Reply to Anonymous Referee #3

We thank the reviewer for the overall positive assessment of the experimental set-up and its description, and his/her recommendation to have the paper published in GMD.

- *Data volume estimates for the requested ESM model output are currently missing and it is recommended to add the information for instance in table 1. This is easy to compute if the cost of 1-year of output (mandatory/extra) is made available. The information can be very helpful to plan storage of the output and runs throughput.*

  Although this is a valuable comment, we cross-checked a few other CMIP6 papers in GMD, and none of them provide these estimates. I understand the CMIP coordination panel is preparing a paper describing the planned data exchange and storage, and I would expect that document to act as a reference for resource planning by the modelling groups.

- *Links to other projects such as the PRIMAVERA-H2020 https://www.primaverah2020.eu or CRESCENDO-H2020 is also worth mentioning.*

  These projects are well known to us. We did make cross-references to a number of earlier experiments, but chose to confine ourselves to those experiments that have a direct relation with the LS3MIP protocol and analyses. We are aware that projects like CRESCENDO (and also others) will be used to carry out the simulations and analyses mentioned in LS3MIP (and other MIPs)

- *There is no mention to the reproducibility of the results and whether the data repository will facilitate for instance re-run the Land experiment series with another model at a later stage.*

  We don't have a lot of experience with reproducibility, but generally outcomes are pretty sensitive to computer platforms, initialization, subtle configuration settings etc that make direct reproducibility limited. Later participation to the experiment by other modelling groups is encouraged and facilitated by the infrastructure. A comment on this is added in the "Data Availability" section: "`This infrastructure makes it possible to carry out the experiments in a distributed matter, and to allow later participation of additional modelling groups.`"