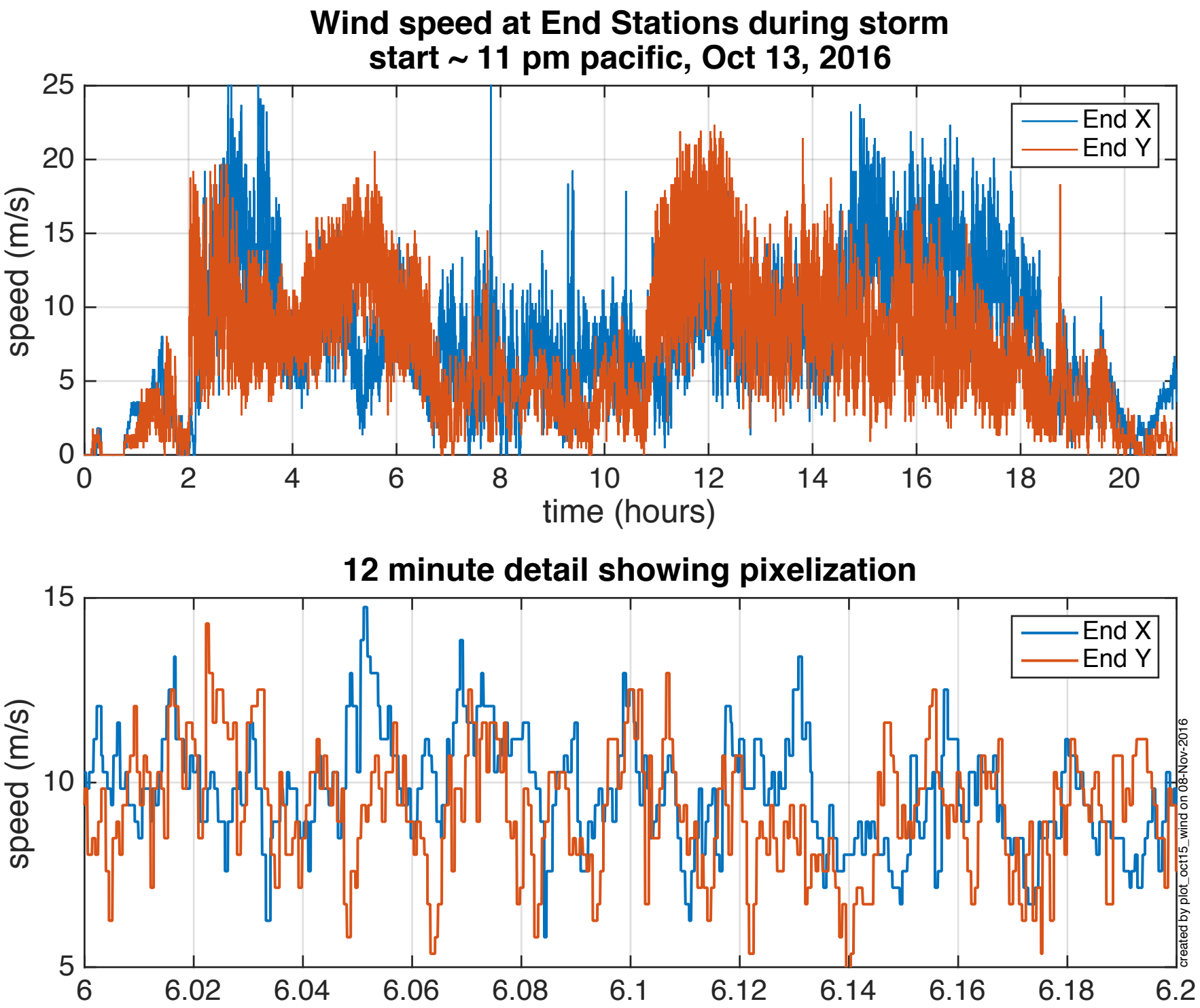
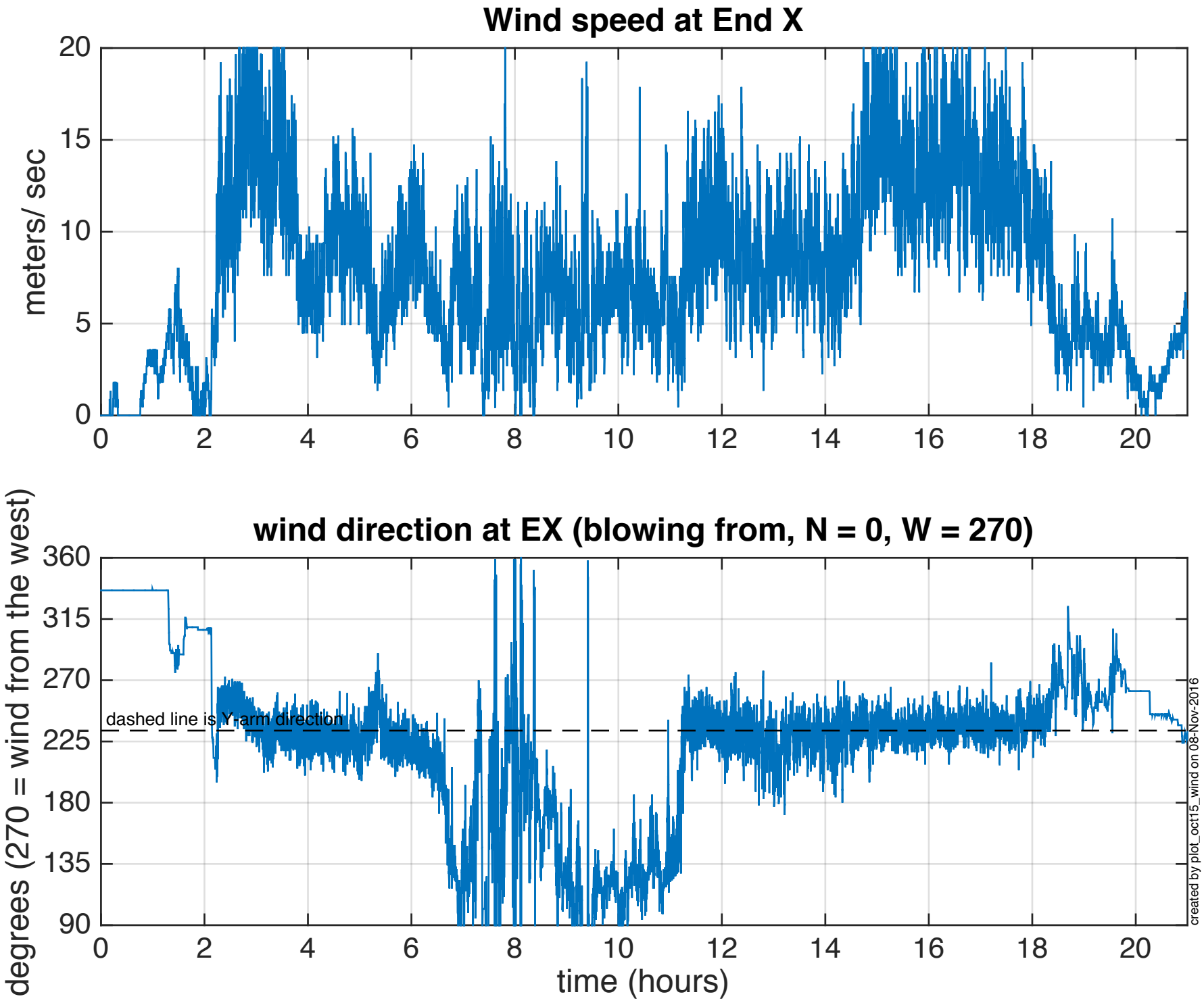
