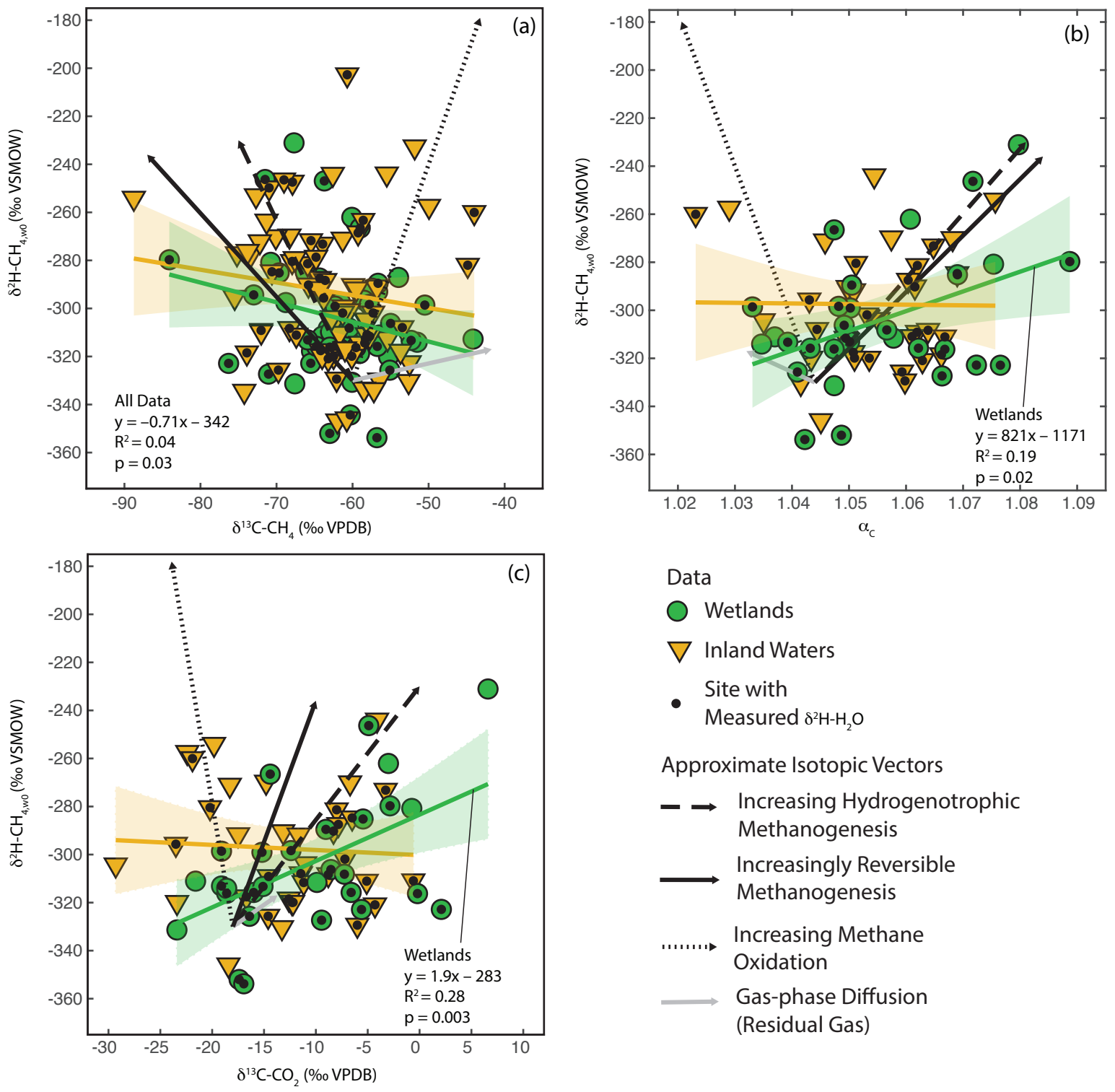
(a)
All Data
y = −0.71x − 342
R² = 0.04
p = 0.03
δ²H-CH4,w0 (‰ VSMOW)
δ¹³C-CH4 (‰ VPDB)
(b)
Wetlands
y = 821x − 1171
R² = 0.19
p = 0.02
δ²H-CH4,w0 (‰ VSMOW)
αc
(c)
Wetlands
y = 1.9x − 283
R² = 0.28
p = 0.003
δ²H-CH4,w0 (‰ VSMOW)
δ¹³C-CO2 (‰ VPDB)
Data
Wetlands
Inland Waters
Site with Measured δ²H-H2O
Approximate Isotopic Vectors
Increasing Hydrogenotrophic Methanogenesis
Increasingly Reversible Methanogenesis
Increasing Methane Oxidation
Gas-phase Diffusion (Residual Gas)