

SOIL TEMPERATURE REGIMES (STR)

CONCEPT -- Mean annual soil temperature (MAST) measured at 50 cm depth and seasonal variation between mean summer soil temperature (MSST) and mean winter soil temperature (MWST).

MAST	°C MSST -MWST °C	STR
≥ 22	≥ 6 < 6	Hyperthermic Isohyperthermic
15 to 22	≥ 6 < 6	Thermic Isothermic
8 to 15	≥ 6 < 6	Mesic Isomesic
0 to 8	≥ 6 < 6	Frigid Isofrigid
< 8	Cold summer, MSST < 15 ≠ Gelisol	Cryic
Gelisol		
1 to -4		Subgelic
-4 to -10		Pergelic
≤ -10		Hypergelic

Rule of thumb estimates:

MAST = mean annual air temperature (MAAT) + 1° C.

MSST = mean summer air temperature - 2 °C.

MWST = mean winter air temperature + 2 °C.