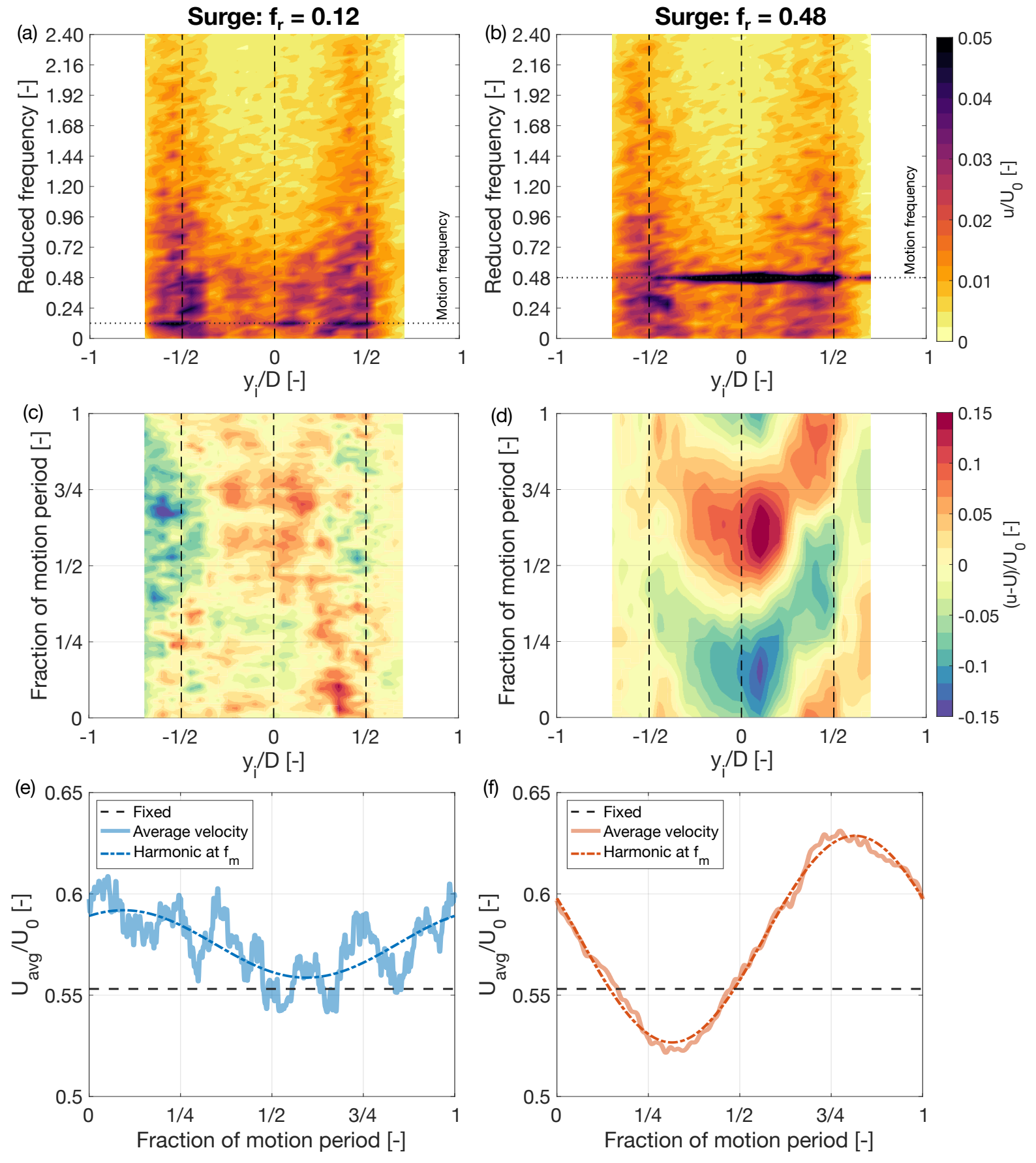

Surge: f_r = 0.12
Surge: f_r = 0.48
(a)
(b)
(c)
(d)
(e)
(f)
Reduced frequency [-]
Motion frequency
y_i/D [-]
u/U_0 [-]
Fraction of motion period [-]
$(u-U)/U_0$ [-]
U_{avg}/U_0 [-]
Fixed
Average velocity
Harmonic at f_m