

Geosci. Model Dev. Discuss., author comment AC1 https://doi.org/10.5194/gmd-2021-375-AC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

## Comment on gmd-2021-375

Zhiqiang Liu et al.

Author comment on "Improving the joint estimation of  $CO_2$  and surface carbon fluxes using a constrained ensemble Kalman filter in COLA (v1.0)" by Zhiqiang Liu et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-375-AC1, 2021

Dear Editor,

Thanks for the notification! The core of this paper is the CEnKF method. We have uploaded it to zenodo (https://doi.org/10.5281/zenodo.5746140).

The LETKF code belongs to Takemasa (https://github.com/takemasamiyoshi/letkf) and we have no right to publish it to zenodo. The system uses the 4D version of LETKF (line 123).

The GEOS-Chem version is 13.0.2 (https://doi.org/10.5281/zenodo.4681204).

We will add the above information to the revised manuscripts.

Sincerely, Zhiqiang