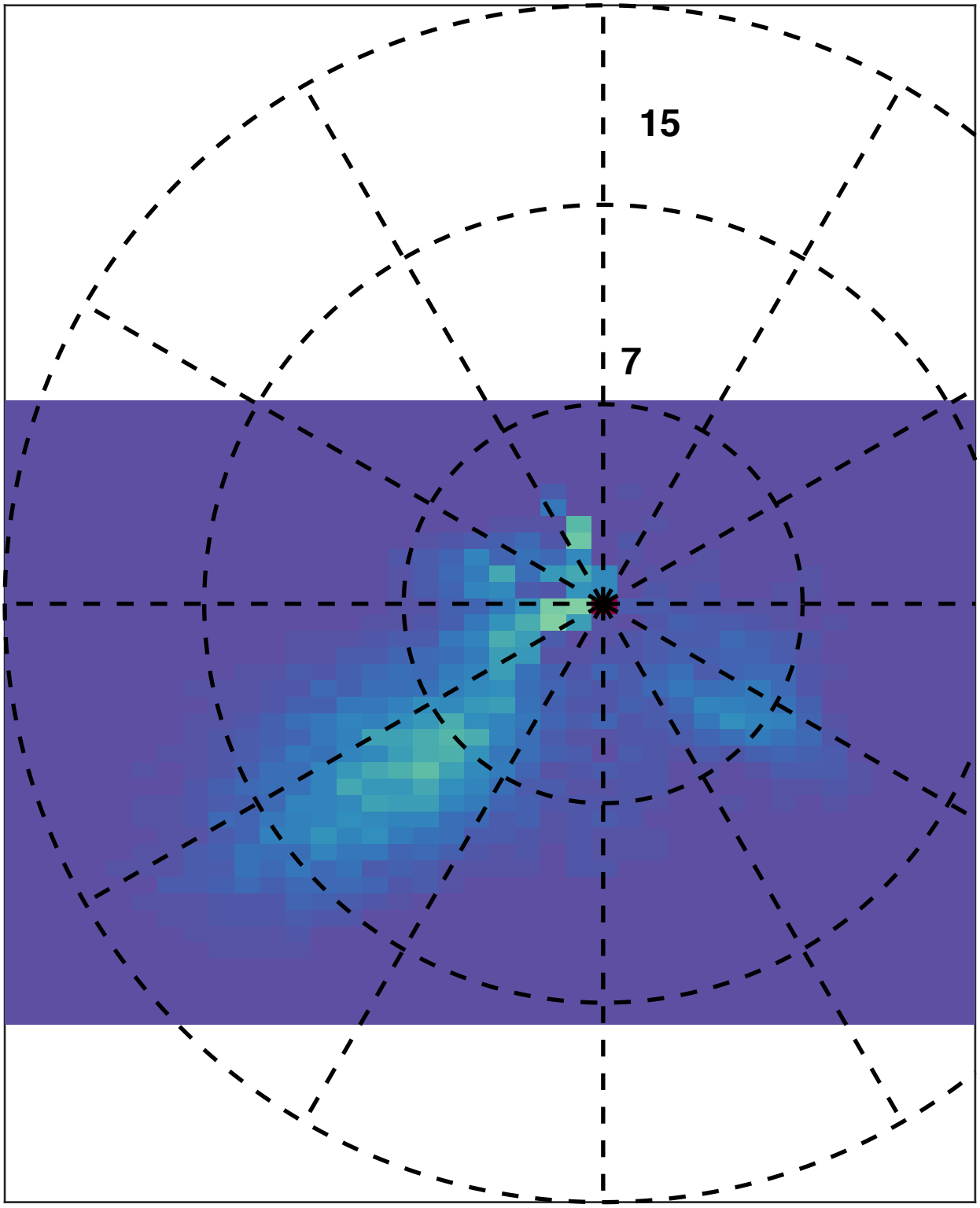
