



Supplement of

Enhancing environmental models with a new downscaling method for global radiation in complex terrain

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Supplementary material

This is a supplement file for the article entitled "Enhancing environmental models with a new downscaling method for global radiation in complex terrain" published in *Biogeosciences* by Druel, A., Ruffault, J., Davi, H., Chanzy, A., Marloie, O., De Cáceres, M., Olioso, A., Mouillot, F., François, C., Soudani, K., and Martin-StPaul, N. K. (2024). It contains the Figure S1 showing daily variation of global radiation measured, from ERA5-Land (Muñoz-Sabater et al., 2021) corrected or not data, and the clear-sky and all sky Copernicus Atmosphere Monitoring Service (CAMS) solar radiation time-series data (available on <https://ads.atmosphere.copernicus.eu/stac-browser/collections/cams-solar-radiation-timeseries>, last access the 22/10/2024). For further details of the analysis, see the aforementioned article.

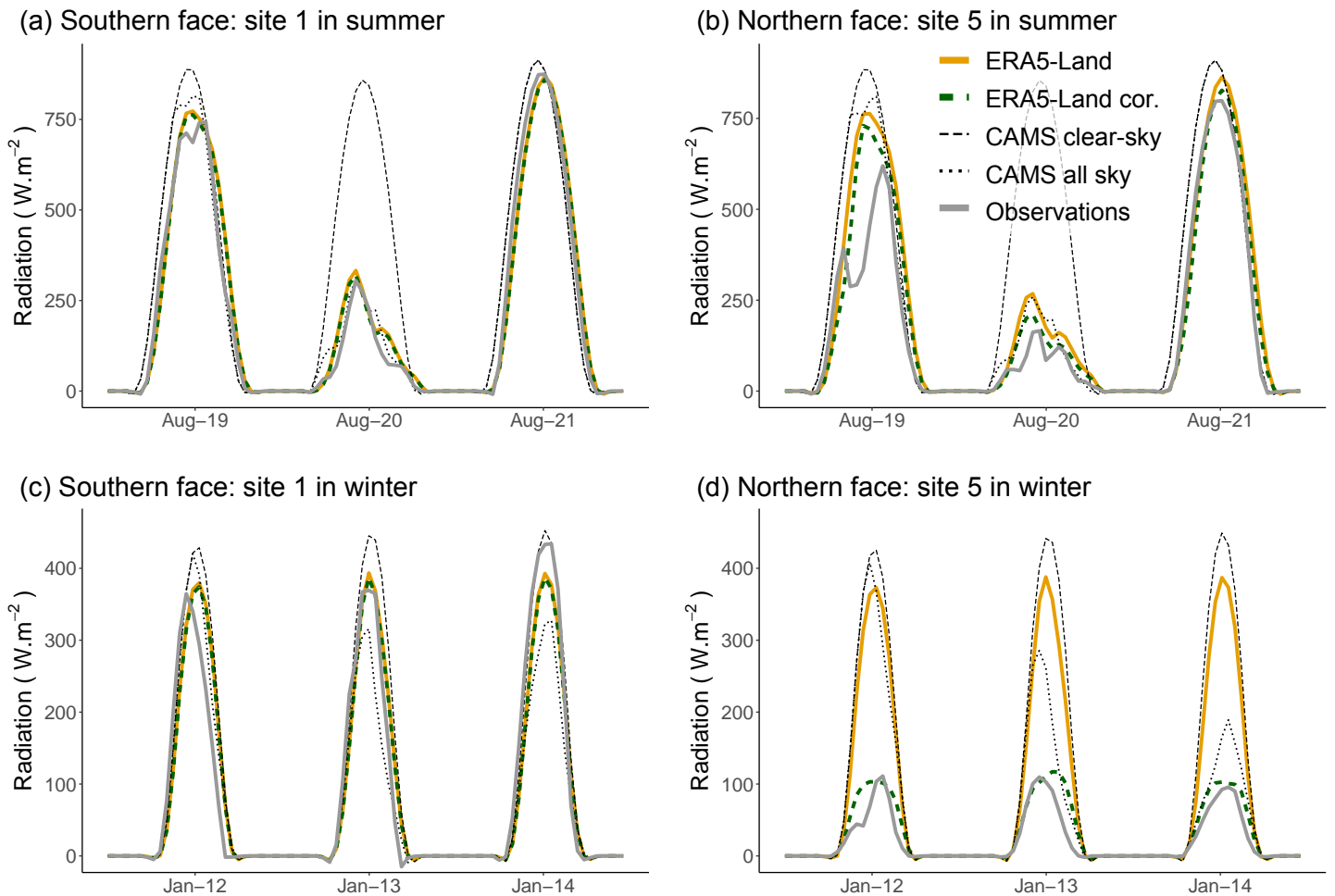


Figure S1: Global radiation of original ERA5-Land data in orange, after downscaling with the SRTM DEM (30 m resolution) in dashed dark green, the clear-sky (thin dashed dark) and all sky, i.e. with cloud- (thin dotted dark) CAMS data, and the observations in grey: for site 1 (a and b, latitude 44.129646° and longitude 5.320524°) and site 5 (c and d, latitude 44.184014° and longitude 5.239161°) and for two different dates: one in summer (19-21 August 2016 in a and c) and one in winter (12-14 January 2017 in b and d).