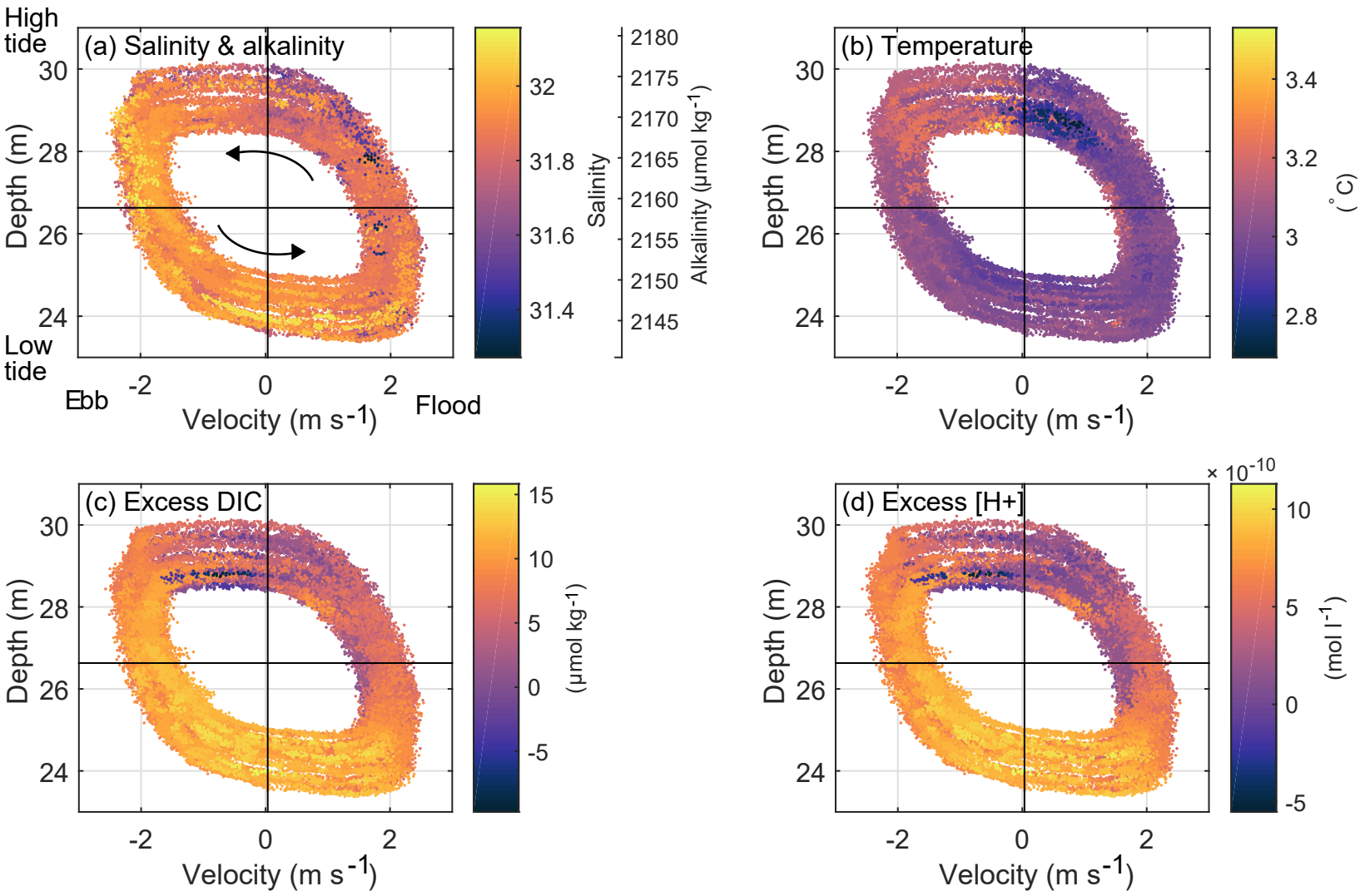

High tide
(a) Salinity & alkalinity
Depth (m)
30
28
26
24
Low tide
Ebb
-2
0
2
Flood
Velocity (m s-1)
32
31.8
31.6
31.4
Salinity
2180
2175
2170
2165
2160
2155
2150
2145
Alkalinity (µmol kg-1)
(b) Temperature
3.4
3.2
3
2.8
(˚C)
(c) Excess DIC
15
10
5
0
-5
(µmol kg-1)
(d) Excess [H+]
× 10-10
10
5
0
-5
(mol l-1)