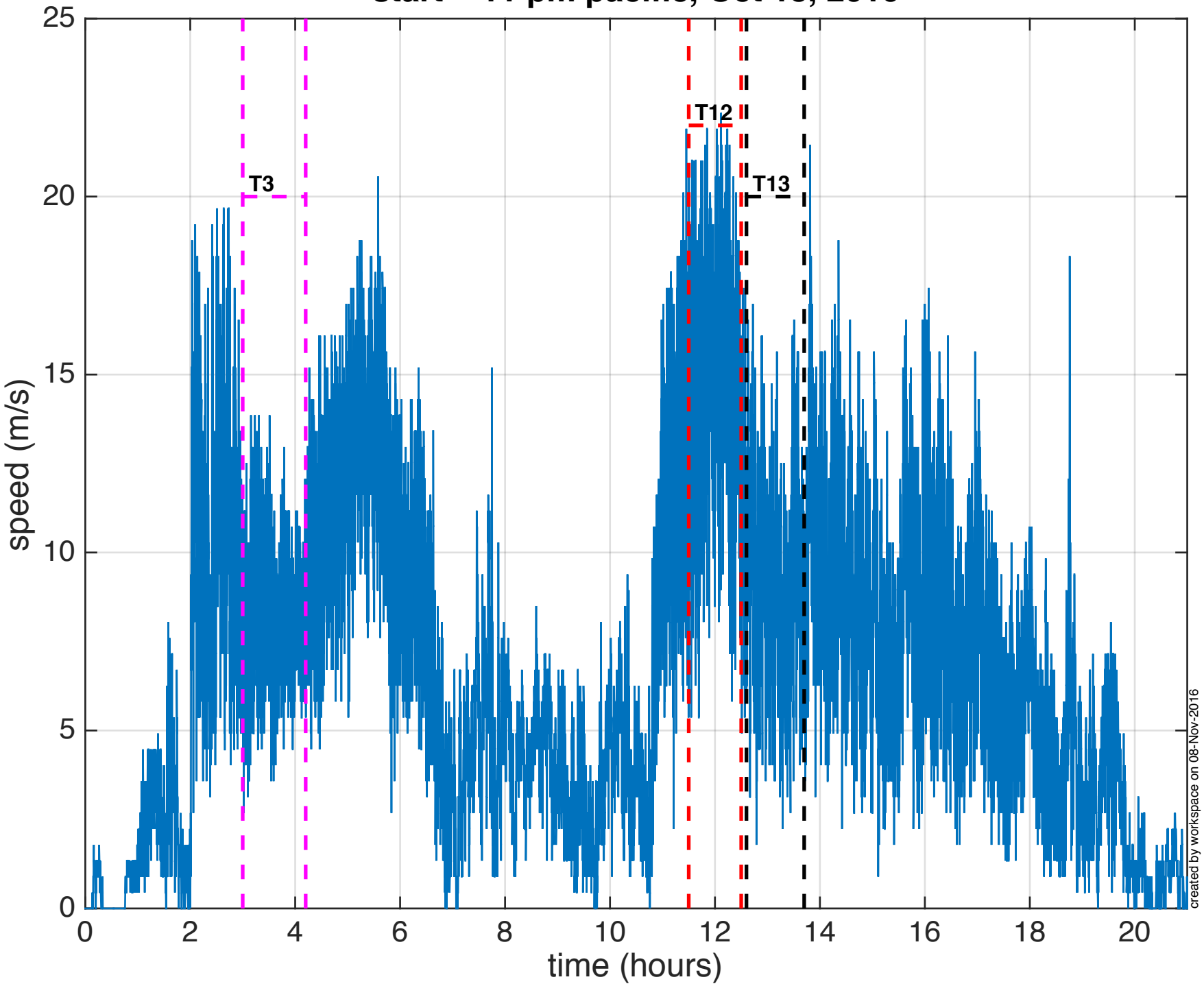
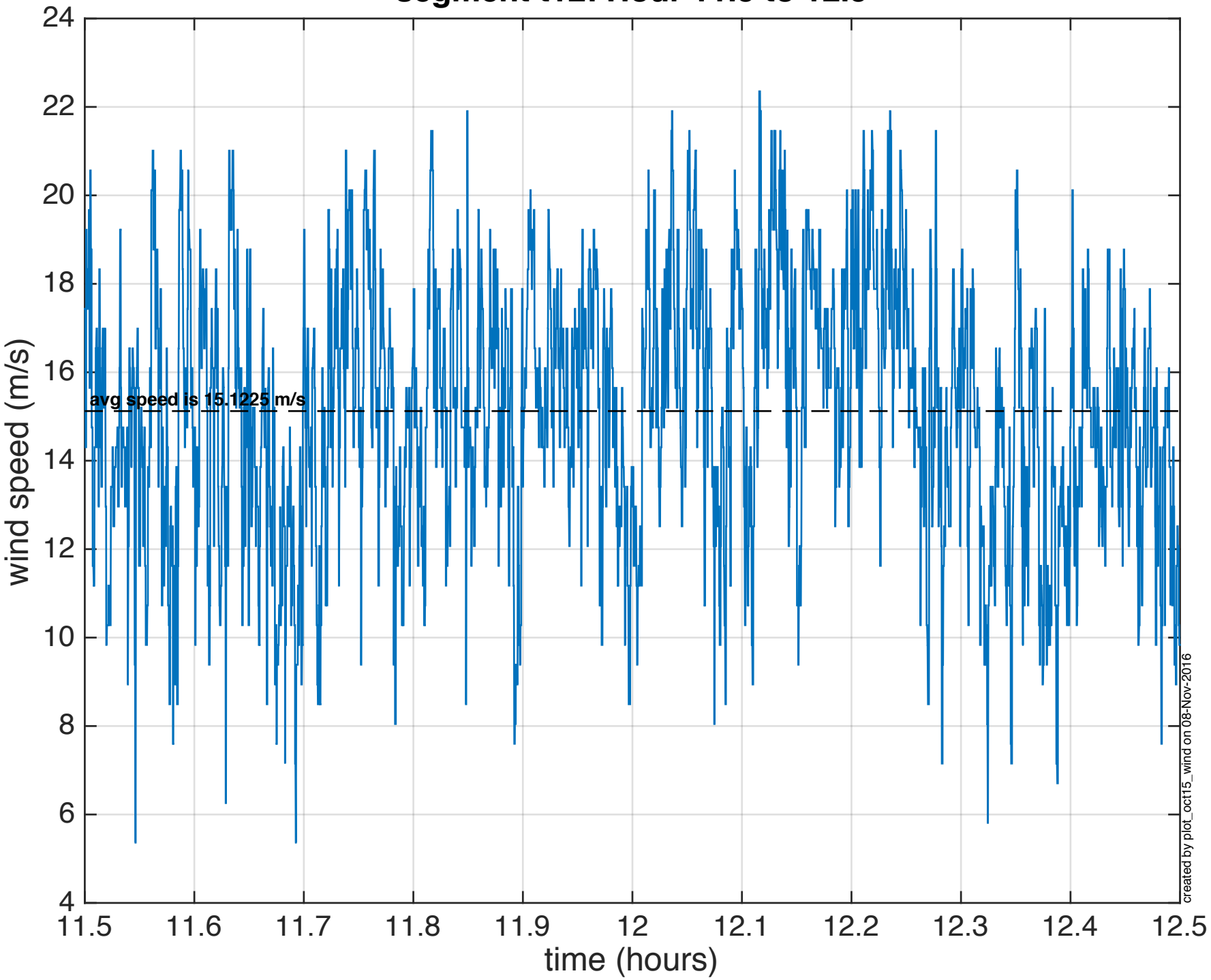

