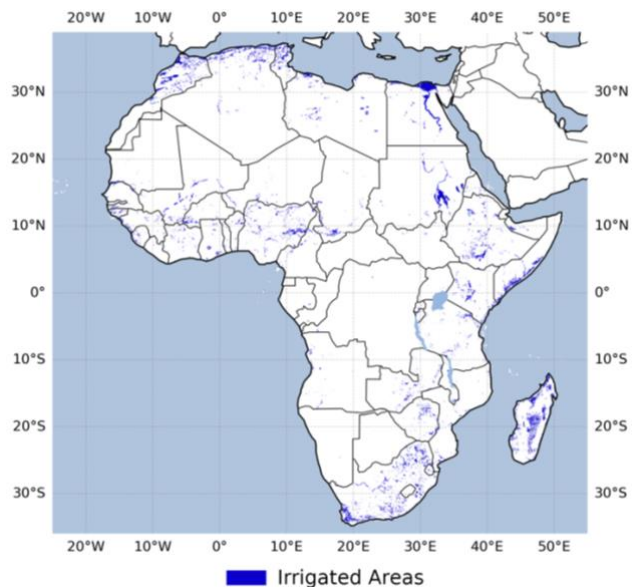


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# Supplement

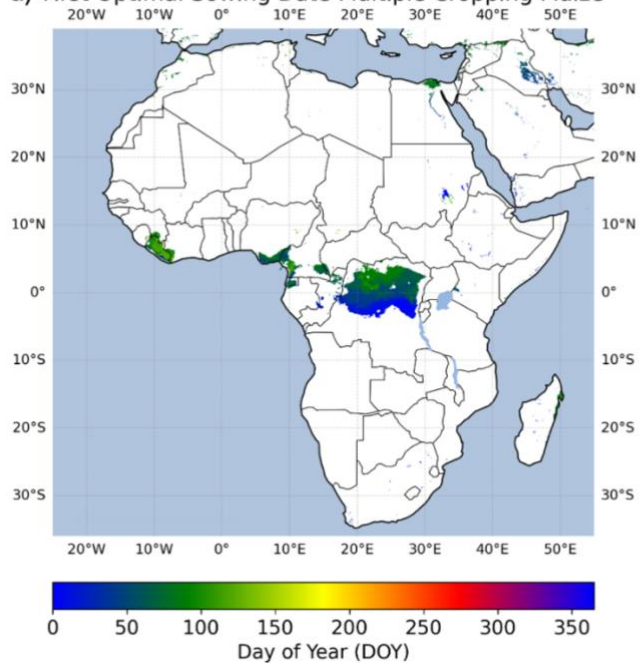


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3 **Figure S1: Irrigated areas for Africa according to Meier et al. (2018).**

