

Descripton of Köppen-Geiger climate symbols and defining criteria (Peel et al., 2007)

| 1st | 2nd | 3 rd | Description and criteria |
|-----|-----|-----------------|---|
| A | | | equatorial / tropical ($T_{\text{cold}} \geq 18^{\circ}\text{C}$) |
| | f | | rainforest, fully humid ($P_{\text{dry}} \geq 60\text{mm}$) |
| | m | | monsoonal (not Af & $P_{\text{dry}} \geq 100 - \text{MAP}/25$) |
| | s | | savannah with dry summer ($P_{\text{sdry}} < 60\text{ mm}$) |
| | w | | savannah with dry winter ($P_{\text{wdry}} < 60\text{ mm}$) |
| B | | | arid ($\text{MAP} < 10 \times P_{\text{threshold}}$) |
| | W | | desert ($\text{MAP} < 5 \times P_{\text{threshold}}$) |
| | S | | steppe ($\text{MAP} \geq 5 \times P_{\text{threshold}}$) |
| | h | | hot arid ($\text{MAT} \geq 18^{\circ}\text{C}$) |
| | k | | cold arid ($\text{MAT} < 18^{\circ}\text{C}$) |
| C | | | warm temperate/temperate ($T_{\text{hot}} > 10^{\circ}\text{C}$ & $0^{\circ}\text{C} < T_{\text{cold}} < 18^{\circ}\text{C}$) |
| D | | | snow / cold ($T_{\text{hot}} > 10^{\circ}\text{C}$ & $T_{\text{cold}} \leq 0^{\circ}\text{C}$) |
| | s | | summer dry ($P_{\text{sdry}} < 40$ & $P_{\text{sdry}} < P_{\text{wwet}}/3$) |
| | w | | winter dry ($P_{\text{wdry}} < P_{\text{swet}}/10$) |
| | f | | fully humid / without a dry season (not s or w) |
| | a | | hot summer ($T_{\text{hot}} \geq 22^{\circ}\text{C}$) |
| | b | | warm summer (not a & $1 \leq T_{\text{mon}10} < 4$) |
| | c | | cool / cold summer (not a or b & $T_{\text{mon}10} \geq 4$) |
| | d | | extremely continental / very cold winter (not a or b & $T_{\text{cold}} < -38^{\circ}\text{C}$) |
| E | | | polar ($T_{\text{hot}} < 10^{\circ}\text{C}$) |
| | T | | polar tundra ($T_{\text{hot}} \leq 10^{\circ}\text{C}$) |

MAP = mean annual precipitation, MAT = mean annual temperature, T_{hot} = temperature of the hottest month, T_{cold} = temperature of the coldest month, $T_{\text{mon}10}$ = number of months where the temperature is above 10°C , P_{dry} = precipitation of the driest month, P_{sdry} = precipitation of the driest month in summer, P_{wdry} = precipitation of the driest month in winter, P_{swet} = precipitation of the wettest month in summer, P_{wwet} = precipitation of the wettest month in winter, $P_{\text{threshold}}$ = varies according to the following rules (if 70% of MAP occurs in winter then $P_{\text{threshold}} = 2 \times \text{MAT}$, if 70% of MAP occurs in summer then $P_{\text{threshold}} = 2 \times \text{MAT} + 28$, otherwise $P_{\text{threshold}} = 2 \times \text{MAT} + 14$). Summer (winter) is defined as the warmer (cooler) six months period of ONDJFM and AMJJAS.