Wind speed at End Stations during storm
start ~ 11 pm pacific, Oct 13, 2016
speed (m/s)
time (hours)
End X
End Y
12 minute detail showing pixelization
speed (m/s)
End X
End Y
created by plot_oct15_wind on 08-Nov-2016

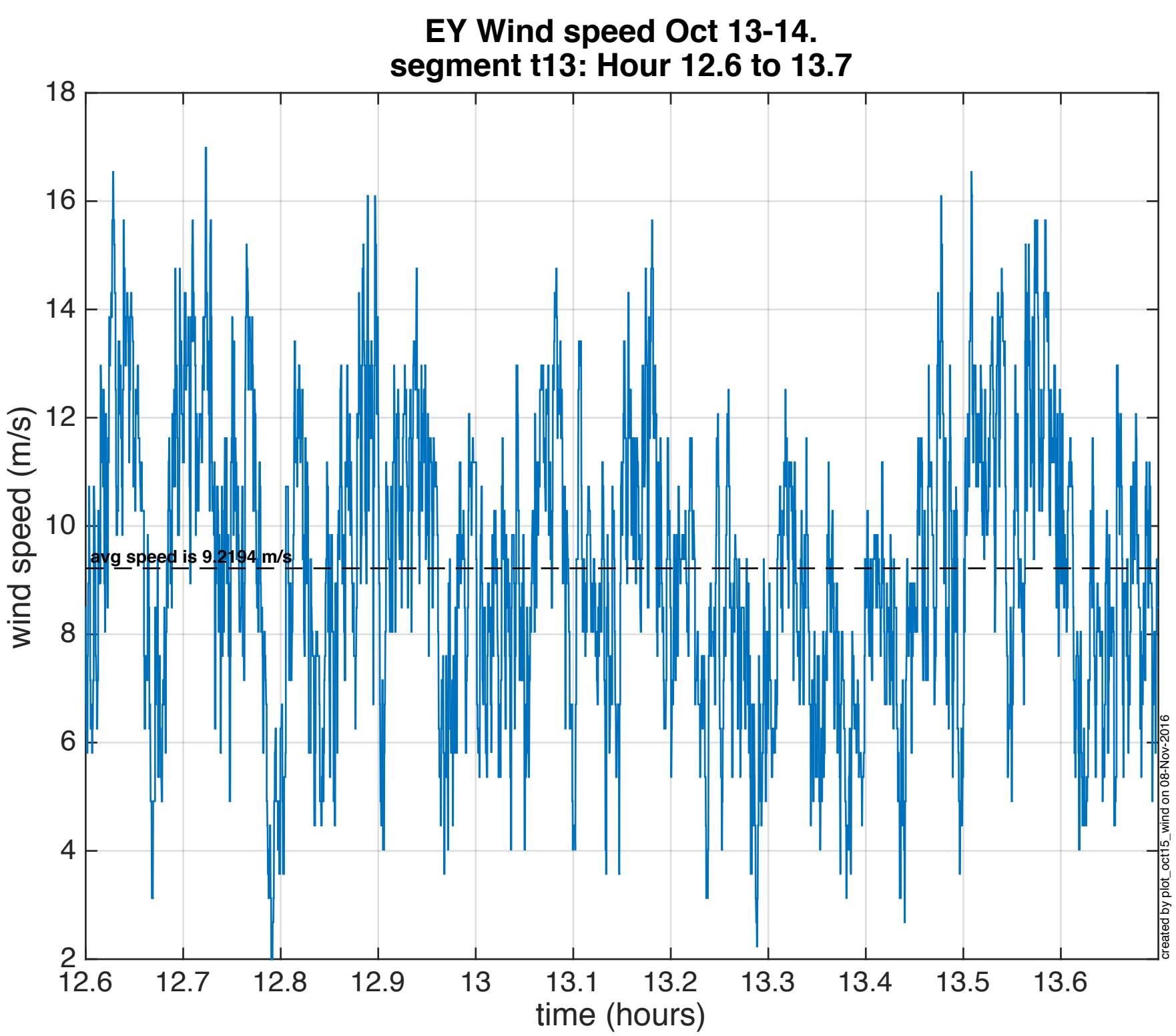

Wind speed at End X
meters/ sec
0
5
10
15
20
0
2
4
6
8
10
12
14
16
18
20
wind direction at EX (blowing from, N = 0, W = 270)
degrees (270 = wind from the west)
360
315
270
225
180
135
90
dashed line is Y-arm direction
time (hours)
created by plot_oct15_wind on 08-Nov-2016

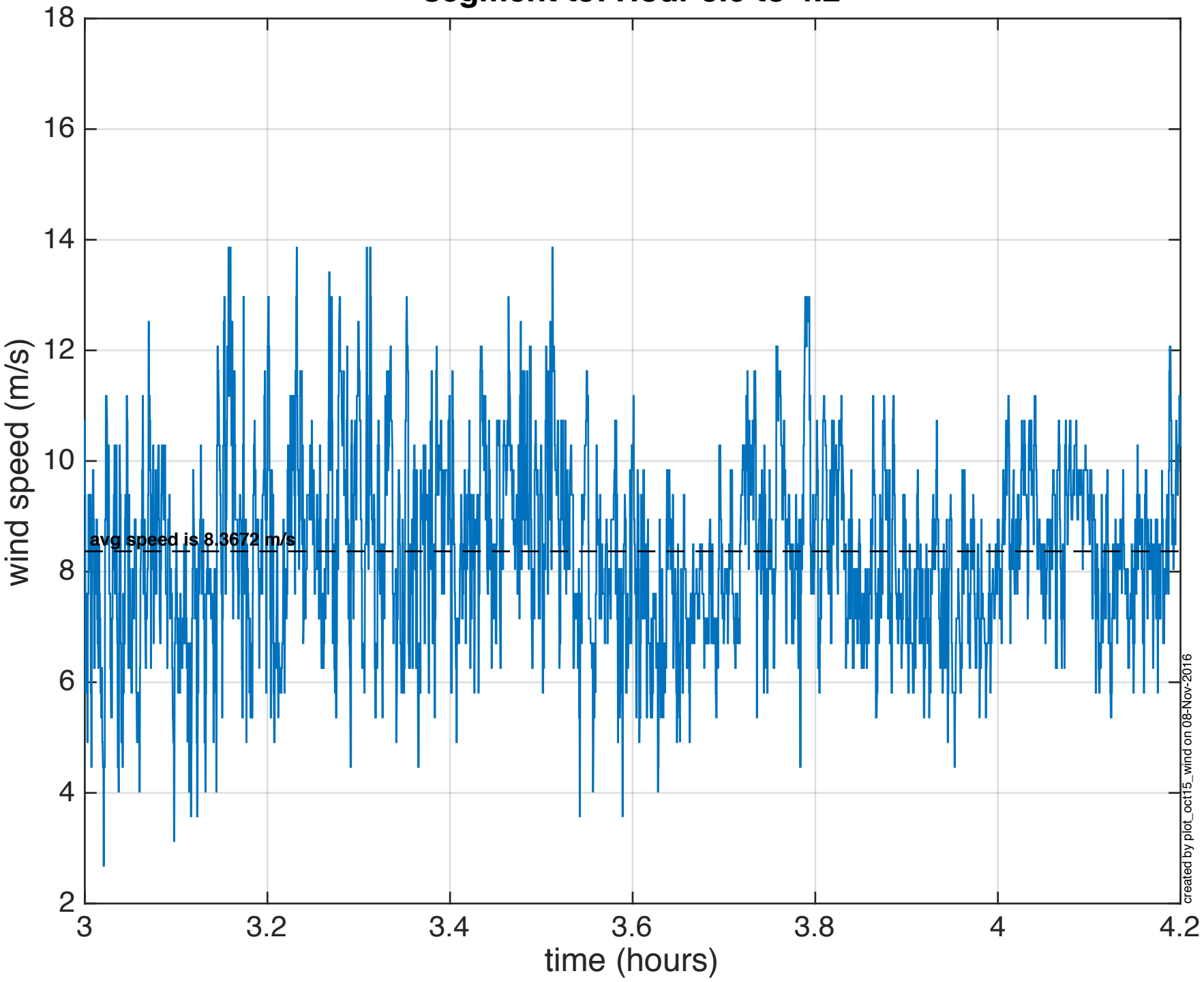
istogram of wind speed and direction, Oct 13 11:00pm Oct 14 - 8:00pm
speed in meters/sec, direction wind is from: 0=north, 90 = east

