**Responds to Editor Frederiek Sperna Weiland decision for
"Technical note: Surface fields for global environmental modelling" by Choulga et al.**

Dear Editor,

Publish subject to minor revisions (review by editor)
The structure of the Technical Note has been substantially improved - please consider the (minor) review comments and finalize the manuscript for publication.
Thank you for kindly reviewing our updated manuscript and providing useful comments to improve the manuscript further.

Additional private note (visible to authors and reviewers only):
This manuscript provides a detailed description of a surface data set that may be of interest to a wide community of modelers. The manuscript has been considerably improved since its first version. Its structure is now clearer, the description of data sources having been partly transferred to an appendix.
Thank you for acknowledging our hard work.

It is still a long document, with lengthy descriptions, but as a technical note it can help the data user understand how specific variables have been selected and merged. Nevertheless, efforts still need to be made to make the document shorter and easier to read.
- Some of the information on reference data is duplicated: the information is available not only in the reference data section, but also in the appendix. The reference data section (X.2) should be very short (see for example point 8.2, which is very long). **We have removed any description of the reference data from the main text, only names of the reference data and link to the Appendix 1 are left.**
- Very long sentences and long lists should also be avoided (some are listed below). Many sentences could be cut into several short ones. **We have shortened long sentences or cut them in two-three shorter ones all over the text. We also tried to make text easier to read.**
- The document should be proof-read carefully to remove many typos (see some listed below). **We have re-read the manuscript and traced down some typos.**

Detailed comments:
- Lines 44 to 52: only one sentence…
- Lines 100-103: the sentence is not clear. Rephrase.
- Line 110: is A 'mask'
- Line 113: … model, IT IS a source…
- Line 145: LDD ??
- Line 150: Note THAT Figure 1
- Lines 181 to 184: long sentence. Rephrase.
- Line 188 (and the same sentence at several location): (nameS … correspond…)
- Lines 201 to 209: shorten, as already in appendix… Same for all similar sections.
- Line 219 (and at several occasions in the text): each field correspondS
- Line 242: Application of … includes…
- Line 283: each followS…
- Line 302: other land coverS… - **other land is one of the fraction type, like forest, and inland water; no S was added**
- Line 313-315: With high… missing verb in the sentence.
- Line 338: Alternative use… includeS…
- Line 407: different forest typeS…
- Line 421: soil / water retention
- Line 426: referring TO physical…
- Line 445: an output of special prediction? What do you mean?
- Lines 444 to 454: only one sentence!
- Line 451: 'reference source not found'?
- Line 513: CEMS Surface field: highlighted in green?
- Lines 683 and following. Shorten the conclusion. Why providing details in the conclusion (such as very local remarks at Line 737).
- Lines 757 to 766: only one long sentence!
All suggestions and comments were implemented by the authors. We really hope that now manuscript can be easier digested by the users and would provide help in understanding surface fields.