

Supplementary Material

Daily evaporation from 23 irrigated and rainfed crops worldwide from 2000 to 2025

Akash Koppa^{1,*} and Sara Bonetti^{2,*}

¹Department of Geography & Environmental Science, University of Reading, Reading, United Kingdom

²Laboratory of Catchment Hydrology and Geomorphology, School of Architecture, Civil and Environmental Engineering, EPFL Valais Wallis, Sion, Switzerland

*Corresponding author, emails: a.koppa@reading.ac.uk and sara.bonetti@epfl.ch

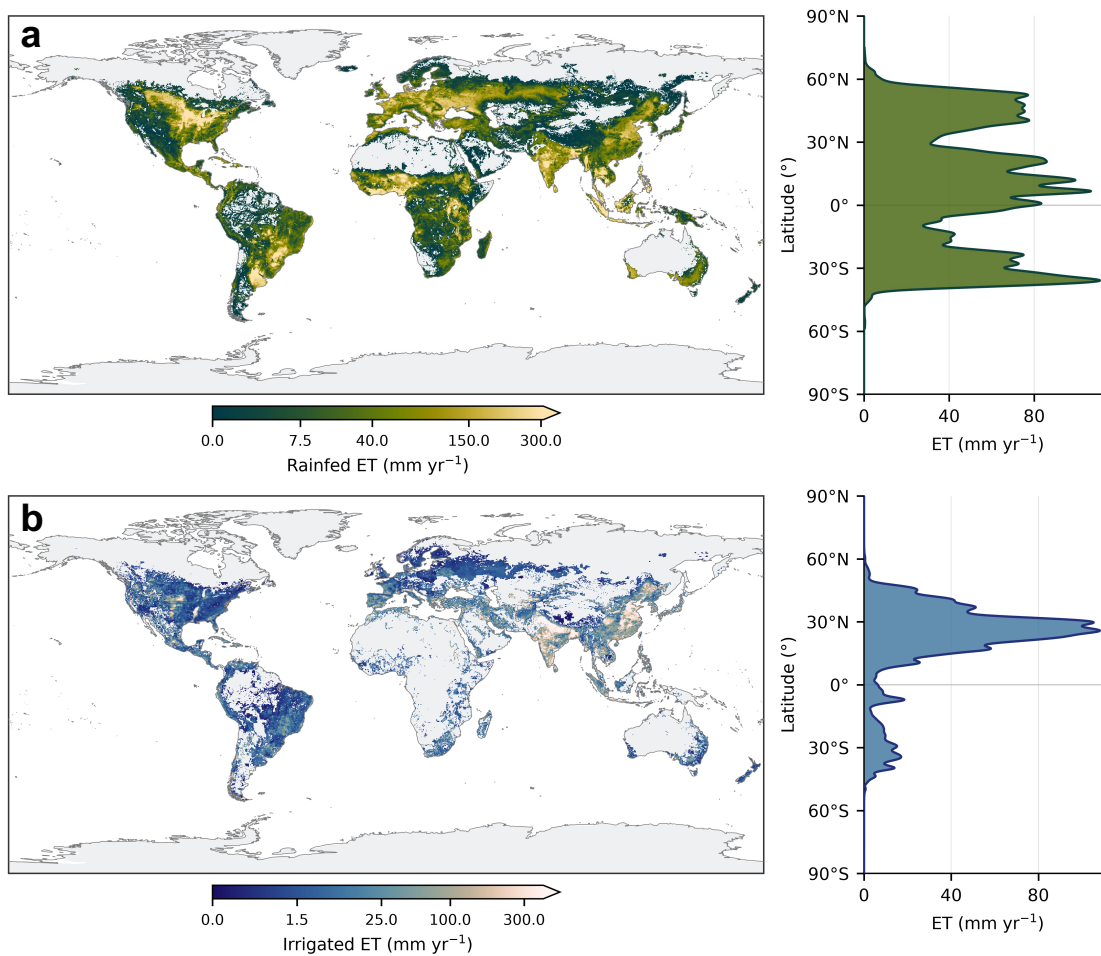


Figure S1: Map of time-averaged annual evaporation from (a) rainfed and (b) irrigated crops, computed over the years 2000–2020. Latitudinal averages are also presented.

