

## **Author Response**

### **Reviewer #3:**

**I think now the section about the 2m heights is perhaps over-explained (end of Section 2.5). Is it possible to more concisely state the problem – that 2 meters may lie within the canopy for WRF-ACASA, although it never does for WRF-NOAH, and the measurements may be made at different heights and likely not within the canopy – is this an accurate summary of the issue?**

The section has made more concise according to reviewer's suggestion.

**A minor comment on the Abstract: the second sentence is confusing, it might be better to reword: "... the land surface schemes available in WRF (such as the popular NOAH model) are simple and lack the capability to simulate carbon dioxide."**

The abstract is modified according to reviewer's suggestion.

**Line 473: Remove "very" from "WRF-NOAH is very slightly better"**

The sentence is modified.

**There are a few typos and grammatical errors throughout so I recommend additional proofreading and editing by the authors.**

Extra effort is made in improving the level of English in the entire paper.