



## Space-borne estimation of the effect of blue water demand on evapotraspiration and surface temperature variability.

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Lakes and rivers constitute important sources of water over land (the blue water). This water is interacting with the atmosphere in a direct and indirect way, e.g. through direct evaporation from river or lake surface and through evapotraspiration of soil moisture (the green water) in regions where irrigation is applied, respectively.

We focus on the latter process. We demonstrate its significance using satellite measurements and we show the effects on evapotraspiration and surface temperature variability in a realistic land surface model simulation.