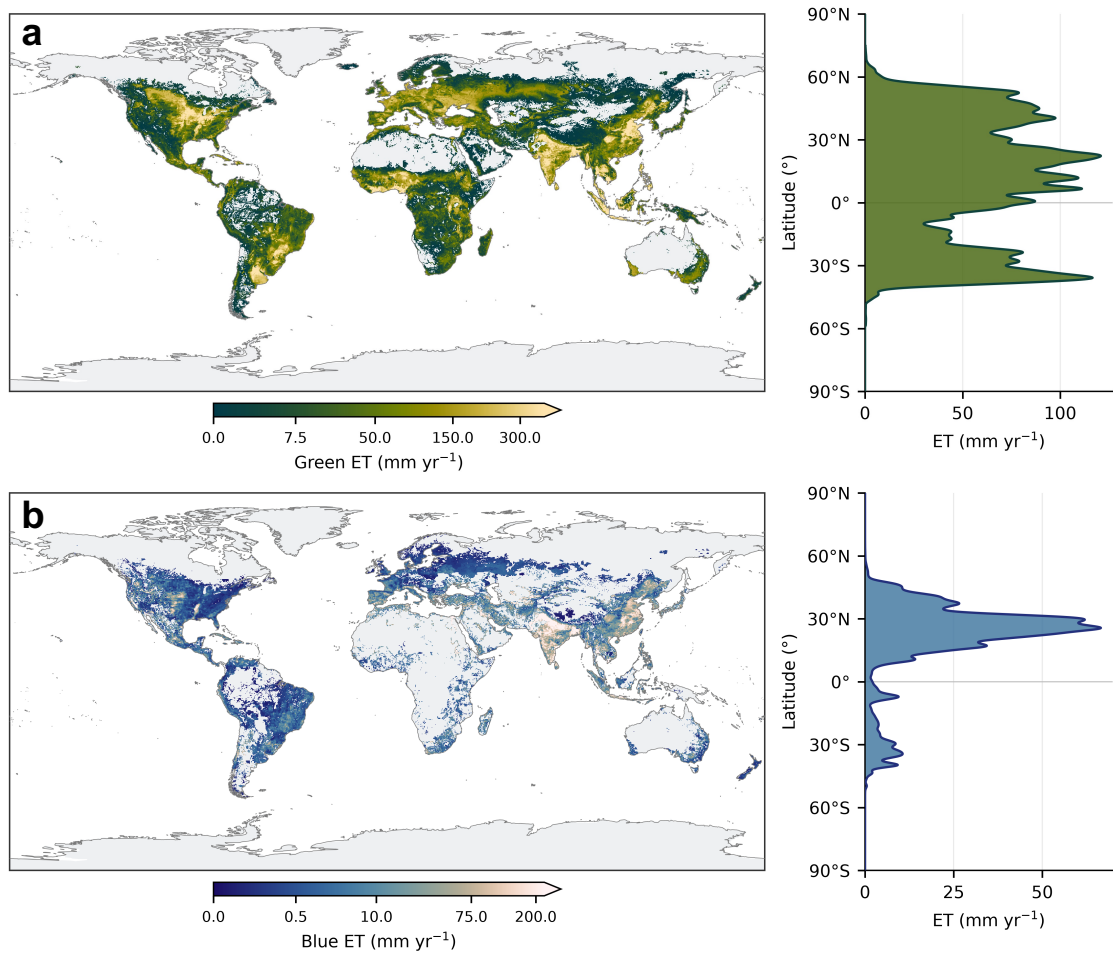


Figure S2: Map of time-averaged annual (a) green and (b) blue evaporation components of total crop evaporation, computed over the years 2000–2020. Latitudinal averages are also presented.

