

Dear editorial team,

Based on the reviews by the anonymous reviewers we adjusted our manuscript.

- Figure 1 and 2 were moved to the appendix and only selected panels are shown in the main text
- The figure captions were improved
- The abstract was reworked
- We expanded the setup as well as the discussion about tuning process and potential deficiencies of BESSI upon tuning to transient data
- All figures had the unit changed for the SMB from kgm^{-2} to $\text{kgm}^{-2}\text{y}^{-1}$
- We added a short section about the temporal continuity at the year break
- We implemented all other suggested changes by the reviewers

All the changes are directly visible in the markup file provided.

Best regards
Tobias Zolles