question. So, I recommend giving a clear scientific question of this study by revising sentences at around Line 63 of the manuscript; for example, "We need a mechanistic understanding on the ecohydrological process, especially soil water movement in different layers and its connection with root water uptake (RWU) and photosynthesis. Therefore, we applied ...". This amendment would explain the scientific significance of this study which the referee #1 felt some weakness.

**Response:** We made the amendment at Line 63 – Line 67 according to your suggestion. Additionally, we concluded three key research questions at Line 73 – Line 77 to clarify the scientific significance of this study.

Thanks a lot for your consideration! We look forward to the insightful feedback and discussions on our revised manuscript.

Yours sincerely,

Enting Tang, on behalf of Zhongbo Su, Yijian Zeng, Lingtong Du