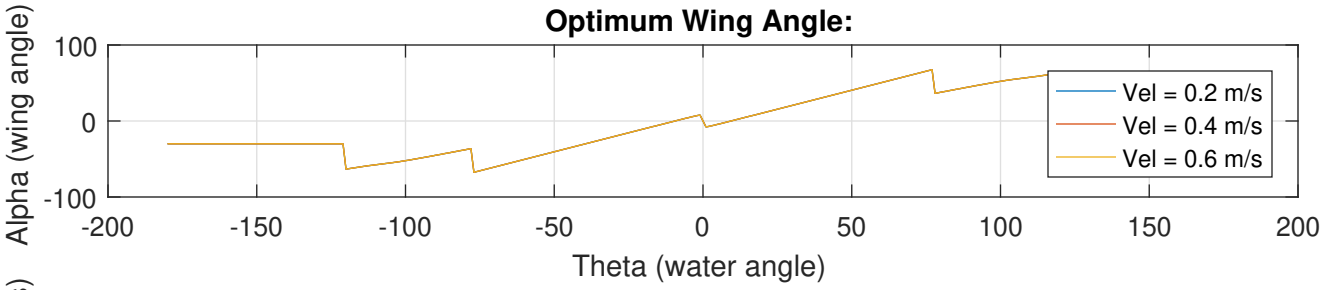
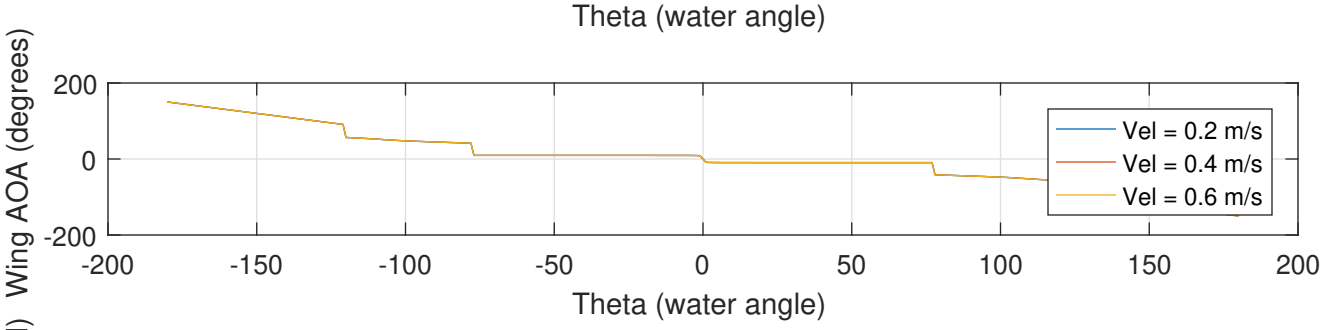
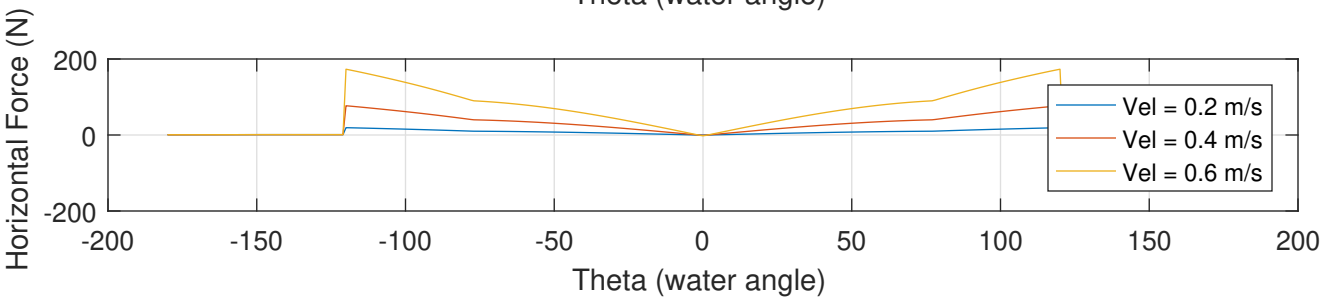
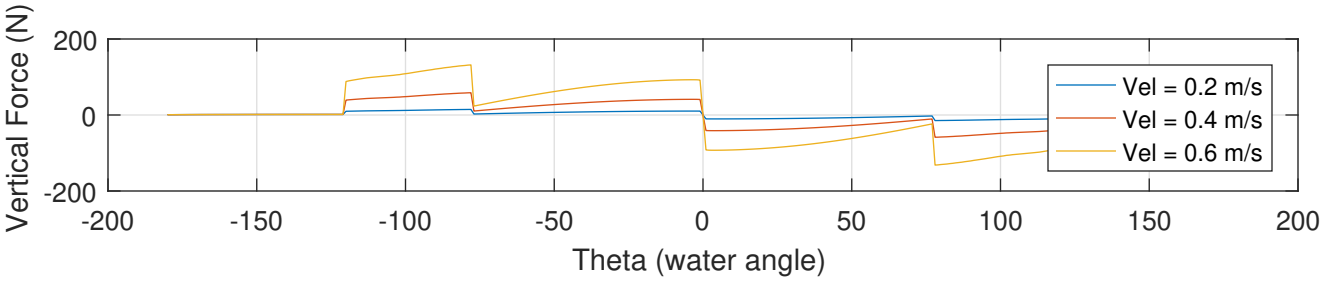
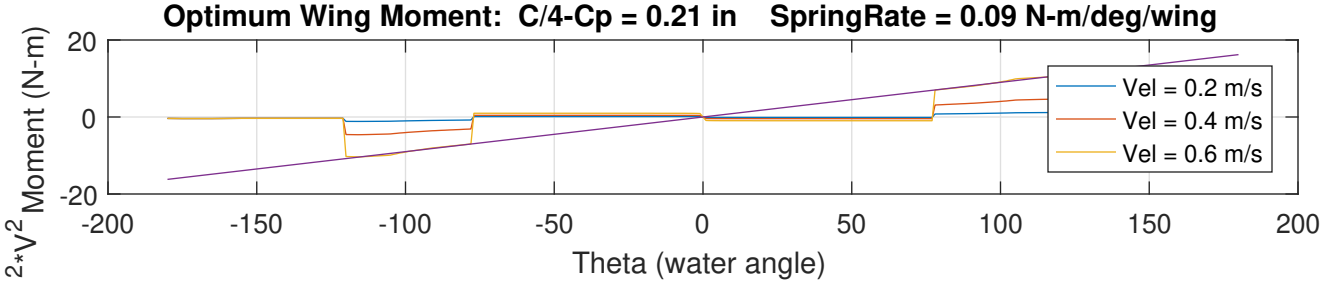
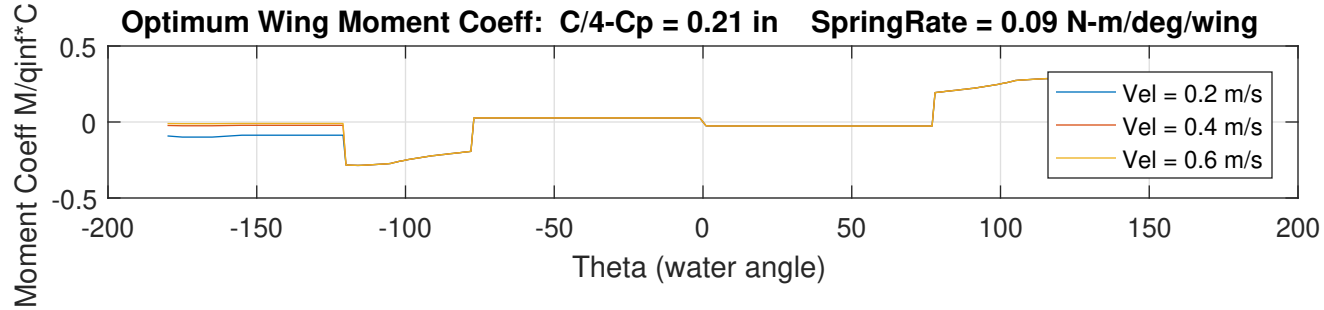

