Supplement of Hydrol. Earth Syst. Sci., 24, 793–807, 2020
https://doi.org/10.5194/hess-24-793-2020-supplement


Hydrology and Earth System Sciences
Open Access
EGU

*Supplement of*

# Terrestrial water loss at night: global relevance from observations and climate models

**Ryan S. Padrón et al.**

*Correspondence to:* Ryan S. Padrón (ryan.padron@env.ethz.ch)

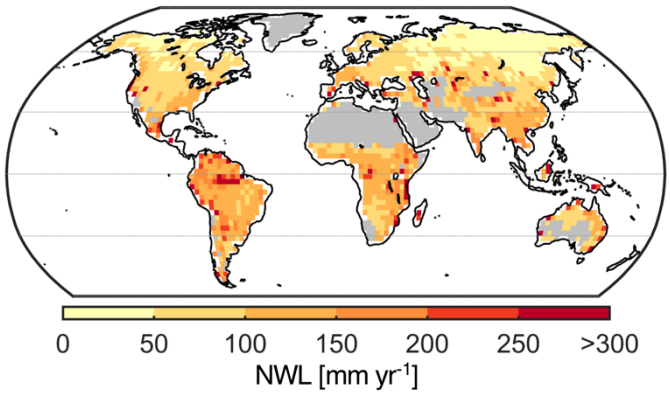


**Figure S1.** NWL map of the central 90 % spread of the climate model ensemble, i.e. the difference between the 95$^{th}$ percentile and the 5$^{th}$ percentile. Desert regions and Greenland are masked.

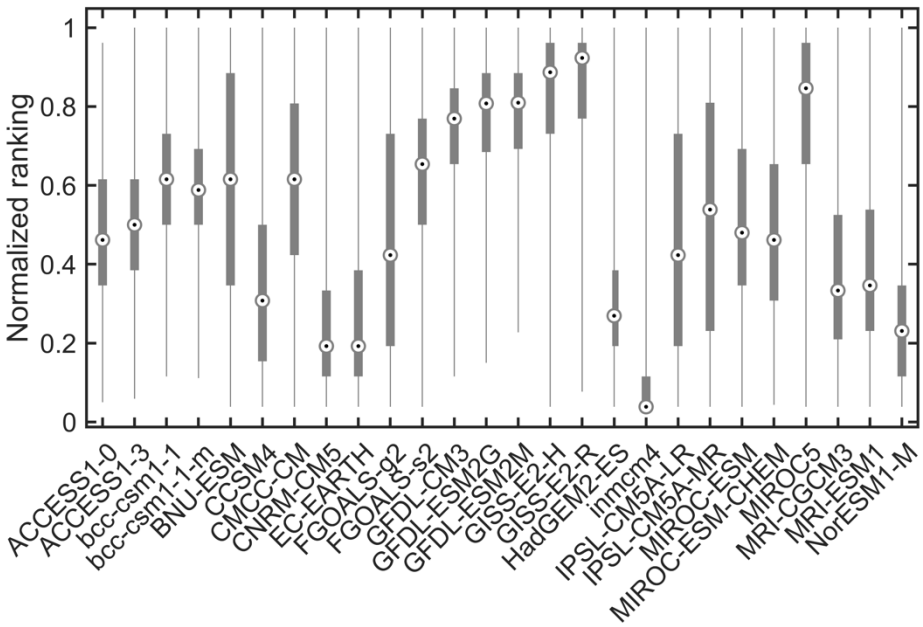


**Figure S2.** Distribution across all grid cells (omitting desert regions and Greenland) of the normalized ranking of each climate model according to simulated NWL. A normalized ranking of 1 corresponds to the model with the highest NWL, while a normalized ranking of 0.5 indicates that a model ranked in position 13 out of the 26 analyzed models.

