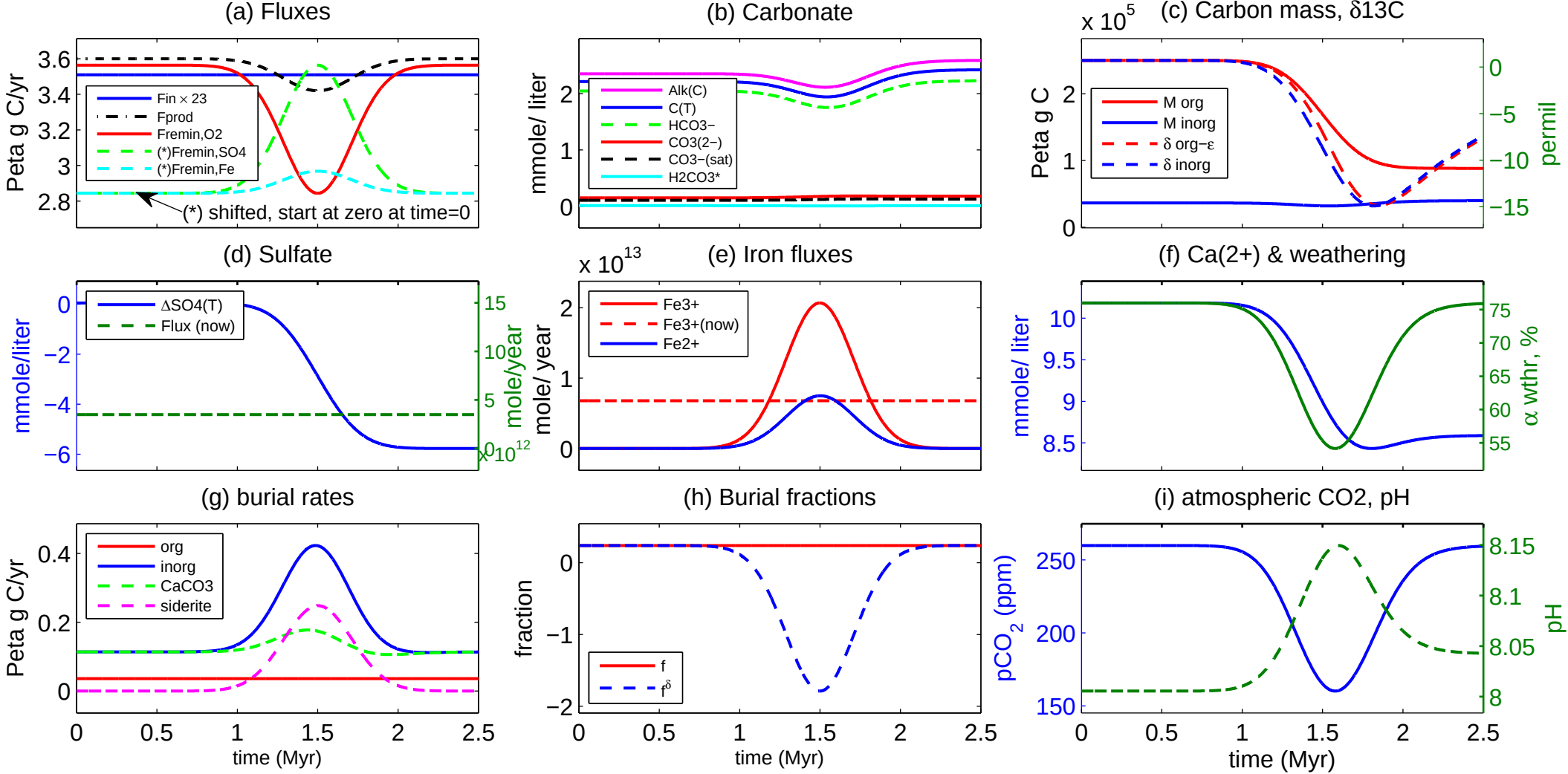
(a) Fluxes
Peta g C/yr
Fin × 23
Fprod
Fremin,O2
(*)Fremin,SO4
(*)Fremin,Fe
(*) shifted, start at zero at time=0
(b) Carbonate
mmole/ liter
Alk(C)
C(T)
HCO3−
CO3(2−)
CO3−(sat)
H2CO3*
(c) Carbon mass, δ13C
x 10^5
Peta g C
permil
M org
M inorg
δ org−ε
δ inorg
(d) Sulfate
mmole/liter
mole/year
ΔSO4(T)
Flux (now)
x10^12
(e) Iron fluxes
x 10^13
mole/ year
Fe3+
Fe3+(now)
Fe2+
(f) Ca(2+) & weathering
mmole/ liter
α wthr, %
(g) burial rates
Peta g C/yr
org
inorg
CaCO3
siderite
time (Myr)
(h) Burial fractions
fraction
f
f^δ
time (Myr)
(i) atmospheric CO2, pH
pCO2 (ppm)
pH
time (Myr)