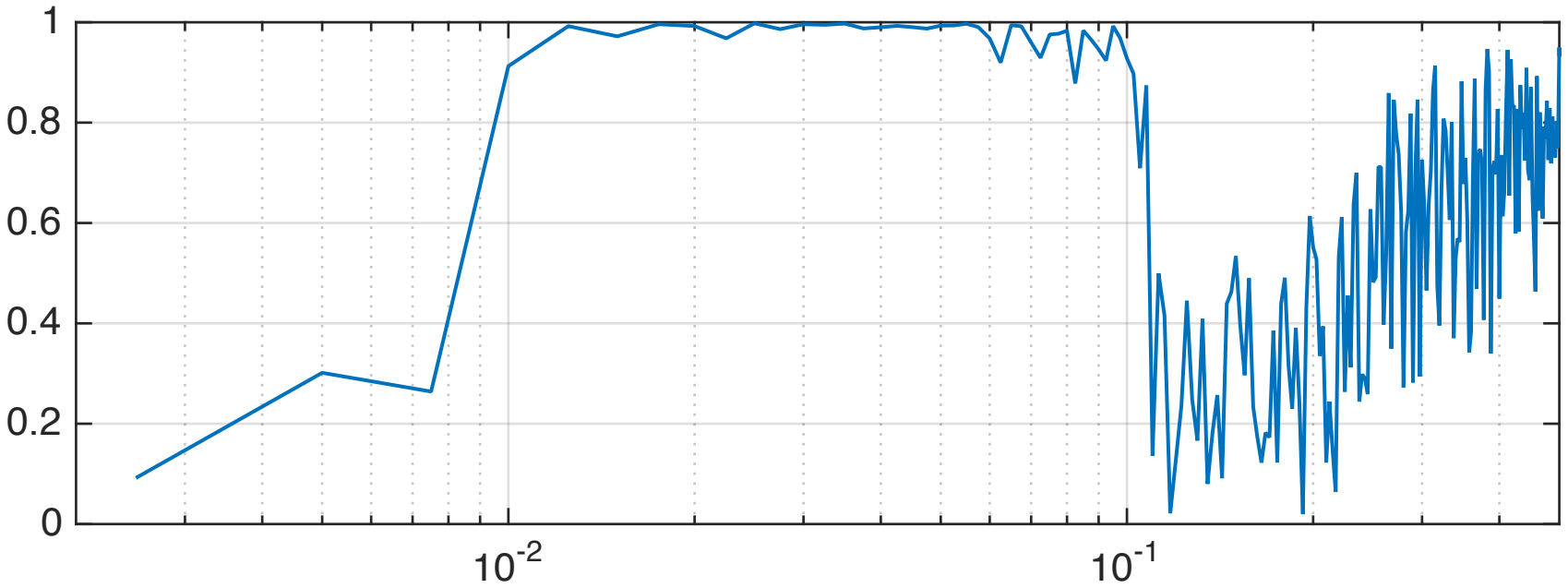


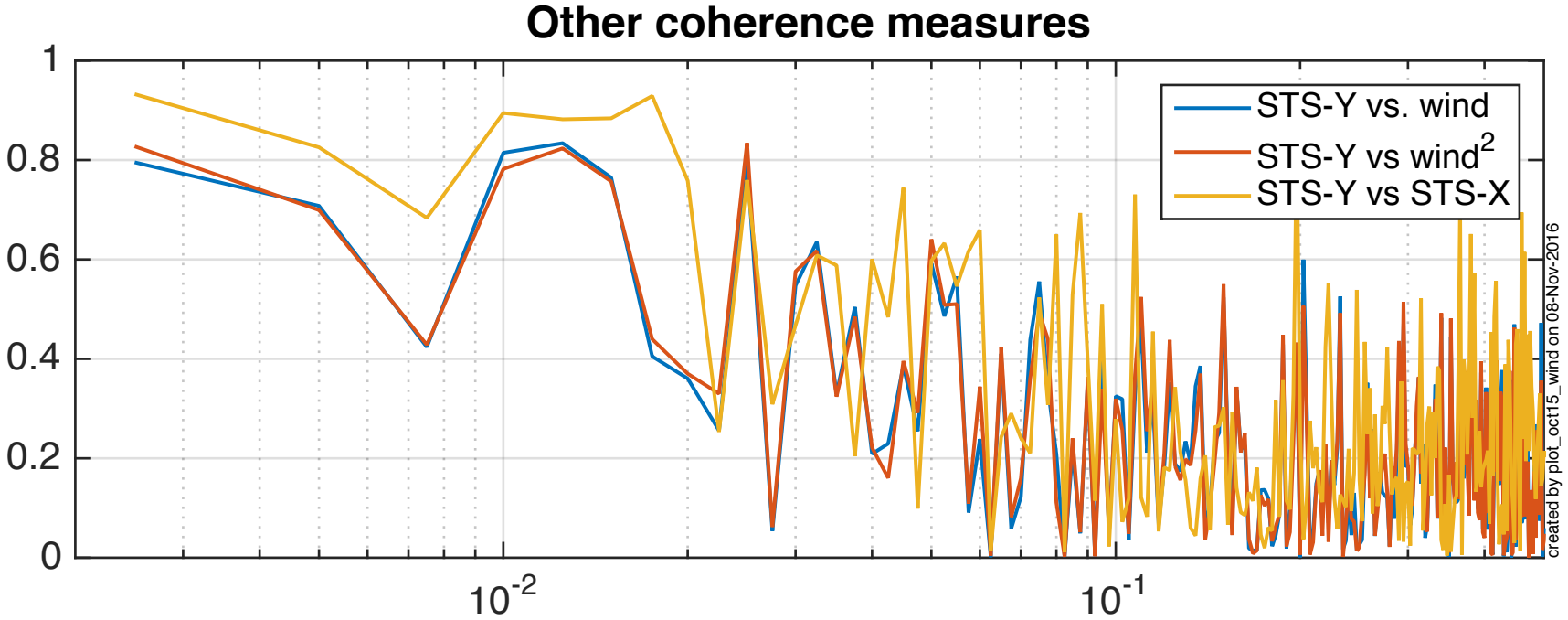

Wind speed at End Y during storm
start ~ 11 pm pacific, Oct 13, 2016
T3
T12
T13
speed (m/s)
time (hours)
0
5
10
15
20
25
0
2
4
6
8
10
12
14
16
18
20
created by workspace on 08-Nov-2016

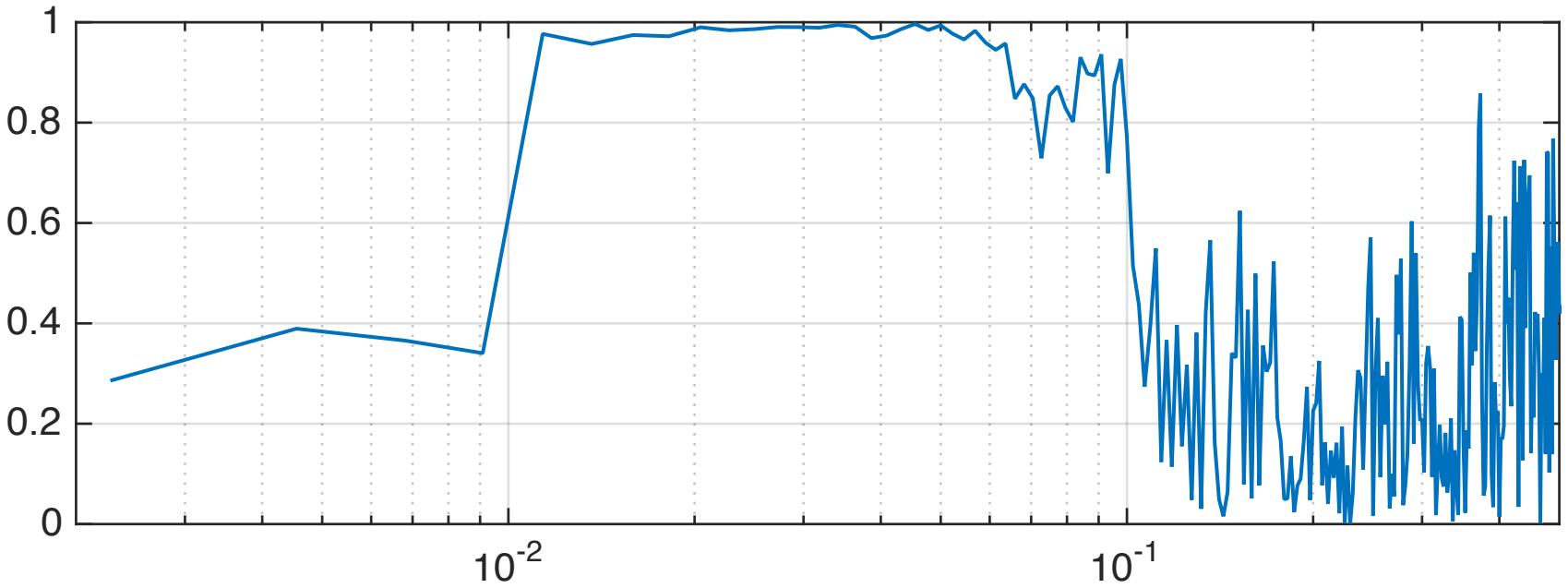

EY Wind speed Oct 13-14.
segment t12: Hour 11.5 to 12.5
wind speed (m/s)
time (hours)
avg speed is 15.1225 m/s
created by plot_oct15_wind on 08-Nov-2016
24
22
20
18
16
14
12
10
8
6
4
11.5
11.6
11.7
11.8
11.9
12
12.1
12.2
12.3
12.4
12.5

