

Reply to referees and editors

After submitting the authors' comments to the referees and while revising the manuscript accordingly, we had to slightly modify the actions we originally proposed for some of the points that were raised by the reviewers. Below we provide the reasons for this and the updated actions.

Furthermore, during the process of creating the timeline (as requested by the peer-review), we realized that at the time of the handing over the leadership role of the paper, one co-author (Lukas Gudmundsson) was inadvertently missed off the author list owing to a clerical error. He provided important insights at both paper writing workshops in Frankfurt and also during the early iterations of the manuscript. Hence, he is now added as a co-author and he has contributed to the revised version of the manuscript.

RC1 suggested to better represent the process that led to the diagram representation, mainly as a resource for other communities with similar efforts. We agreed to describe this process with a timeline that shows the milestones, meetings, interactions with the graphics designer, stakeholder interactions, review rounds of drafts and brief summaries of each interaction round and the manuscript. Furthermore, we proposed to provide some of the diagram drafts and elaborate on difficulties that arise with such a large group (e.g., metrics like number of groups per model involved, when people change groups or positions or leave academia). During the process of revisiting the notes and emails, we realized that it is impossible to fulfill all these items in a satisfactory and overall condensed way. For example, it is not realistic to provide a number of people involved over time per modelling group, or who changed institution, e.g., some people changed to another modelling group, some to another institution but kept responsibility for the model. We feel that the effort to recap all this in retrospective is complicated and very time consuming, therefore we cannot fulfil this. Furthermore, it was unrealistic to provide a summary of each interaction round as the interactions itself are very diverse (e.g., on conferences, with the core writing team, with individual modellers, with the graphics designer, on workshops etc.). To provide results for all of these interactions, we would need to deep dive into the content of around 1,500 emails that have been exchanged over several years and this would be a research project by itself. We did, however, screen the emails and notes and generated a timeline with the most important milestones/actions per year, alongside the events (conferences/workshops) where the content was discussed. We also include in the supplementary materials a series of figures that show the evolution of the diagram over several stages. We believe that both the timeline and the development of the diagrams via the different stages help to enrich the paper and will assist other communities to understand the whole process we engaged in.