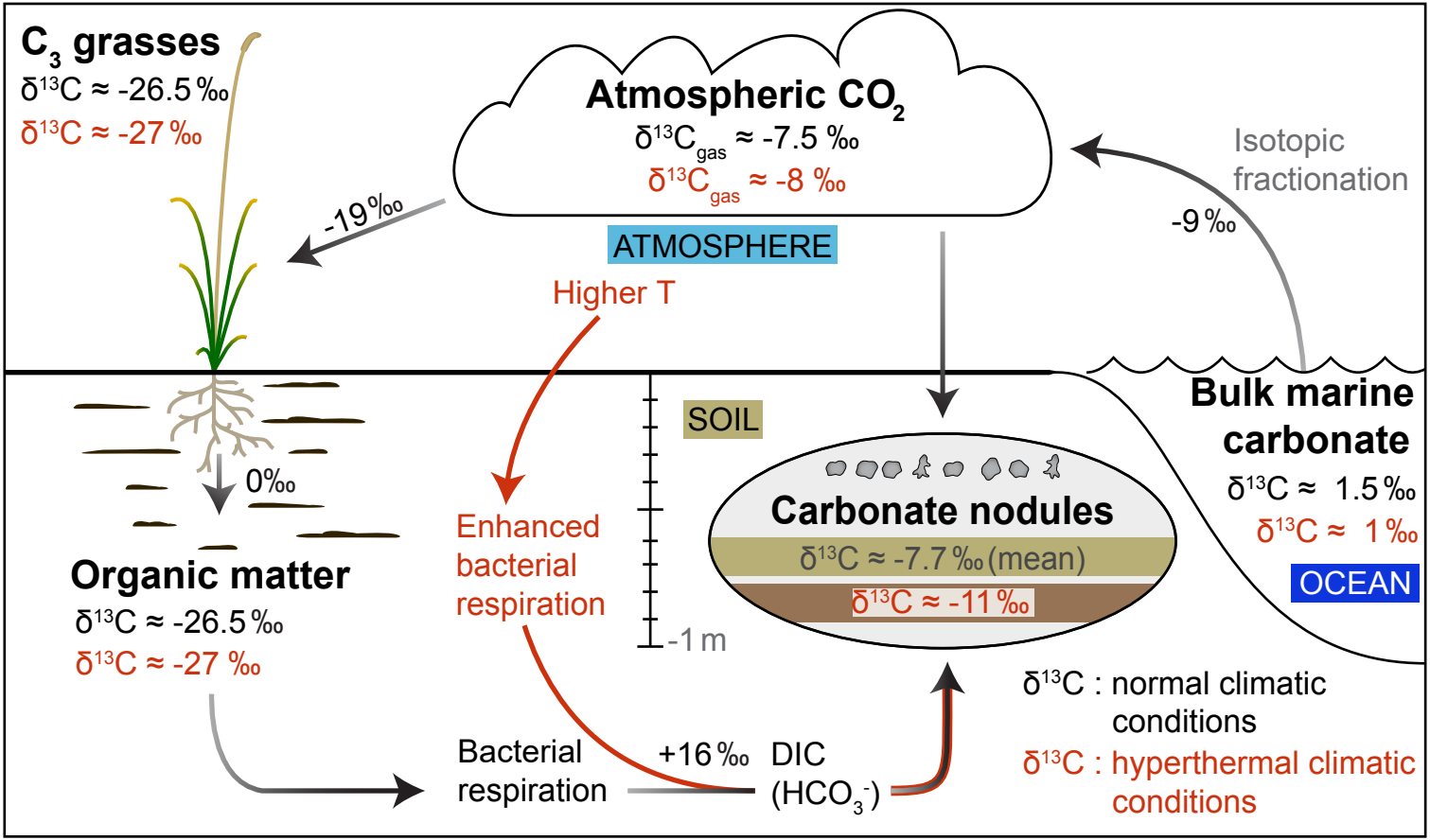
C3 grasses
δ13C ≈ -26.5 ‰
δ13C ≈ -27 ‰
Atmospheric CO2
δ13Cgas ≈ -7.5 ‰
δ13Cgas ≈ -8 ‰
ATMOSPHERE
-19 ‰
Higher T
Isotopic fractionation
-9 ‰
Bulk marine carbonate
δ13C ≈ 1.5 ‰
δ13C ≈ 1 ‰
OCEAN
SOIL
0‰
Organic matter
δ13C ≈ -26.5 ‰
δ13C ≈ -27 ‰
Enhanced bacterial respiration
Carbonate nodules
δ13C ≈ -7.7 ‰ (mean)
δ13C ≈ -11 ‰
-1 m
δ13C : normal climatic conditions
δ13C : hyperthermal climatic conditions
Bacterial respiration
+16 ‰
DIC (HCO3-)