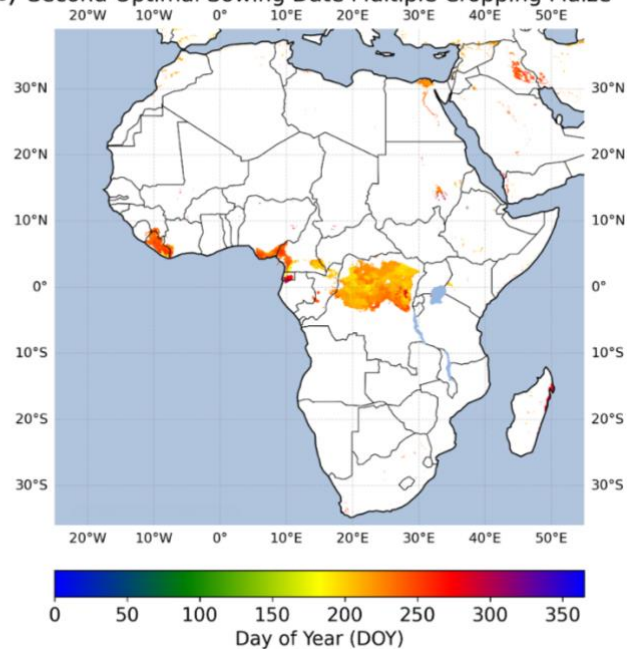
4

a) First Optimal Sowing Date Multiple Cropping Maize

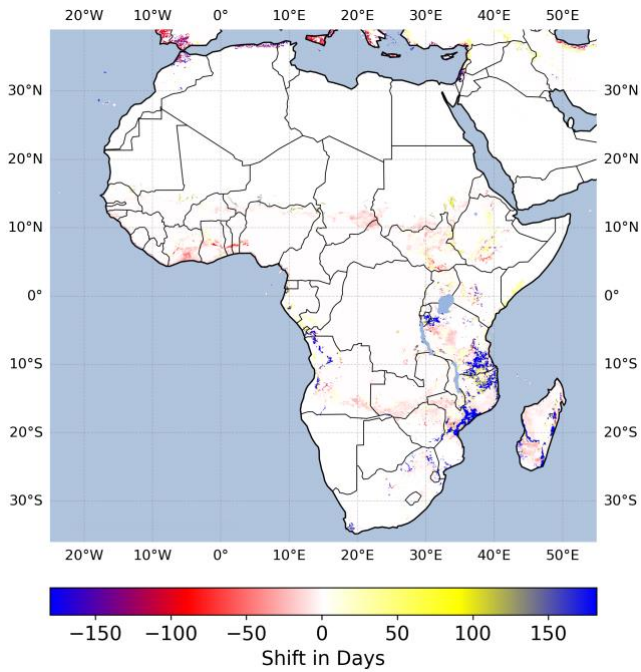


5

b) Second Optimal Sowing Date Multiple Cropping Maize



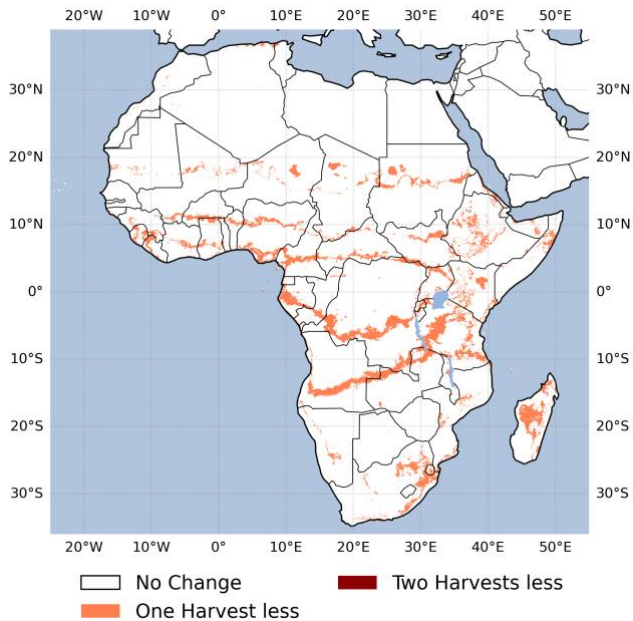
6 **Figure S2: (a) First- and (b) second optimal sowing date under consideration of multiple cropping without soil and terrain**  
7 **limitations for maize.**



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**Figure S3: Impact of the consideration of climate variability on the optimal sowing date for maize under historical climate conditions from 1991 to 2010.** Irrigated areas are considered according to Meier et al. (2018).



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**Figure S4: Impact of the consideration of climate variability on the multiple cropping potential for maize under historical climate conditions from 1991 to 2010.** Irrigated areas are considered according to Meier et al. (2018).

14

**Literature**

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Meier, J., Zabel, F., and Mauser, W.: A global approach to estimate irrigated areas – a comparison between different data and statistics, *Hydrology and Earth System Sciences*, 22, 1119–1133-1119–1133, 2018.

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