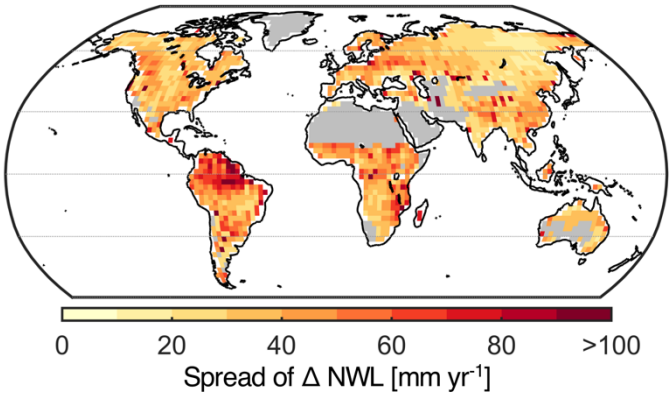


**Figure S3.** Map of the central 90 % spread of the climate model ensemble, i.e. the difference between the 95$^{th}$ percentile and the 5$^{th}$ percentile, for projected changes in NWL between the period 2081–2100 and the period 1976–2005. Desert regions and Greenland are masked.

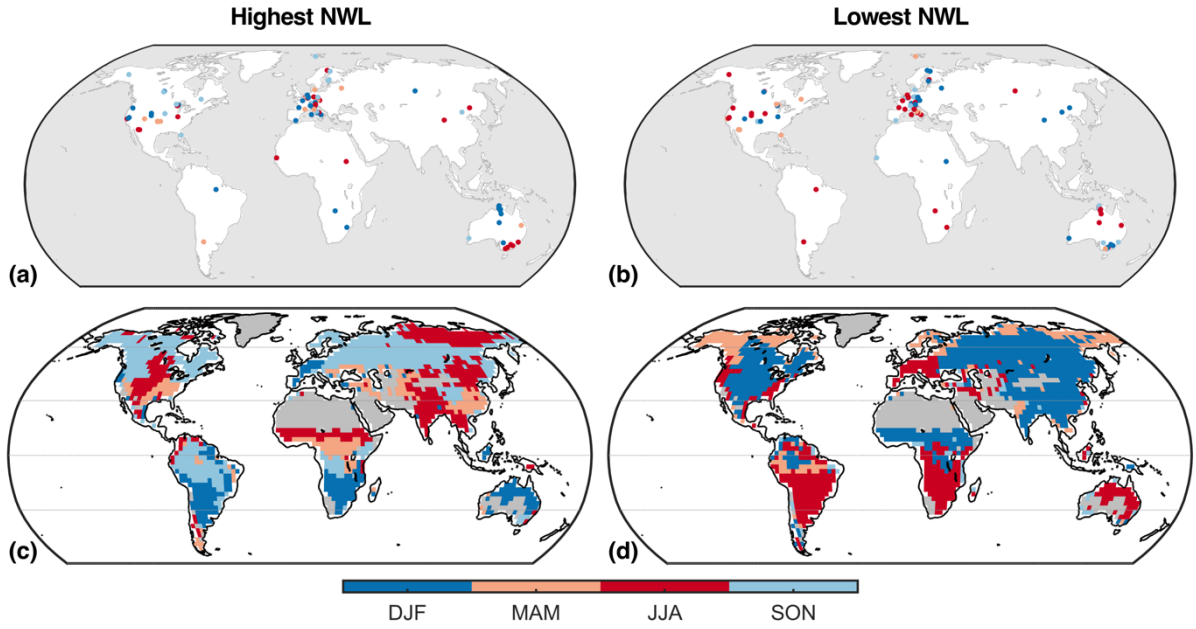


**Figure S4.** Seasons with highest and lowest NWL on average according to EC data from FLUXNET2015 (a, b) and to the multi-model mean of CMIP5 climate models (c, d). The defined seasons are December–February (DJF), March–May (MAM), June–August (JJA), and September–November (SON). Desert regions and Greenland are masked in the multi-model mean maps.