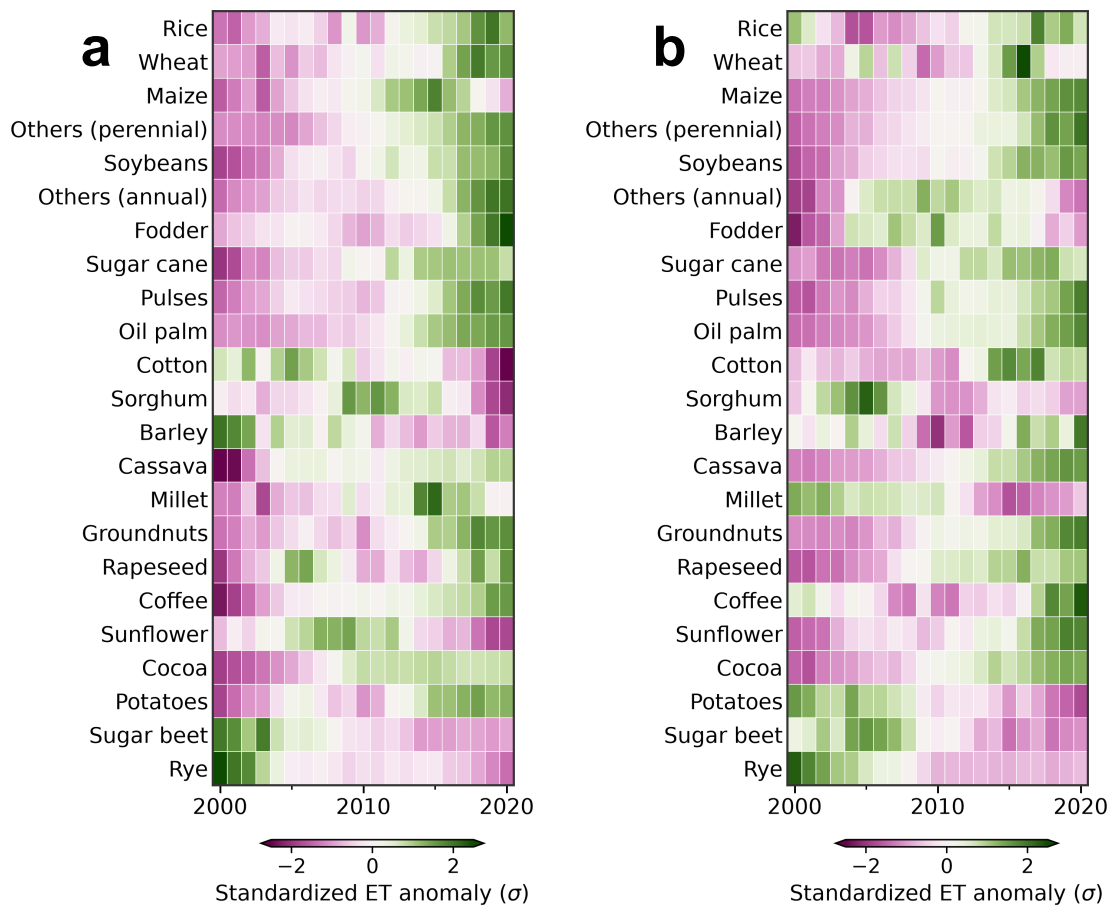


Figure S3: Heat map of globally aggregated standardized (a) rainfed and (b) irrigated crop evaporation anomaly for 23 crop classes and every year between 2000 and 2020.

