

## **Referee #1**

### General comments

I applaud the authors' hard work to include all reviewers' remarks. I am satisfied that the authors have adequately addressed my comments, especially by expanding the introduction with more examples and caveating the ESA-CCI SM product.

*We would like to thank the referee again for the time and effort to read our review response and the revised manuscript. We greatly appreciate the recognition of our hard work.*

### Minor considerations

1.1 Maybe adding "...totalling a depth of 289cm." to L113 would make it even clearer.

*We will include this sentence to clarify the soil layer depths of the model.*

1.2 I think my confusion around Fig 2 came from forgetting that low vegetation and high vegetation were treated separately, so low vegetation could not replace high vegetation and vice versa. I appreciate the addition of the brackets, but perhaps two separate panels would be more apparent or a reminder in the caption.

*We will include a reminder in the caption of Fig. 2 to clarify that high and low vegetation are treated separately in the model.*

## **Referee #2**

I'm happy to see the revised manuscript that addressed my previous comments. I feel that it is much improved and therefore I do not require further improvements.

*We would like to thank the referee again for the time and effort to read our review response and the revised manuscript. We greatly appreciate the recognition of our hard work.*