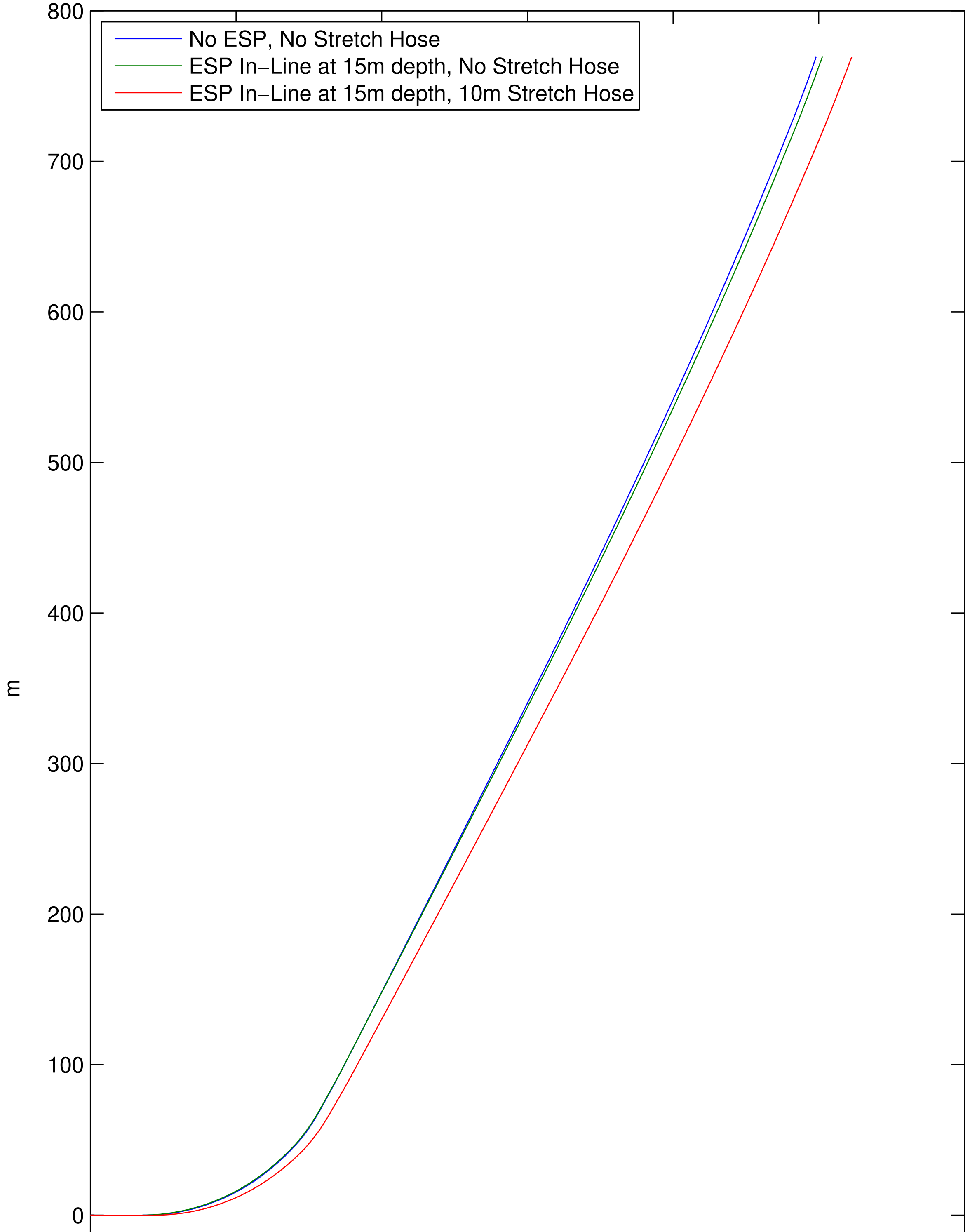
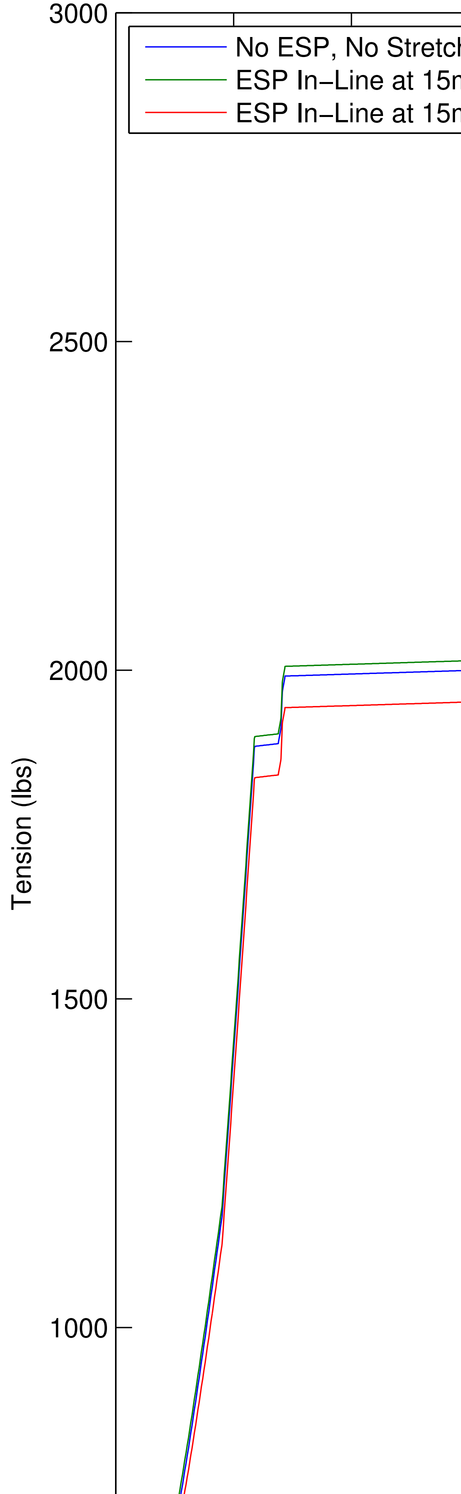
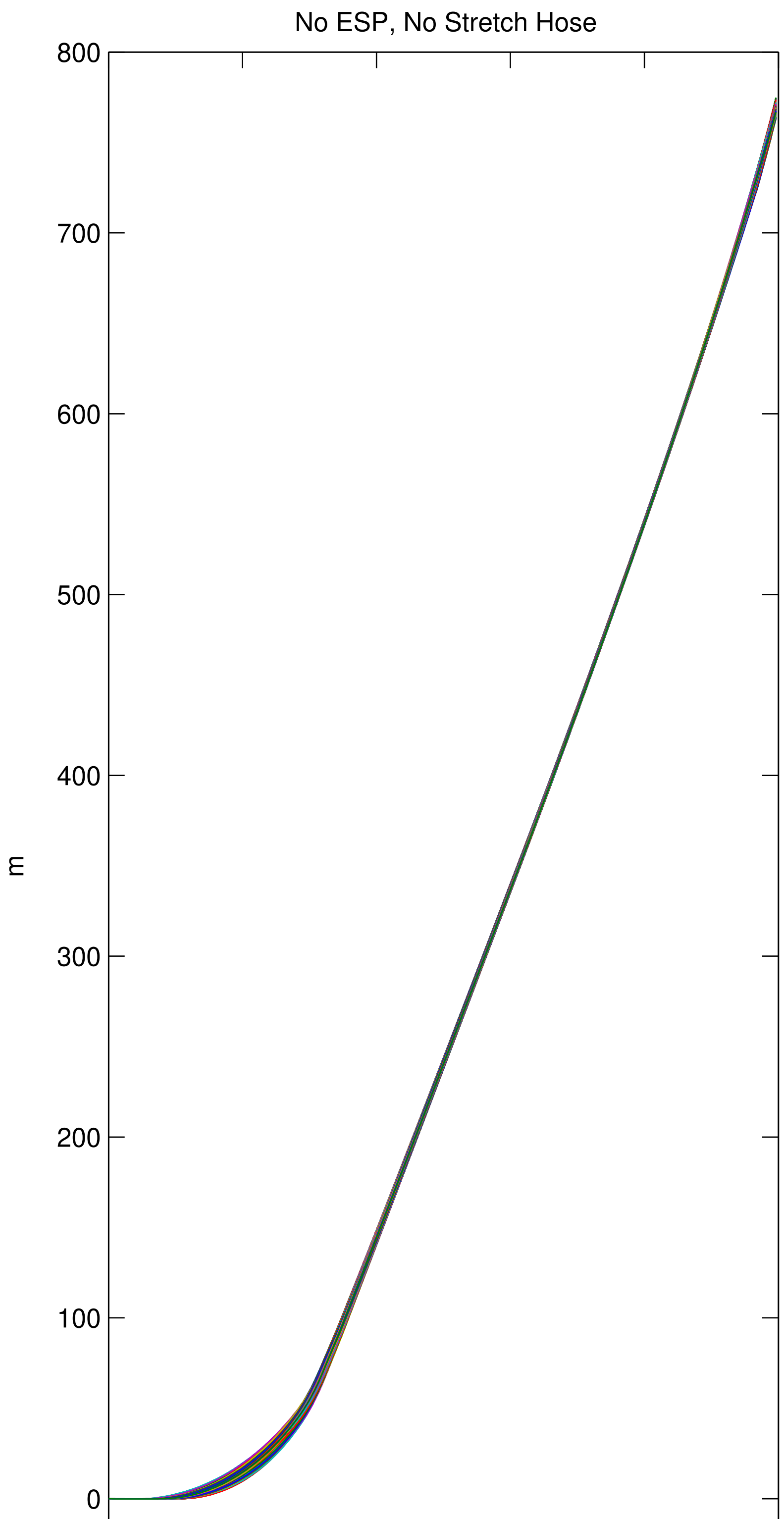


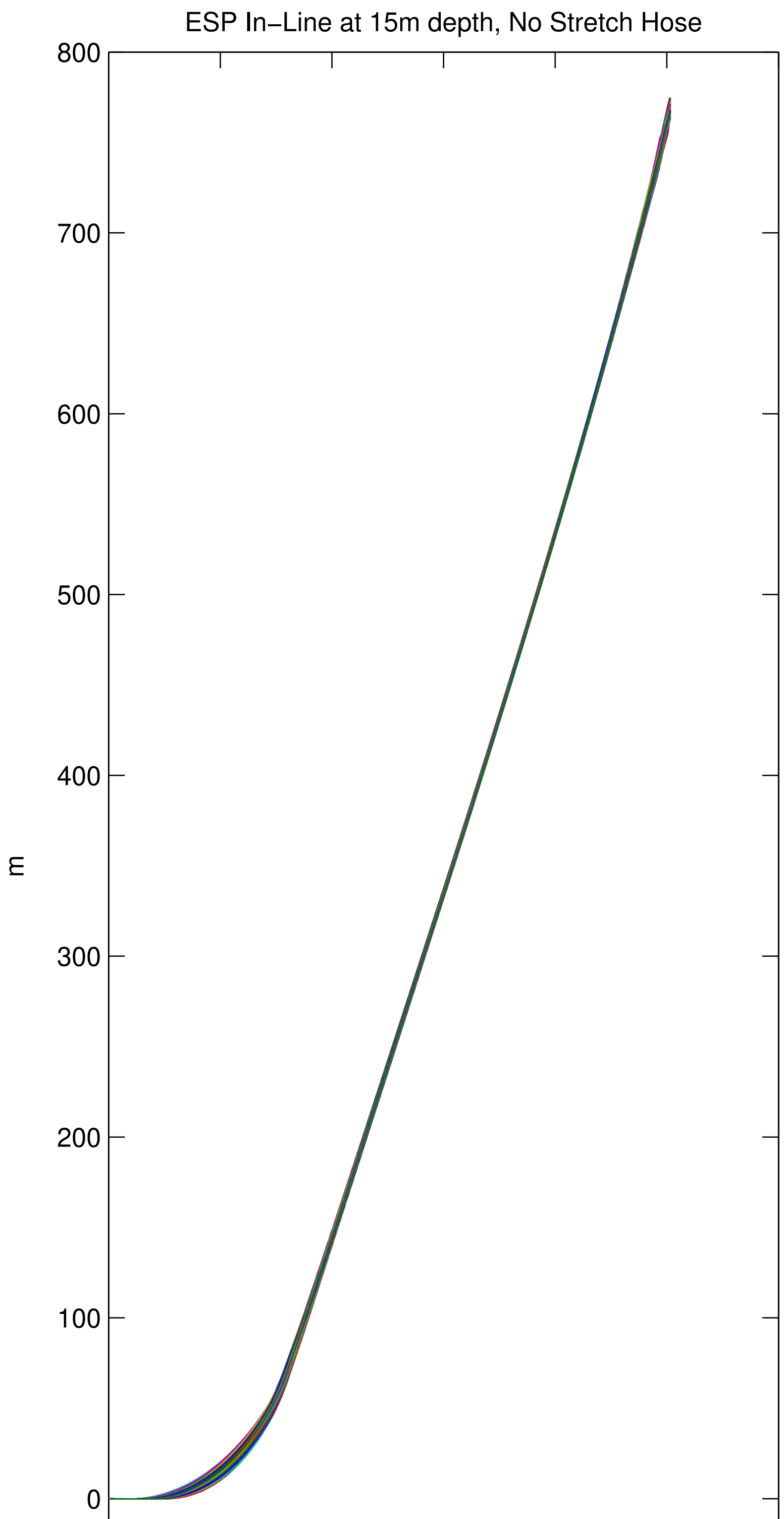
800
700
600
500
400
300
200
100
0
m
No ESP, No Stretch Hose
ESP In–Line at 15m depth, No Stretch Hose
