



## **Space-borne estimation of the effect of blue water demand on evapotranspiration 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 evapotranspiration 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 evapotranspiration and surface temperature variability in a realistic land surface model simulation.