

Geosci. Model Dev. Discuss., author comment AC1  
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## Reply on CEC1

Sudhanshu Pandey et al.

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Author comment on "Order of magnitude wall time improvement of variational methane inversions by physical parallelization: a demonstration using TM5-4DVAR" by Sudhanshu Pandey et al., Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2021-339-AC1>, 2022

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Dear Editor,

We have put the TM5-4DVAR-PP code developed in this study as well as the input data used in the simulations (surface observations, initial mole fraction fields) on Zenodo:

*"Data Availability.* NOAA ESRL methane observations used in this study are available on Zenodo in the input folder of the TM5-4DVAR-PP code (<https://doi.org/10.5281/zenodo.6326373>, Pandey et al., 2022).

*Code availability.* The TM5-4DVAR-PP version 1.0-beta-1 code used in this study for the simulations can be downloaded from Zenodo (<https://doi.org/10.5281/zenodo.6326373>, Pandey et al., 2022). The TM5 model is described in detail on <http://tm5.sourceforge.net/>.  
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