ESP In–Line at 15m depth, 10m Stretch Hose



3000
2500
2000
1500
1000
Tension (lbs)

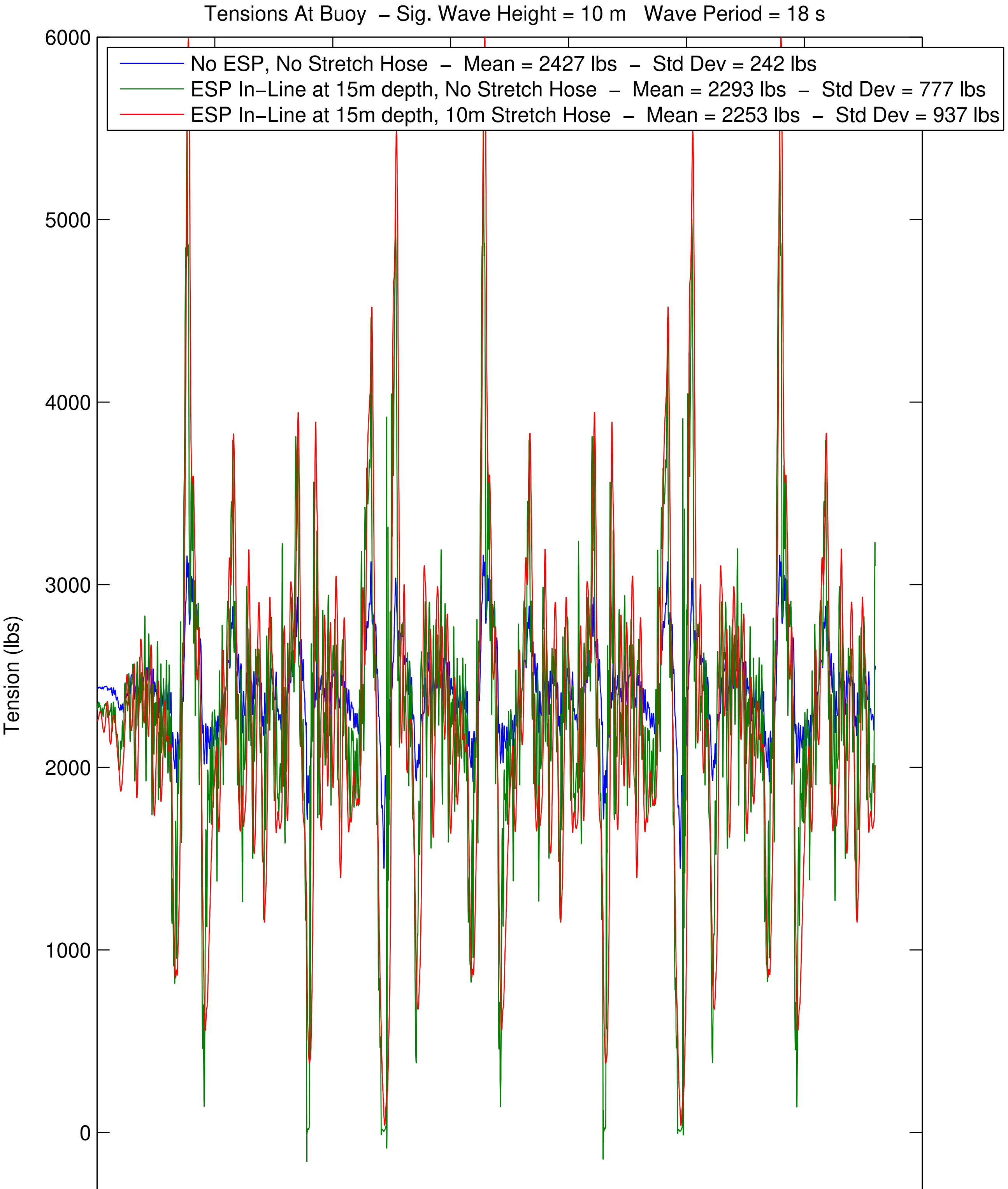


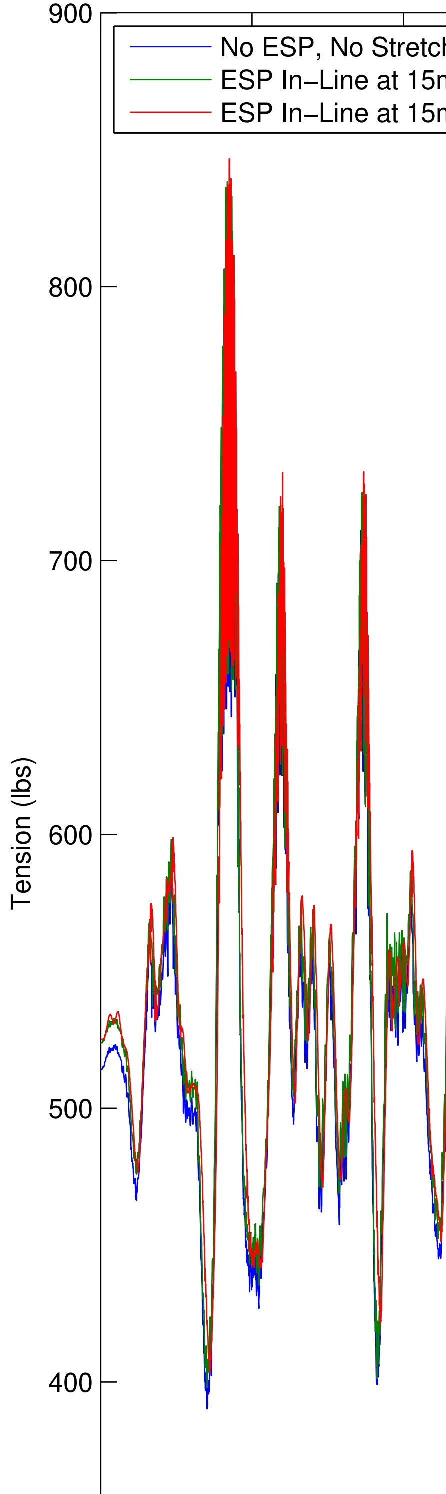
No ESP, No Stretch Hose
800
700
600
500
400
300
200
100
0
m

