

List of calculated indicators Birmingham (June 2025)

Type	Indicator	Description	over a			Units	Name of Python function
			month	season	year		
PRECIP	Wet days > 10mm	The number of days with daily precipitation > 10mm	X	X	X	days	wetdays()
PRECIP	Wet days > 30mm	The number of days with daily precipitation > 30mm	X	X	X	days	wetdays()
PRECIP	Consecutive wet days	The longest number of consecutive days with daily precipitation > 1mm	X	X	X	days	cwd()
PRECIP	Consecutive dry days	The longest number of consecutive days with daily precipitation < 1mm	X	X	X	days	cdd()
PRECIP	Total precipitation	Total accumulated precipitation	X	X	X	mm	prcptot()
PRECIP	Maximum daily precipitation	Maximum 1-day total precipitation	X	X	X	mm/day	rx1day()
PRECIP	SPI	Standardized Precipitation Index, additionally calculates the probability of zero	X			1	spl()
TEMP	Max daily Tmax	Maximum of daily maximum temperature	X	X	X	°C	txx()
TEMP	Min daily Tmax	Minimum of daily maximum temperature	X	X	X	°C	txn()
TEMP	Summer days	The number of days where maximum temperature > 25°C	X	X	X	1	hot_spell_frequency()
TEMP	Hot days	The number of days where maximum temperature > 30°C	X	X	X	1	hot_spell_frequency()
TEMP	Heatwave spell	The number of spells where maximum temperature > 27°C for 3 consecutive days	X	X	X	1	hot_spell_frequency()
TEMP	Tropical nights	The number of days where minimum temperature > 20°C	X	X	X	days	tropical_nights()
VEG	Length of growing season	Number of days between the first occurrence of 6 consecutive days with a daily average temperature > 5°C and the first occurrence of 6 consecutive days with a daily average temperature < 5°C, occurring after a 1 st July			X	days	growing_season_length()
VEG	Growing degree days	Number of growing degree days, calculated according to Baker et al. (1980) using daily minimum and maximum temperature			X	1	gdd_baker()

The units of the input data can be any precipitation unit for the precipitation data and any temperature unit for the temperature data.

Tested with input units “kg m-2 s-1” and “K”.

The temporal resolution of the input data can be daily or sub daily. Tested with hourly data.