

Response to editor and reviewers

Dear Reviewer 1,

I thank you greatly for your constructive review of the “This is FRIDA” manuscript, and have done my best to respond to your comments. I will address each one in the following.

- 1) Authorship. **I have added info briefly in the abstract. This in addition to the statement in the acknowledgements. The alternative was to include 35 co-authors, which seemed an overkill for such a light paper (but It can obviously be done if that is preferable).**
- 2) informal language. **I have removed the “do remember”-statements, and other informal statements that I found going through the manuscript.**
- 3) line 56: **fixed**
- 4) lines 59-60: **sentence removed.**
- 5) lines 51-54: **fixed**
- 6) Credibility of projections.
 - a) comparison of projections. **done**
 - b) data input. **done**
 - c) how many equations developed by team vs pulled from literature? **the exact number not easy to determine, but I have added much information to exemplify what we’ve done.**
 - d) are the parameterizations designed with reference to existing projections from other models? **no**
- 7) show some comparisons somewhere (figure 7 can’t be read). If done in subsequent papers then no issue. **I’ve removed figure 7 (in fact, I’ve only kept two figures) but added a section on comparisons and many references to where the information can be found.**
- 8) endogenous vs external. Make discussion. **done, see in particular the final section.**

In addition I edited the manuscript wrt to comments from the second reviewer and updated the paper slightly based on new submissions to GMD after the first submission of this manuscript.

Dear Reviewer 2,

I thank you greatly for your constructive review of the “This is FRIDA” manuscript, and have done my best to respond to your comments. I will address each one in the following.

- 1) Structure of paper: **I do agree that the structure can be improved in order to clarify the messages, and I am grateful for you proposed order, which I have followed, except for a couple of places:**
 - a) I cannot present “running the model” together with “calibration and validation” - the latter is a specific process, which - although it includes running the model - is must be done before one can run the model for analysis and experimentation. I hope that makes sense,

- b) Since the FRIDA collection in GMD has progressed greatly since the submission of this introductory paper, I have chosen to make references to the individual module documentations instead of describing each module.
- 2) Combine sections 8 and 9. **Done.**
- 3) Mention each of the papers in the the collection. **I have made these references much more systematically.**
- 4) On the detailed comments:
 - a) reference to “already observed dangerous climate change impacts: **done**
 - b) calibration and uncertainty: **I have added a section to explain these work processes, and made the reference to the Schoenberg et al paper more visible. I decided not to dwell on the validation process because it is more straight-forward and fully explained in the Schoenberg paper. Hope this makes sense.**

In addition I edited the manuscript wrt to comments from the first reviewer and updated the paper slightly based on new submissions to GMD after the first submission of this manuscript.