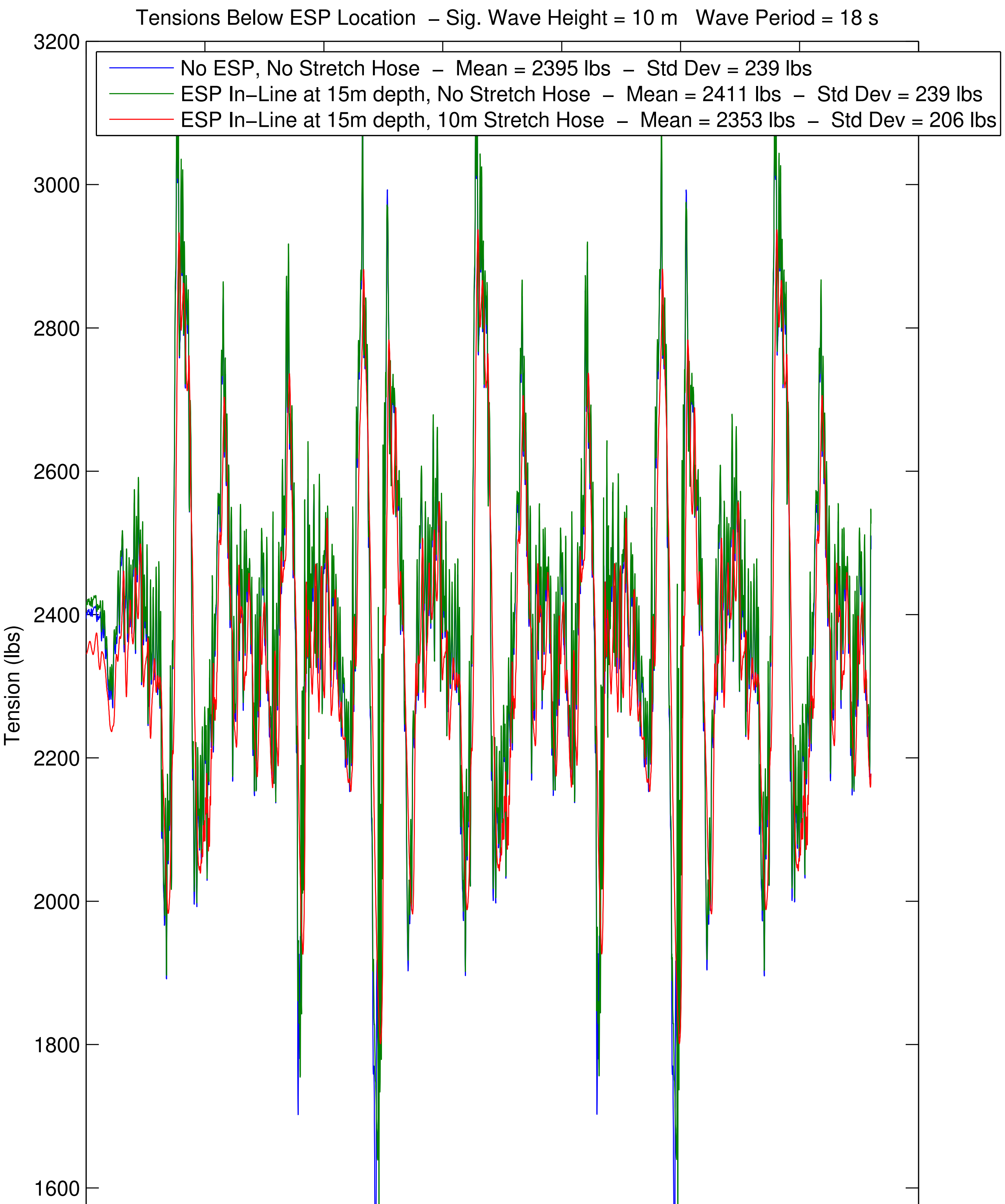


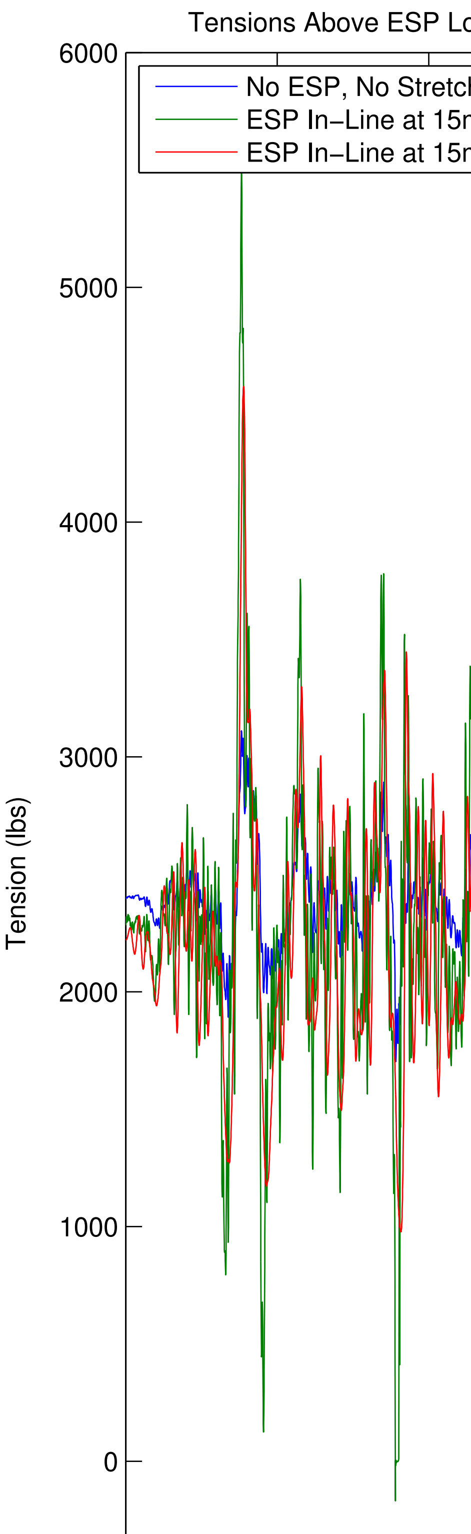
ESP In−Line at 15m depth, No Stretch Hose
800
700
600
500
400
300
200
100
0
m

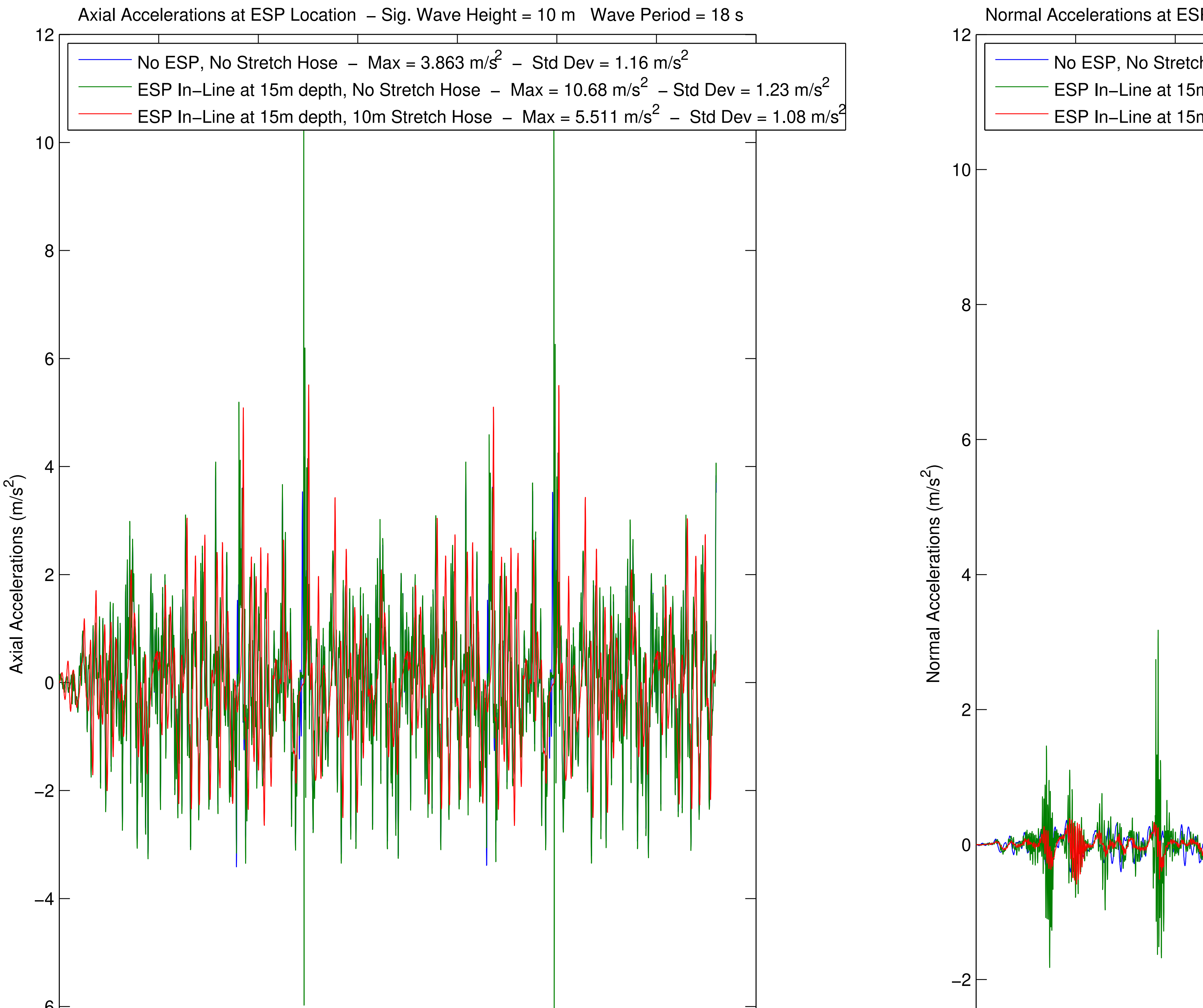
m


Tensions At Buoy – Sig. Wave Height = 10 m Wave Period = 18 s
