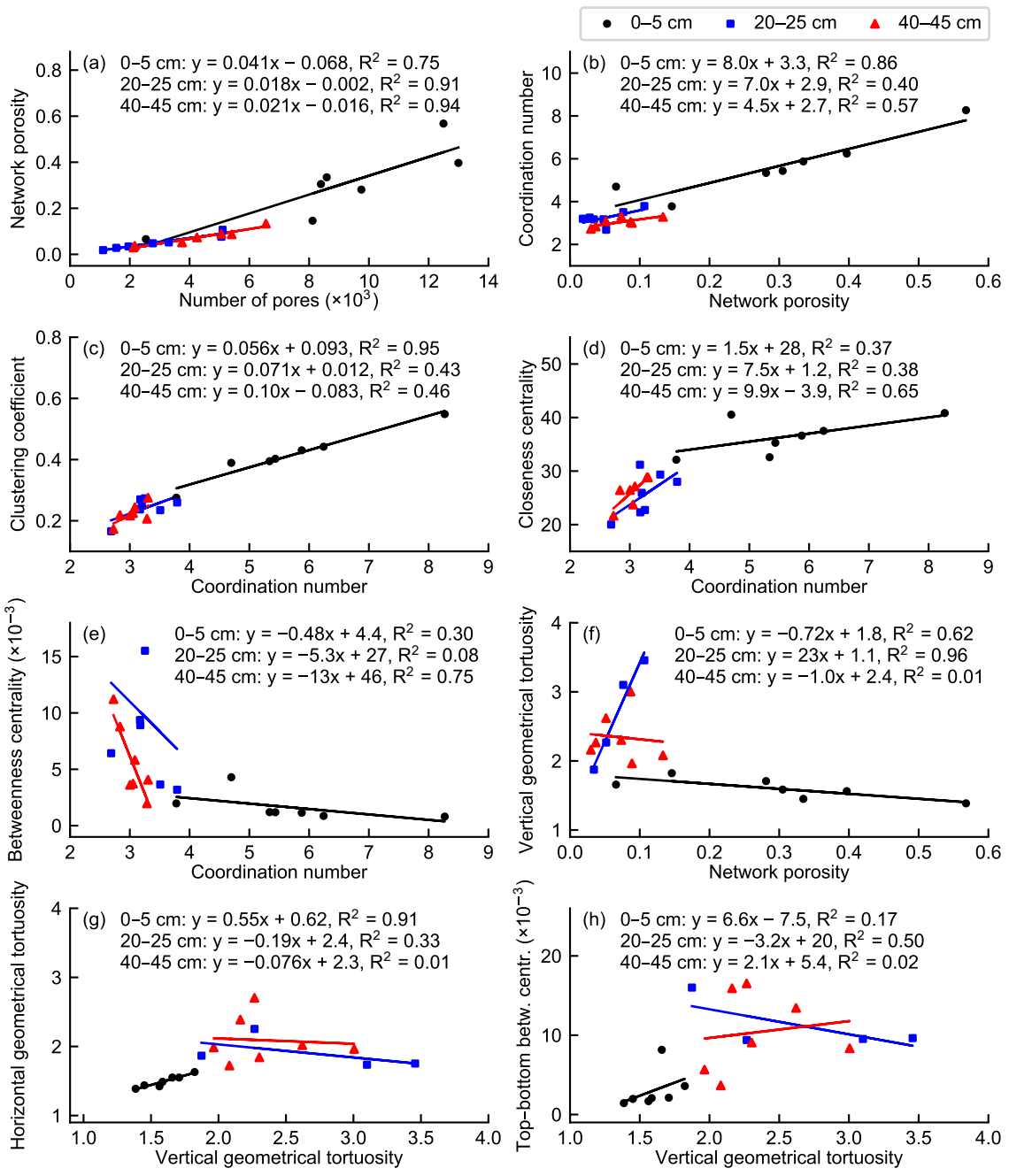
0–5 cm
20–25 cm
40–45 cm
(a)
0–5 cm: y = 0.041x − 0.068, R2 = 0.75
20–25 cm: y = 0.018x − 0.002, R2 = 0.91
40–45 cm: y = 0.021x − 0.016, R2 = 0.94
Network porosity
Number of pores (×10^3)
(b)
0–5 cm: y = 8.0x + 3.3, R2 = 0.86
20–25 cm: y = 7.0x + 2.9, R2 = 0.40
40–45 cm: y = 4.5x + 2.7, R2 = 0.57
Coordination number
Network porosity
(c)
0–5 cm: y = 0.056x + 0.093, R2 = 0.95
20–25 cm: y = 0.071x + 0.012, R2 = 0.43
40–45 cm: y = 0.10x − 0.083, R2 = 0.46
Clustering coefficient
Coordination number
(d)
0–5 cm: y = 1.5x + 28, R2 = 0.37
20–25 cm: y = 7.5x + 1.2, R2 = 0.38
40–45 cm: y = 9.9x − 3.9, R2 = 0.65
Closeness centrality
Coordination number
(e)
0–5 cm: y = −0.48x + 4.4, R2 = 0.30
20–25 cm: y = −5.3x + 27, R2 = 0.08
40–45 cm: y = −13x + 46, R2 = 0.75
Betweenness centrality (×10^−3)
Coordination number
(f)
0–5 cm: y = −0.72x + 1.8, R2 = 0.62
20–25 cm: y = 23x + 1.1, R2 = 0.96
40–45 cm: y = −1.0x + 2.4, R2 = 0.01
Vertical geometrical tortuosity
Network porosity
(g)
0–5 cm: y = 0.55x + 0.62, R2 = 0.91
20–25 cm: y = −0.19x + 2.4, R2 = 0.33
40–45 cm: y = −0.076x + 2.3, R2 = 0.01
Horizontal geometrical tortuosity
Vertical geometrical tortuosity
(h)
0–5 cm: y = 6.6x − 7.5, R2 = 0.17
20–25 cm: y = −3.2x + 20, R2 = 0.50
40–45 cm: y = 2.1x + 5.4, R2 = 0.02
Top–bottom betw. centr. (×10^−3)
Vertical geometrical tortuosity