Code and data availability

ERA5 forcing data to run the ELM model can be downloaded from the ECMWF Climate Data Store: https://cds.climate.copernicus.eu/datasets/reanalysis-era5-single-levels?tab=overview. ATS forcings data can be retrieved from Daymet version 4 dataset (Thornton et al., 2020). A description, metadata, files, and Python codes used to describe the results found in this paper are found at https://doi.org/10.5281/zenodo.15809186. The description and codes of E3SM v3.0 (including ELM v3.0) are publicly available at https://doi.org/10.5281/zenodo.15793373. The public repository for the ATS model code and raw data is available at https://doi.org/10.5281/zenodo.15792721.

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