No ESP, No Stretch Hose – Mean = 2427 lbs – Std Dev = 242 lbs
ESP In–Line at 15m depth, No Stretch Hose – Mean = 2293 lbs – Std Dev = 777 lbs
ESP In–Line at 15m depth, 10m Stretch Hose – Mean = 2253 lbs – Std Dev = 937 lbs
Tension (lbs)
6000
5000
4000
3000
2000
1000
0


No ESP, No Stretch
ESP In–Line at 15m
ESP In–Line at 15m
Tension (lbs)
900
800
700
600
500
400


Tensions Below ESP Location – Sig. Wave Height = 10 m Wave Period = 18 s
No ESP, No Stretch Hose – Mean = 2395 lbs – Std Dev = 239 lbs
ESP In−Line at 15m depth, No Stretch Hose – Mean = 2411 lbs – Std Dev = 239 lbs
ESP In−Line at 15m depth, 10m Stretch Hose – Mean = 2353 lbs – Std Dev = 206 lbs
Tension (lbs)
3200
3000
2800
2600
2400
2200
2000
1800
1600


Tension (lbs)
6000
5000
4000
3000
2000
1000
0



Axial Accelerations at ESP Location – Sig. Wave Height = 10 m Wave Period = 18 s
No ESP, No Stretch Hose – Max = 3.863 m/s2 – Std Dev = 1.16 m/s2
ESP In–Line at 15m depth, No Stretch Hose – Max = 10.68 m/s2 – Std Dev = 1.23 m/s2
ESP In–Line at 15m depth, 10m Stretch Hose – Max = 5.511 m/s2 – Std Dev = 1.08 m/s2
Axial Accelerations (m/s2)
12
10
8
6
4
2
0
–2
–4
Normal Accelerations at ESP
No ESP, No Stretch
ESP In–Line at 15m
ESP In–Line at 15m
Normal Accelerations (m/s2)
12
10
8
6
4
2
0
–2