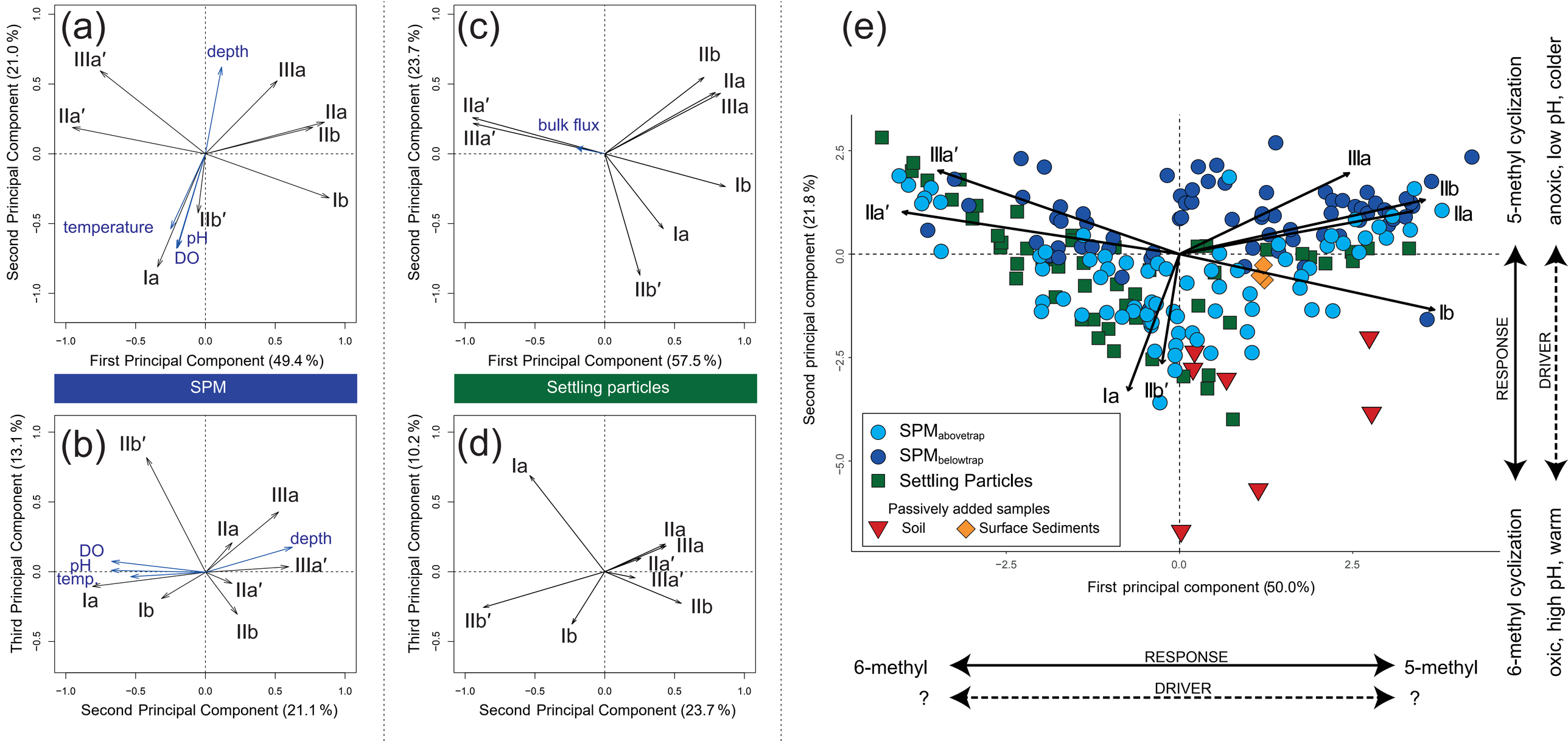
(a)
IIIa′
depth
IIIa
IIa′
IIa
IIb
Ib
temperature
IIb′
pH
DO
Ia
Second Principal Component (21.0 %)
First Principal Component (49.4 %)
SPM
(c)
IIb
IIa
IIIa
IIa′
bulk flux
IIIa′
Ib
Ia
IIb′
Second Principal Component (23.7 %)
First Principal Component (57.5 %)
Settling particles
(b)
IIb′
IIIa
IIa
depth
DO
pH
temp
IIIa′
IIa′
Ia
Ib
IIb
Third Principal Component (13.1 %)
Second Principal Component (21.1 %)
(d)
Ia
IIa
IIIa
IIa′
IIIa′
IIb
IIb′
Ib
Third Principal Component (10.2 %)
Second Principal Component (23.7 %)
(e)
IIIa′
IIa′
IIIa
IIb
IIa
Ib
Ia
IIb′
SPM abovetrap
SPM belowtrap
Settling Particles
Passively added samples
Soil
Surface Sediments
Second principal component (21.8 %)
First principal component (50.0%)
5-methyl cyclization
anoxic, low pH, colder
RESPONSE
DRIVER
6-methyl cyclization
oxic, high pH, warm
6-methyl
RESPONSE
5-methyl
?
DRIVER
?