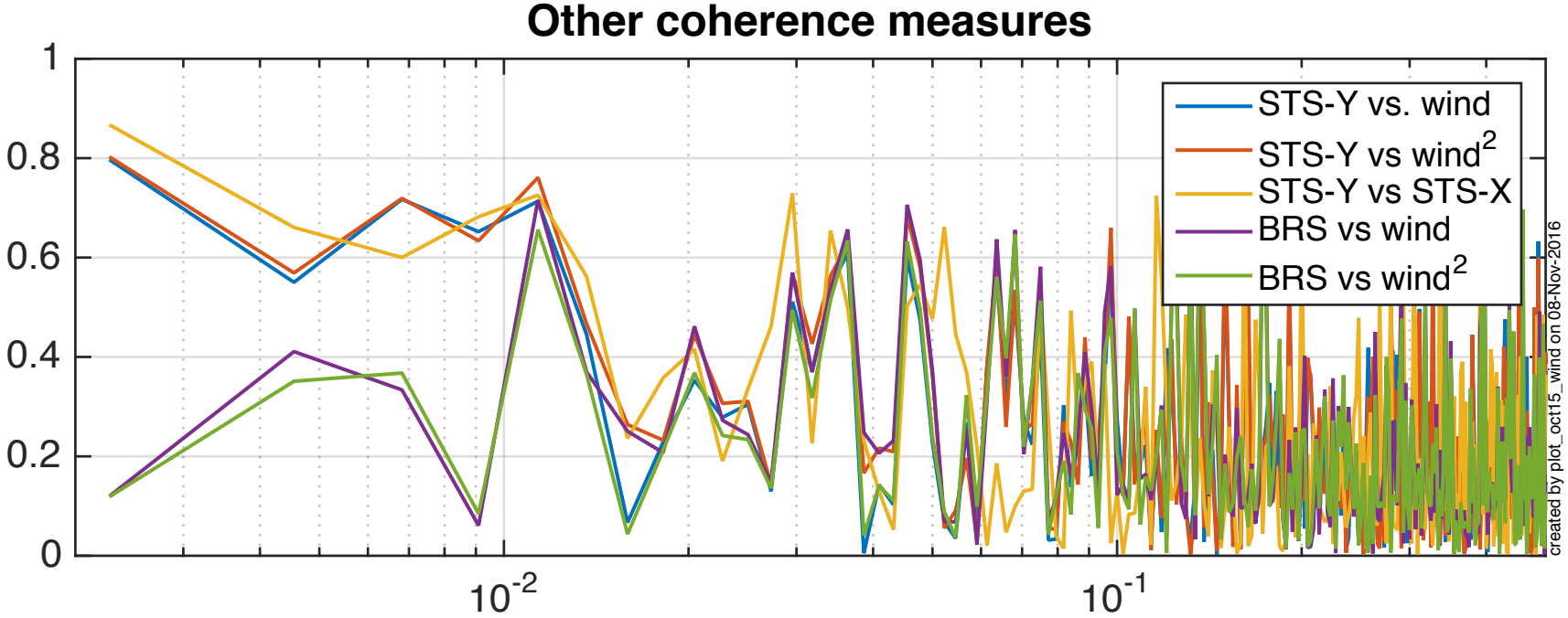

EY Wind speed Oct 13-14.
segment t13: Hour 12.6 to 13.7
wind speed (m/s)
time (hours)
avg speed is 9.2194 m/s
created by plot_oct15_wind on 08-Nov-2016
18
16
14
12
10
8
6
4
2
12.6
12.7
12.8
12.9
13
13.1
13.2
13.3
13.4
13.5
13.6

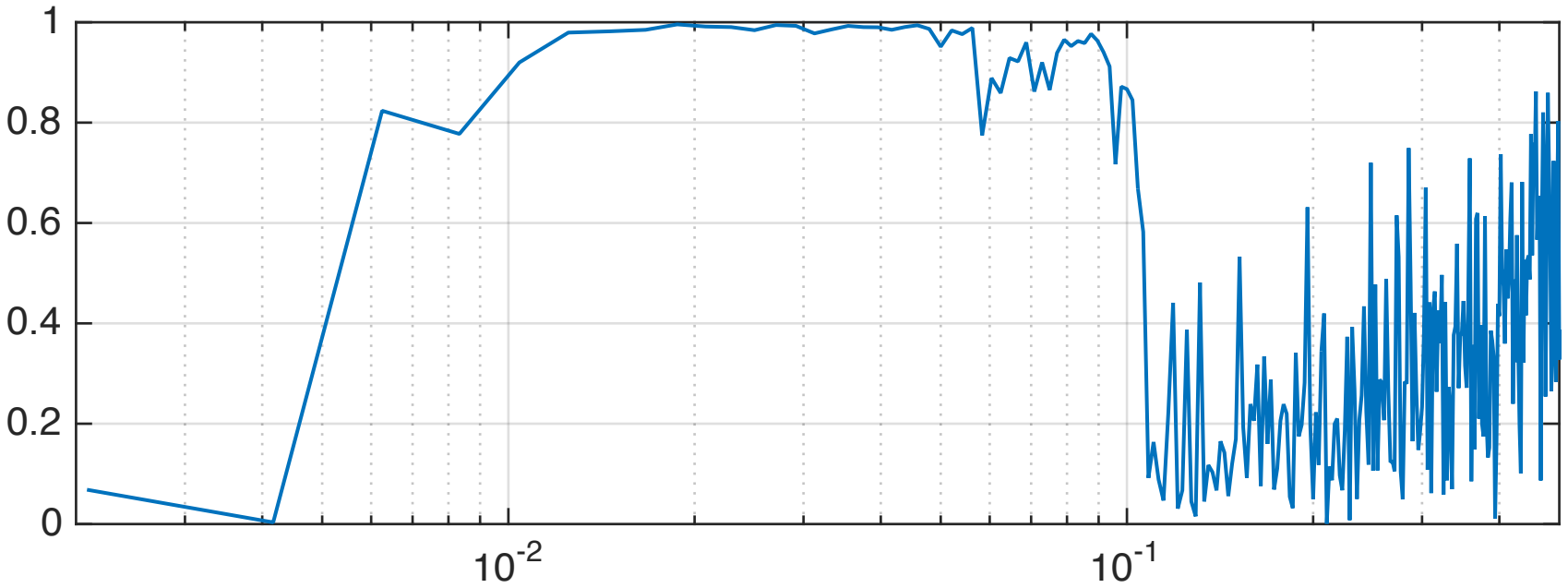

EY Wind speed Oct 13-14.
segment t3: Hour 3.0 to 4.2
wind speed (m/s)
time (hours)
avg speed is 8.3672 m/s
created by plot_oct15_wind on 08-Nov-2016
18
16
14
12
10
8
6
4
2
3
3.2
3.4
3.6
3.8
4
4.2

