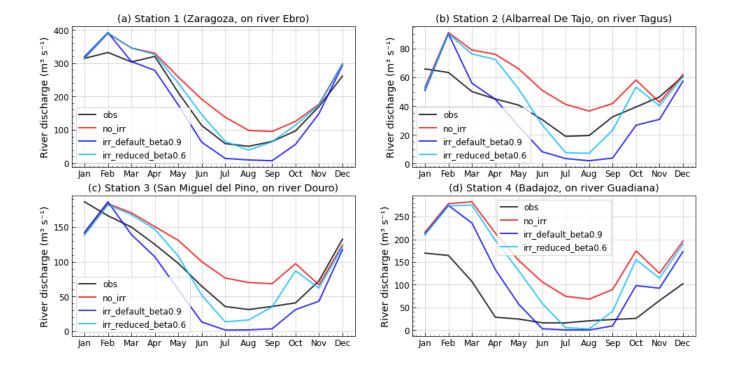
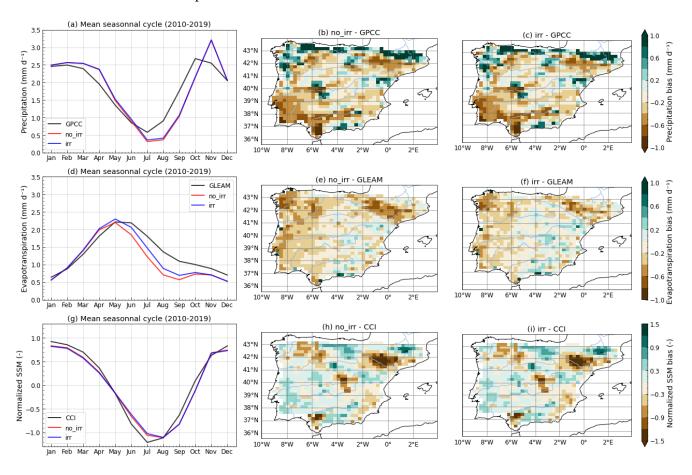
Seasonal cycle of river discharge at four stations in GRDC observations and three ORCHIDEE offline simulations, without irrigation, with the default target (90% of field capacity SM) and with the reduced target used in the article (60% of field capacity SM).

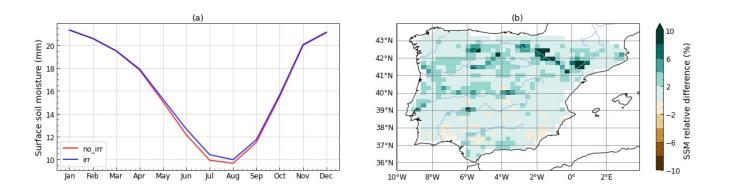
Will be complemented by technical details on the simulations run, and the previous results from Arboleda et al. 2024 discussing the possible values of this parameter.



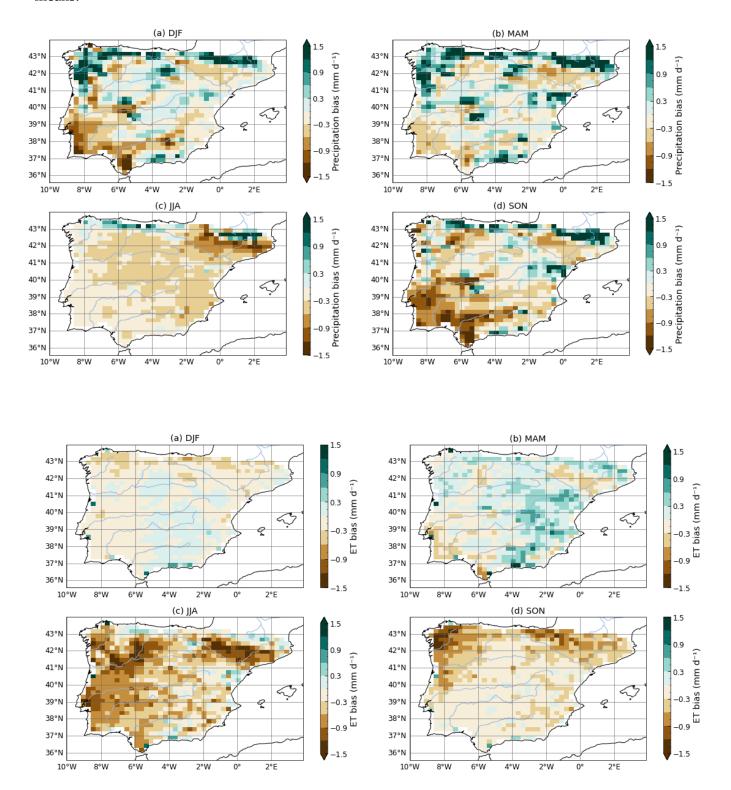
New version of Fig. 6 including an evaluation of normalized surface soil moisture with the ESA CCI COMBINED soil moisture product.

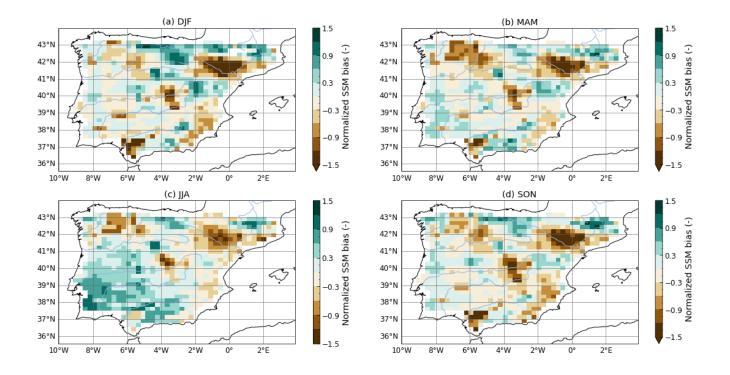


Appendix figure showing changes of surface soil moisture between the *no_irr* and *irr* simulations in absolute value (mm in the first 10cm of soil), to complement of the normalized SSM comparison.



Appendix figures showing seasonal comparisons of the *no_irr* simulation to GPCC (precipitation), GLEAM (ET) and ESA CCI (surface soil moisture). In complement of Fig. 6, which shows annual means.





Appendix figure to show the contribution of snowfall to precipitation. (a) seasonal cycle on average over the Peninsula for rainfall, snowfall, snow melt and total precipitation, and (b) annual mean of the share of snowfall in total precipitation.

