

Reviewer Comments of Revised Manuscript

Summary

Thank you to the authors for taking the time to respond to the detailed comments. The responses provided have helped clarify some of the complexities of this work. The additions in the text have made following the manuscript much easier, in particular Section 3.1.3, in referencing the associated plots. This piece of work will be part of moving the science of OCS modelling forward. It was a pleasure to have reviewed this article.

Technical Comments

Line 110: “This enables to simulate trace gases...” -> “This enables the simulation of trace gases....”

Line 114: Could a reference be provided for the force–restore model or it’s general methodology, unless this is a common technique. (I am not an experienced soil modeller).

Line 552: change “Supplement” to “supplementary material” to match Line 256. Personally, I would just remove supplementary material/Supplement and just leave Sect. S1.8, the S is the differentiator with sections in the main manuscript.

Line 572: I believe the correct reference form would be: (derived in Kooijmans et al., 2019) – perhaps a point for the Editor or typesetter.