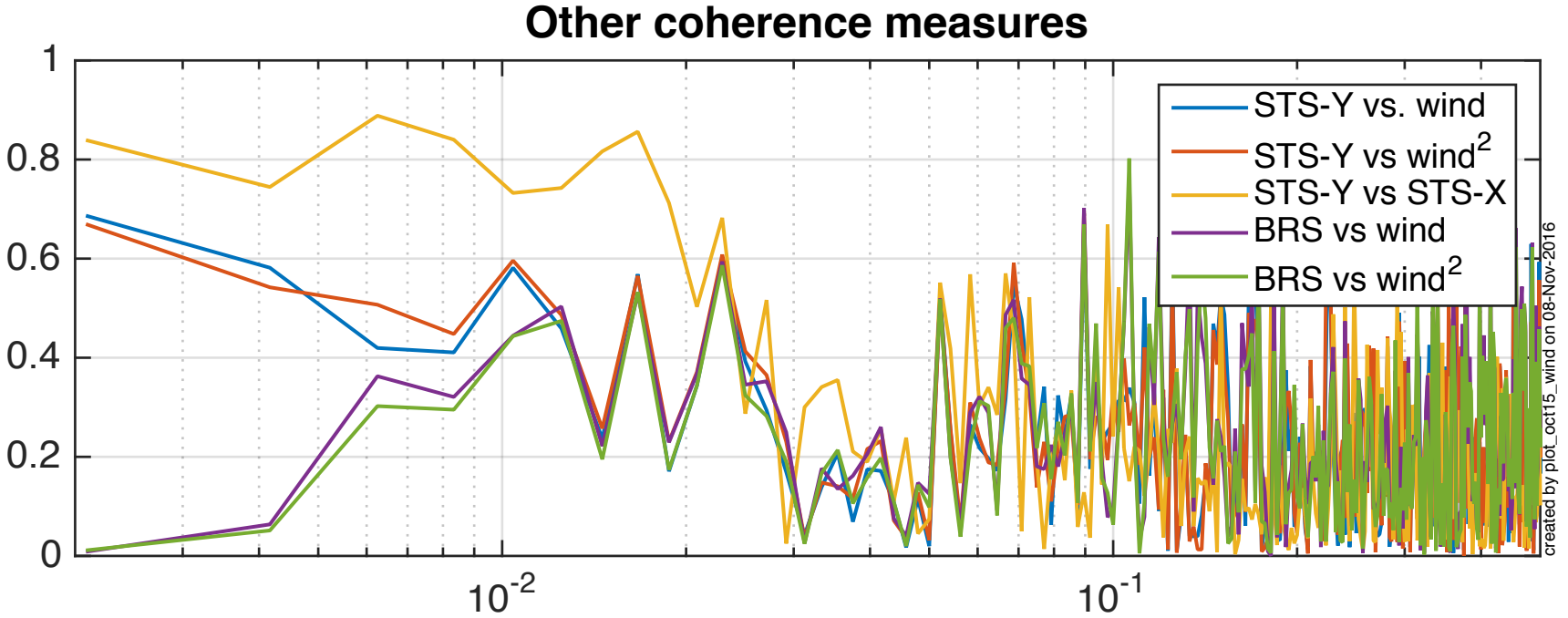

Coherence plots for segment t12 Hour 11.5 to 12.5
STS Y vs. BRS
1
0.8
0.6
0.4
0.2
0
10^-2
10^-1

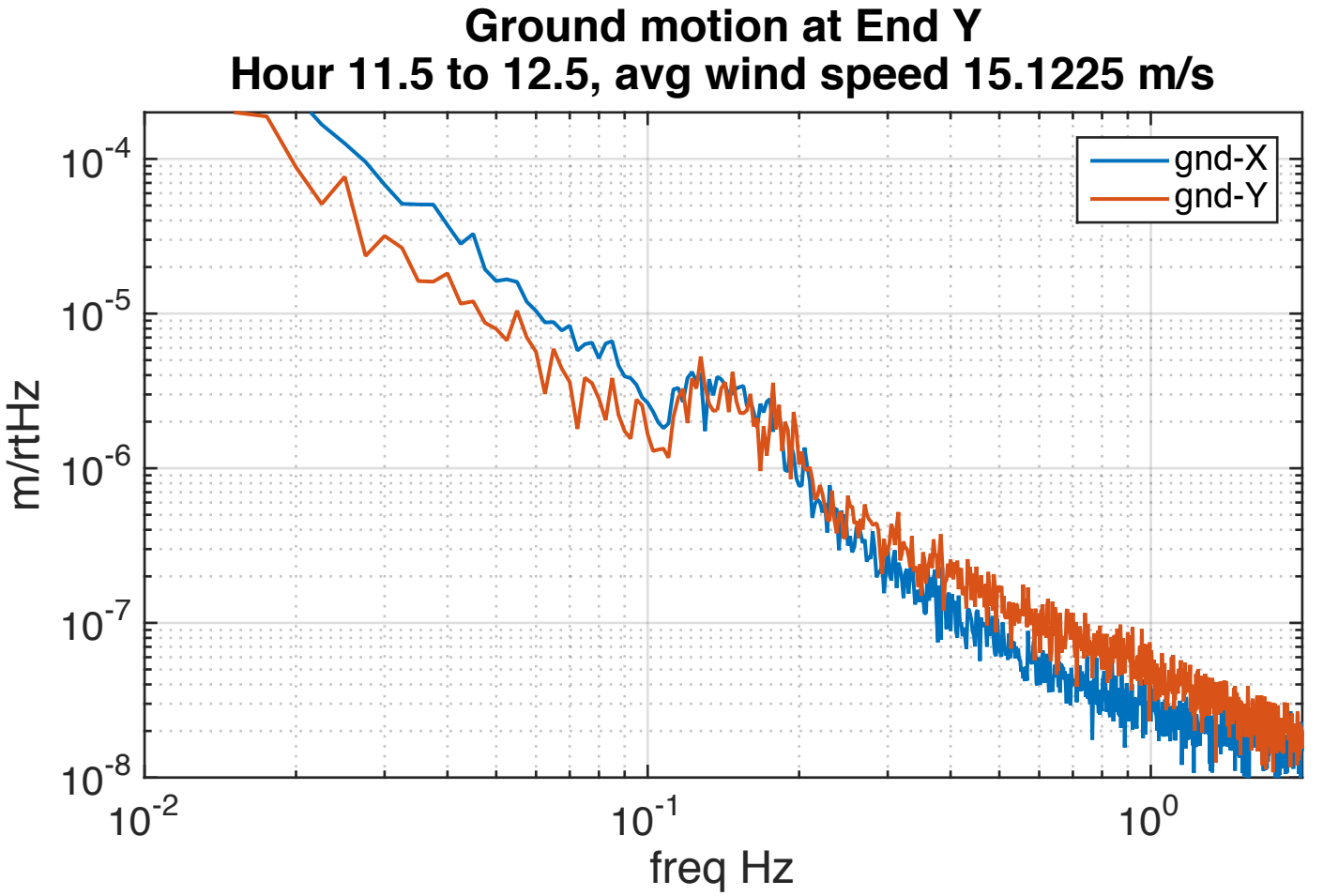

Other coherence measures
1
0.8
0.6
0.4
0.2
0
10^-2
10^-1
STS-Y vs. wind
STS-Y vs wind^2
STS-Y vs STS-X
created by plot_oct15_wind on 08-Nov-2016

