

## Supplementary Material

A weather station inside the lysimeter station recorded climatic variables, i.e. net radiation, air temperature, precipitation, relative humidity and wind speed. The study followed Allen et al. (1998) and calculated potential evapotranspiration using the FAO grass reference evapotranspiration. 2017 was the wettest year, with precipitation exceeding annual reference evapotranspiration by 202 mm. In contrast, 2018 had the lowest precipitation (421 mm) and the largest difference between precipitation and reference evapotranspiration (347 mm). In 2012 and 2013, the amount of precipitation and reference evapotranspiration was almost equivalent. The highest average annual temperature was observed in 2019 (+10.3 °C) and 2020 (+10.2 °C), followed by 2018 (+10.1 °C). Annual potential evapotranspiration in these three years was also considerably higher than the long-term average.

**Table S1** Mean annual air temperature, precipitation and FAO grassland reference evapotranspiration in the period from 2011 to 2020.

<b>Year</b>	<b>Annual mean temperature (°C)</b>	<b>Annual sum of precipitation (mm)</b>	<b>FAO grass reference evapotranspiration (mm)</b>
2011	9.5	639	649
2012	8.9	661	626
2013	8.4	528	524
2014	10.0	597	644
2015	9.6	618	656
2016	9.4	599	626
2017	9.5	831	629
2018	10.1	421	768
2019	10.3	548	725
2020	10.2	574	684
Average	9.6	601	653