

Response to the Chief Editor Comments for the Manuscript
gmd-2021-333

**“Optimization of Snow-Related Parameters in Noah Land
Surface Model (v3.4.1) Using Micro-Genetic Algorithm
(v1.7a)”**

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We have revised the Code and Data Availability section following your sugges-
tion as below:

code availability The current version of the Noah LSM is available from the web-
site: <https://ral.ucar.edu/solutions/products/unified-noah-lsm> (last
access: 12 January 2022). The current version of the GA is available from the
website: [https://cuaerospace.com/products-services/genetic-algorithm/
ga-drive-free-download](https://cuaerospace.com/products-services/genetic-algorithm/ga-drive-free-download) (last access: 12 January 2022). The exact version
of Noah LSM and GA used in this study are archived at: [https://doi.org/
10.5281/zenodo.5777821](https://doi.org/10.5281/zenodo.5777821) (Lim et al., 2021). It also contains the forcing data
and output files of Noah LSM and micro-GA-Noah LSM coupled system and
the scripts to plot the same figures as in this manuscript.

data availability The 1-hourly forcing data for Noah LSM are obtained from
Open MET Data Portal, which is available at <https://data.kma.go.kr> (last
access: 12 January 2022) and ERA5-Land, which is available at [https://cds.
climate.copernicus.eu](https://cds.climate.copernicus.eu) (last access: 12 January 2022). The snow depth is
also obtained from Open MET Data Portal. The daily fractional snow cover
and snow albedo from MODIS/Terra Snow Cover Daily L3 Global 500 m SIN
Grid, Version 61, is available at <https://nsidc.org/data/MOD10A1> (last ac-
cess: 12 January 2022).

References

Lim, S., Gim, H.-J., Lee, E., Lee, S.-Y., Lee, W. Y., Lee, Y. H., Cassardo, C.,
and Park, S. K.: Code and Data: Optimization of Snow-Related Parameters
in Noah Land SurfaceModel (v3.4.1) UsingMicro-Genetic Algorithm (v1.7a),
<https://doi.org/10.5281/zenodo.5777821>, 2021.