Figure S1. Climatology of 1991-2021 for volumetric soil moisture at 0-7 cm (column a-g), in m$^3$.m$^{-3}$, and average daily precipitation (column b-h), in mm.day$^{-1}$, for the quarters of September-October-November (SON, line a-b), December-January-February (DJF, line c-d), March-April-May (MAM, line e-f) and June-July-August (JJA, g-h)
Figure S2. Climatology of 1991-2021 for air temperature at 2 meters (column a-j), in °C, and sensible (column b-k) and latent (column c-l) heat fluxes at the surface, in W.m⁻², for the September-October-November (SON, line a-c), December-January-February (DJF, line d-f), March-April-May (MAM, line g-i) and June-July-August (JJA, j-l) quarters.
Figure S3. TCI (W.m$^{-2}$) over the development (SON, column a-g), maturity (DJF, column b-h), and weakening (MAM, column c-i) quarters of the SMAS rainy season for three soil moisture conditions; wet (line a-c), intermediate (line d-f), and dry (line g-i). The hatched area shows statistical significance when the p-value was less than 0.05.
Figure S4. ACI (mm.day$^{-1}$) over the development (SON, column a-g), maturity (DJF, column b-h), and weakening (MAM, column c-i) quarters of the SMAS rainy season for three soil moisture conditions; wet (line a-c), intermediate (line d-f), and dry (line g-i). The hatched area shows statistical significance when the p-value was less than 0.05.
Figure S5. TF (W.m$^{-2}$.mm.day$^{-1}$) over the development (SON, column a-g), maturity (DJF, column b-h), and weakening (MAM, column c-i) quarters of the SMAS rainy season for three soil moisture conditions; wet (line a-c), intermediate (line d-f), and dry (line g-i). The hatched area shows statistical significance when the p-value was less than 0.05.