Optimum Wing Angle:
Alpha (wing angle)
100
0
-100
-200
-150
-100
-50
0
50
100
150
200
Theta (water angle)
Vel = 0.2 m/s
Vel = 0.4 m/s
Vel = 0.6 m/s


Wing AOA (degrees)
200
0
-200
-200
-150
-100
-50
0
50
100
150
200
Theta (water angle)
Vel = 0.2 m/s
Vel = 0.4 m/s
Vel = 0.6 m/s


Horizontal Force (N)
200
0
-200
-200
-150
-100
-50
0
50
100
150
200
Theta (water angle)
Vel = 0.2 m/s
Vel = 0.4 m/s
Vel = 0.6 m/s


Vertical Force (N)
200
0
-200
-200
-150
-100
-50
0
50
100
150
200
Theta (water angle)
Vel = 0.2 m/s
Vel = 0.4 m/s
Vel = 0.6 m/s


Optimum Wing Moment: C/4-Cp = 0.21 in SpringRate = 0.09 N-m/deg/wing
Moment (N-m)
20
0
-20
-200
-150
-100
-50
0
50
100
150
200
Theta (water angle)
Vel = 0.2 m/s
Vel = 0.4 m/s
Vel = 0.6 m/s


Optimum Wing Moment Coeff: C/4-Cp = 0.21 in SpringRate = 0.09 N-m/deg/wing
Moment Coeff M/qinf*C*v2
0.5
0
-0.5
-200
-150
-100
-50
0
50
100
150
200
Theta (water angle)
Vel = 0.2 m/s
Vel = 0.4 m/s
Vel = 0.6 m/s