

Geosci. Model Dev. Discuss., author comment AC1  
<https://doi.org/10.5194/gmd-2021-258-AC1>, 2022  
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## **The modified model code and the relevant data of gmd-2021-258**

Chengyong Wu et al.

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Author comment on "Improved CASA model based on satellite remote sensing data: simulating net primary productivity of Qinghai Lake basin alpine grassland" by Chengyong Wu et al., Geosci. Model Dev. Discuss., <https://doi.org/10.5194/gmd-2021-258-AC1>, 2022

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Dear Juan A. Añel,

Happy International Workers' Day!

We are very grateful to your comments for the preprint. According to your advice, we have modified our code and provided the relevant data in supplement. Some of your questions were answered as below.

(1) We have modified our code and formed an integrated structure, including an instruction ("how to run CASA model code .PDF" file) about how to run code.

(2) We have provided all data to drive remote sensing data driven CASA model. These data were put in the Inputdata folder which contains the subfolder of LUCC (Land-use and Land-cover change), MOD08\_M3, MOD09A1, MOD13Q1, MOD11A2, the files of DEM.tif and study\_area.shp. The subfolder of MOD08\_M3, MOD09A1, MOD13Q1 and MOD11A2 contain the files of cloud cover, band6, band7, NDVI, land surface temperature, which extracted from the dataset of MOD08\_M3, MOD09A1, MOD13Q1 and MOD11A2 product.

In addition, the dataset of MOD08\_M3, MOD09A1, MOD13Q1 and MOD11A2 product consist of several sub datasets, which are too large (its size is about 1.85 GB) to be include in supplement for unloading, so we also provide codes to extract the sub datasets of cloud cover, band6, band7, land surface temperature and NDVI from these dataset.

(3) We also have provided solar radiation data, meteorological data and its derived data for calculating NPP with Multi source data driven CASA. These data are contained in the folder of Multi\_source\_data\_driven\_CASA.

In case any advice give, please do not hesitate to contact me.

Best regards,

Chengyong Wu

Please also note the supplement to this comment:

<https://gmd.copernicus.org/preprints/gmd-2021-258/gmd-2021-258-AC1-supplement.zip>