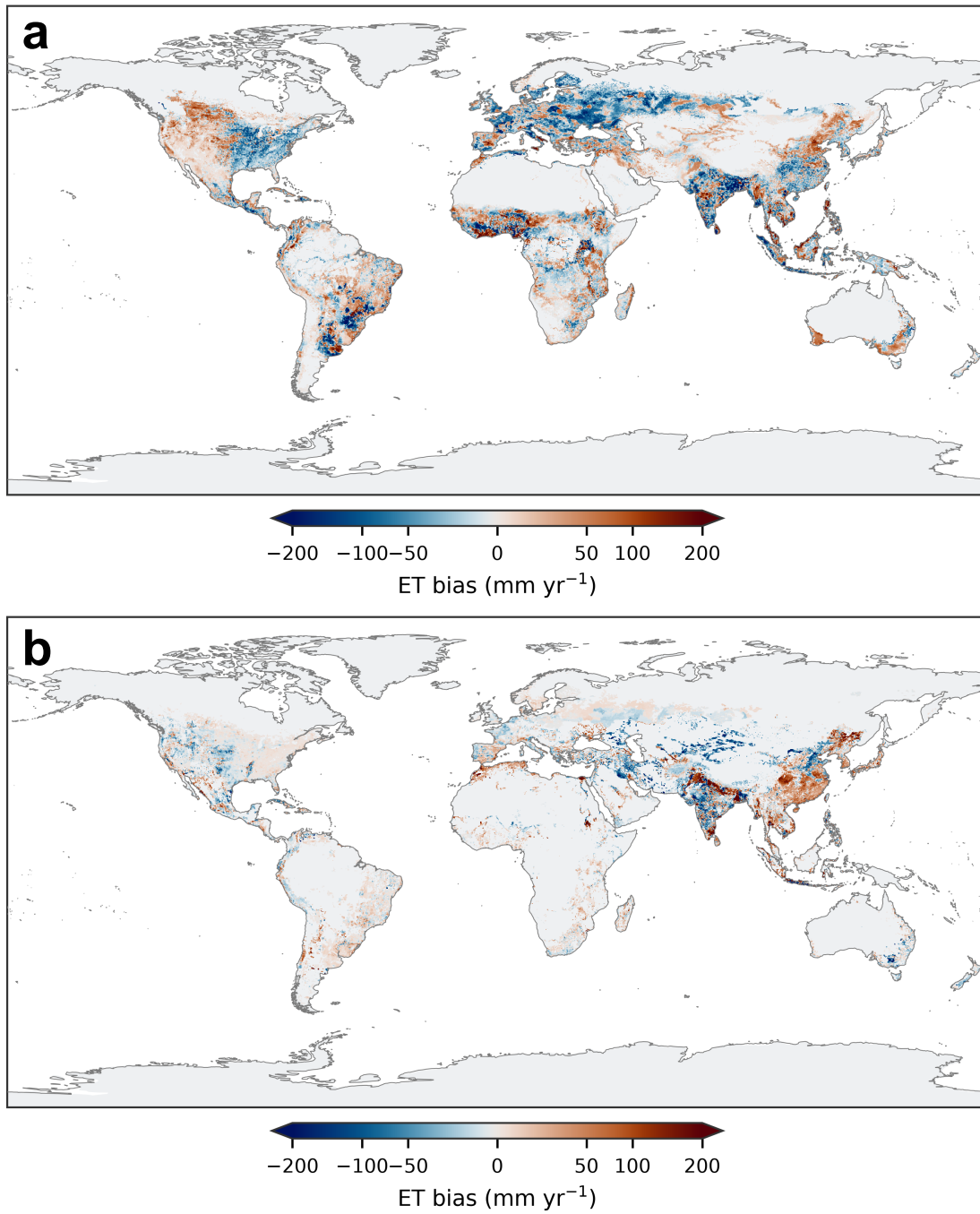


Figure S4: Map of bias in evaporation from (a) rainfed and (b) irrigated crops between CropET and WATNEEDS datasets for the year 2000.

