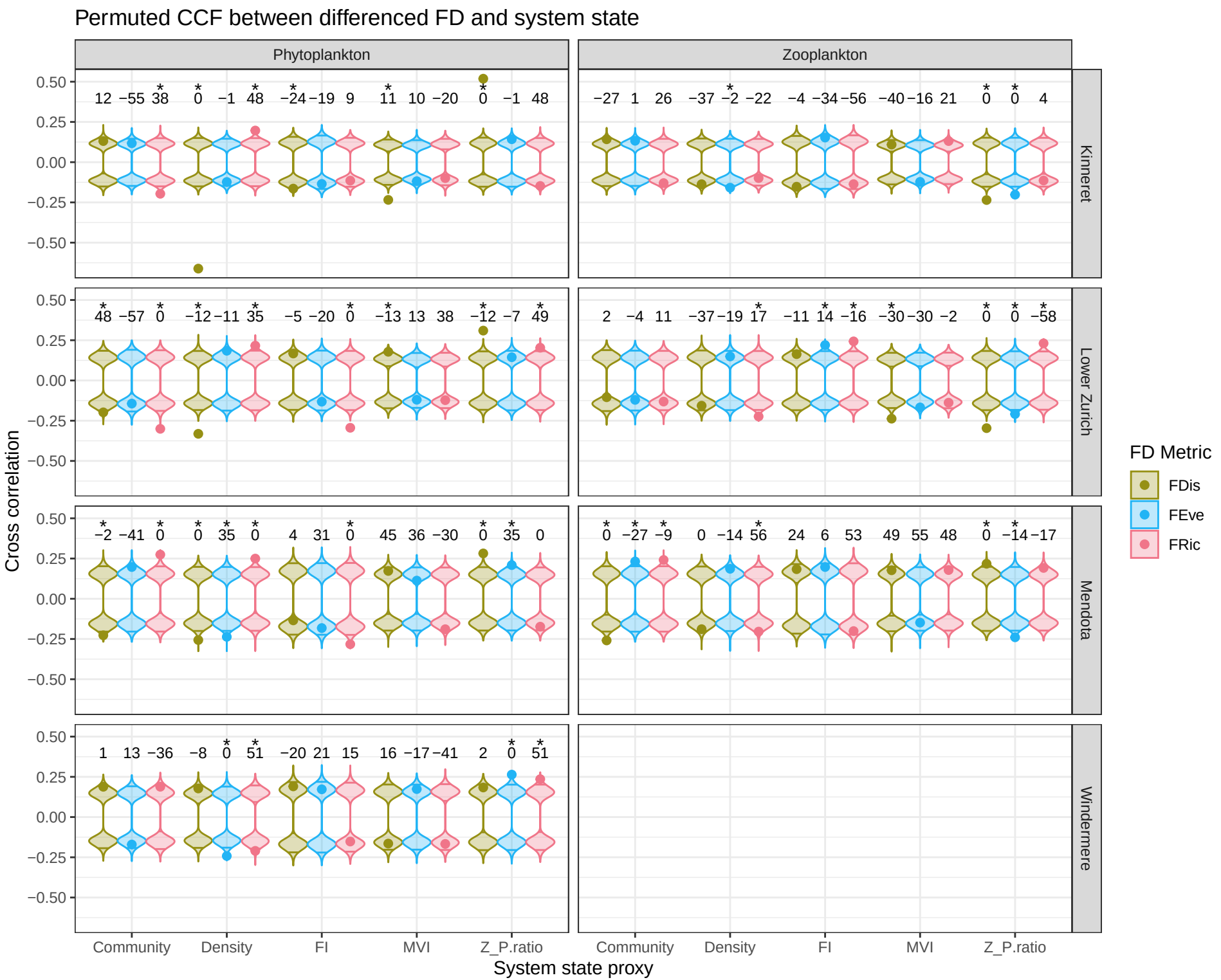
Permuted CCF between differenced FD and system state
Phytoplankton
Zooplankton
Kinneret
Lower Zurich
Mendota
Windermere
Cross correlation
0.50
0.25
0.00
−0.25
−0.50
12 −55 38 0 −1 48 −24 −19 9 11 10 −20 0 −1 48
−27 1 26 −37 −2 −22 −4 −34 −56 −40 −16 21 0 0 4
48 −57 0 −12 −11 35 −5 −20 0 −13 13 38 −12 −7 49
2 −4 11 −37 −19 17 −11 14 −16 −30 −30 −2 0 0 −58
−2 −41 0 0 35 0 4 31 0 45 36 −30 0 35 0
0 −27 −9 0 −14 56 24 6 53 49 55 48 0 −14 −17
1 13 −36 −8 0 51 −20 21 15 16 −17 −41 2 0 51
Community
Density
FI
MVI
Z_P.ratio
System state proxy
FD Metric
FDis
FEve
FRic