

Zurich, 3.2.2020

Dear Dr. Kala ,

Many thanks for handling the second round of revisions of our paper (gmd-2019-200 P-model v1.0: *An optimality-based light use efficiency model for simulating ecosystem gross primary production*).

I revised the code availability statement, now explicitly stating the version numbers and providing update references to Zenodo repositories (note that the citations '*Stocker [year]*' in brackets refers to respective Zenodo entries with their DOI given in the bibliography). I hope it's clear now that the *rpmode* R package does implement all equations described in the paper, but for running the simulations, we used a Fortran version that implements the very same equations and gives identical results (as we have tested).

I have uploaded an updated PDF of the manuscript with the revised code availability statement here on the GMD MS overview. The revised text reads:

The P-model is implemented as an R package (rpmode) and available through CRAN and Zenodo (Stocker, 2019a). Results shown here correspond to rpmode version v1.0.4. A documentation of the R package is available under <https://stineb.github.io/rpmode/>. Both site-scale and global simulations shown here are done with the Fortran implementation of the P-model within the SOFUN modelling framework (version v1.2.0), available on Zenodo (Stocker, 2019b). Site-scale forcing data ingest and filtering, model calibration, and evaluation was done using the R package rsofun (version v1.0.wrap_sofun), available on Zenodo (Stocker, 2020b). Scripts that implement the workflow (repository eval_pmodel version v2) are available on Zenodo (Stocker, 2020a). Model outputs are available on Zenodo (Stocker, 2019c).

I have also corrected a wrong description that came to our attention in the meantime on l. 186, replacing

"Here θ is the plant-available soil water, expressed as a fraction of field capacity"

with

"Here θ is the plant-available soil water, expressed as a fraction of available water holding capacity"

With kind regards and many thanks for your work as editor.

Sincerely, in the name of all co-authors,



Beni Stocker