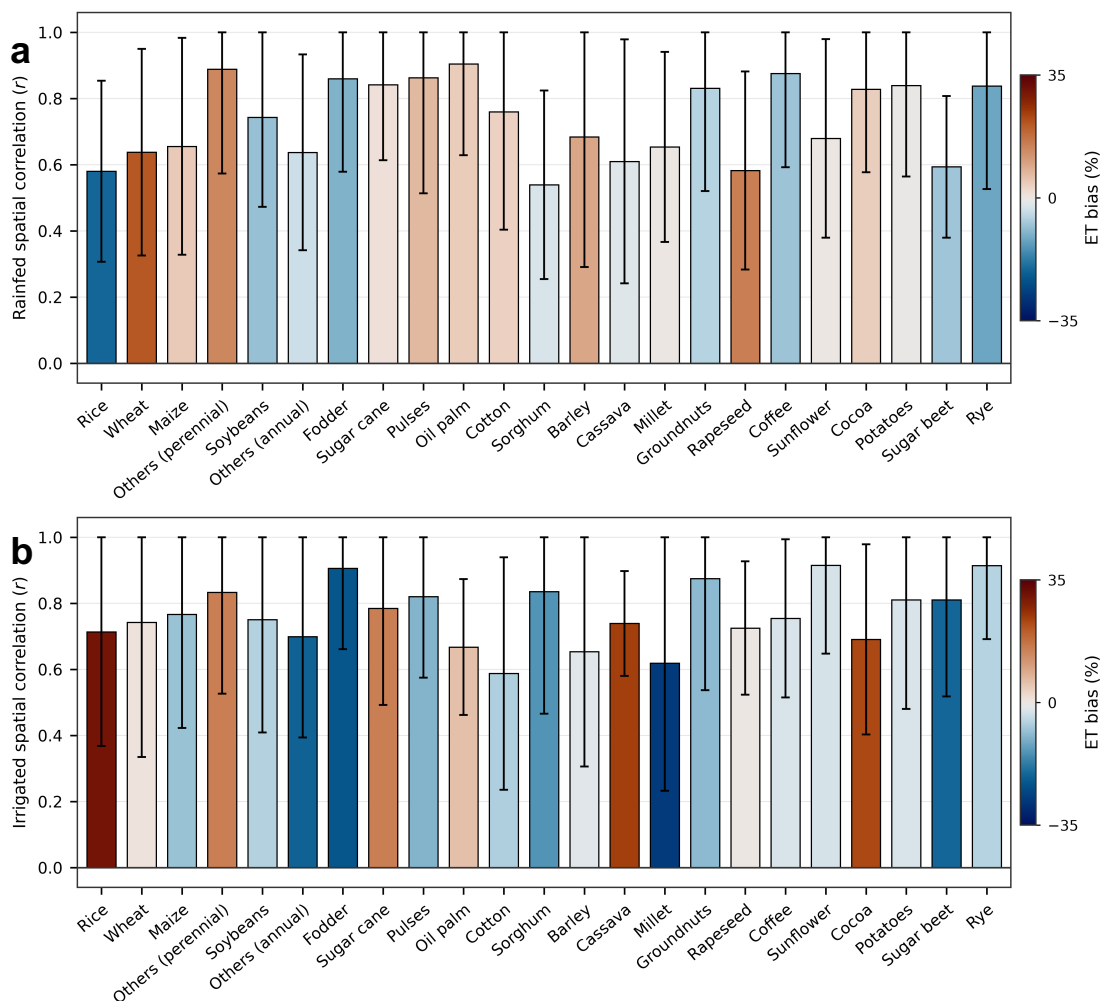


Figure S5: Mean and standard deviation of spatial correlation in evaporation from (a) rainfed and (b) irrigated crops between CropET and WATNEEDS dataset for the year 2000. The colors of the bars show percentage bias between CropET and WATNEEDS dataset for the year 2000.

Table S1: FLUXNET towers with cropland land cover used for validation of the CropET dataset.

Site ID	Station	Lat	Lon	N _{days}	KGE	r	α
β							
BE-Lon ¹	Lonzée	50.55	4.75	4013	0.72	0.79	0.82
0.99							
DE-Geb ²	Gebesee	51.10	10.91	5103	0.78	0.84	0.88
1.08							
DE-Kli ³	Klingenberg	50.89	13.52	3939	0.80	0.83	0.93
1.05							
DE-Seh ⁴	Selhausen	50.87	6.45	1458	0.64	0.72	0.95
0.78							
FI-Jok ⁵	Jokioinen	60.90	23.51	1357	0.77	0.82	0.95
1.14							
FR-Gri ⁶	Grignon	48.84	1.95	4016	0.46	0.73	0.70
0.64							
IT-CA ²⁷	Castel d'Asso 2	42.38	12.03	1461	0.38	0.46	0.79
0.80							
US-ARM ⁸	ARM SGP Lamont	36.61	−97.49	5769	0.56	0.67	0.72
0.92							
US-Bi ²⁹	Bouldin Island	38.11	−121.54	1826	0.39	0.52	0.67
0.82							
US-Twt ¹⁰	Twitchell Island	38.11	−121.65	2191	0.54	0.82	0.64
0.78							

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