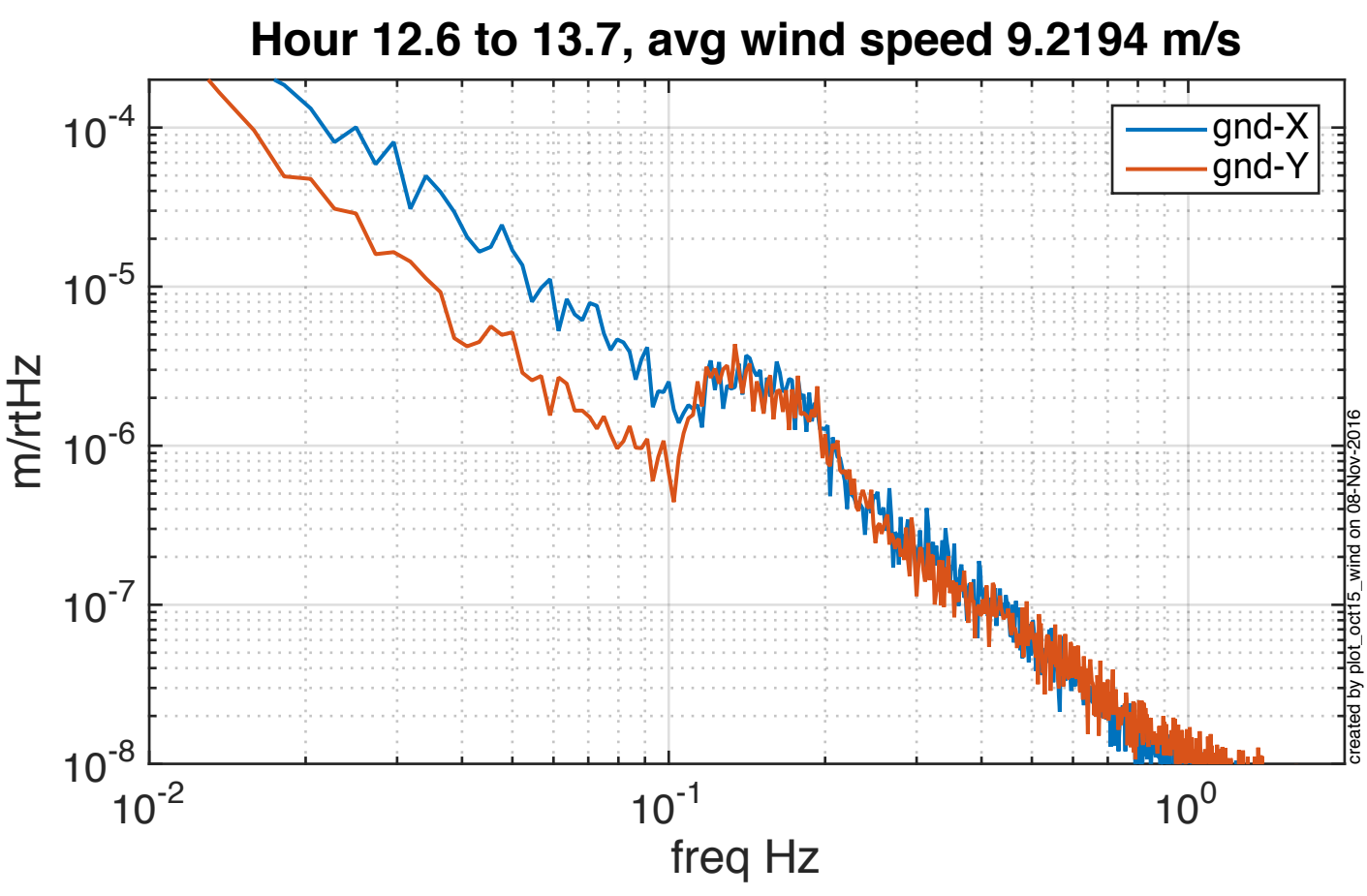

Coherence plots for segment t13 Hour 12.6 to 13.7
STS Y vs. BRS
1
0.8
0.6
0.4
0.2
0
10^-2
10^-1

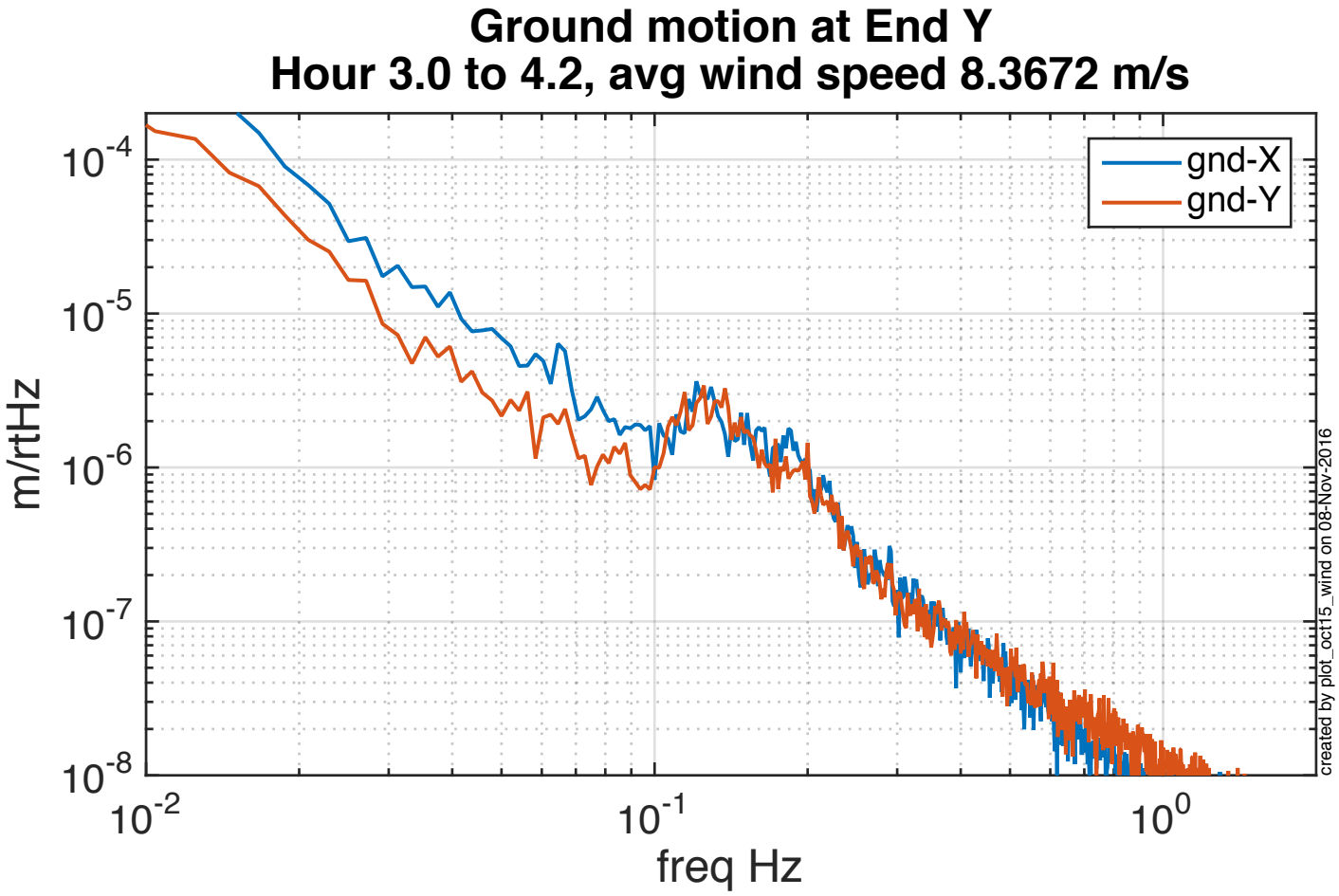

Other coherence measures
1
0.8
0.6
0.4
0.2
0
10^-2
10^-1
STS-Y vs. wind
STS-Y vs wind^2
STS-Y vs STS-X
BRS vs wind
BRS vs wind^2
created by plot_oct15_wind on 08-Nov-2016

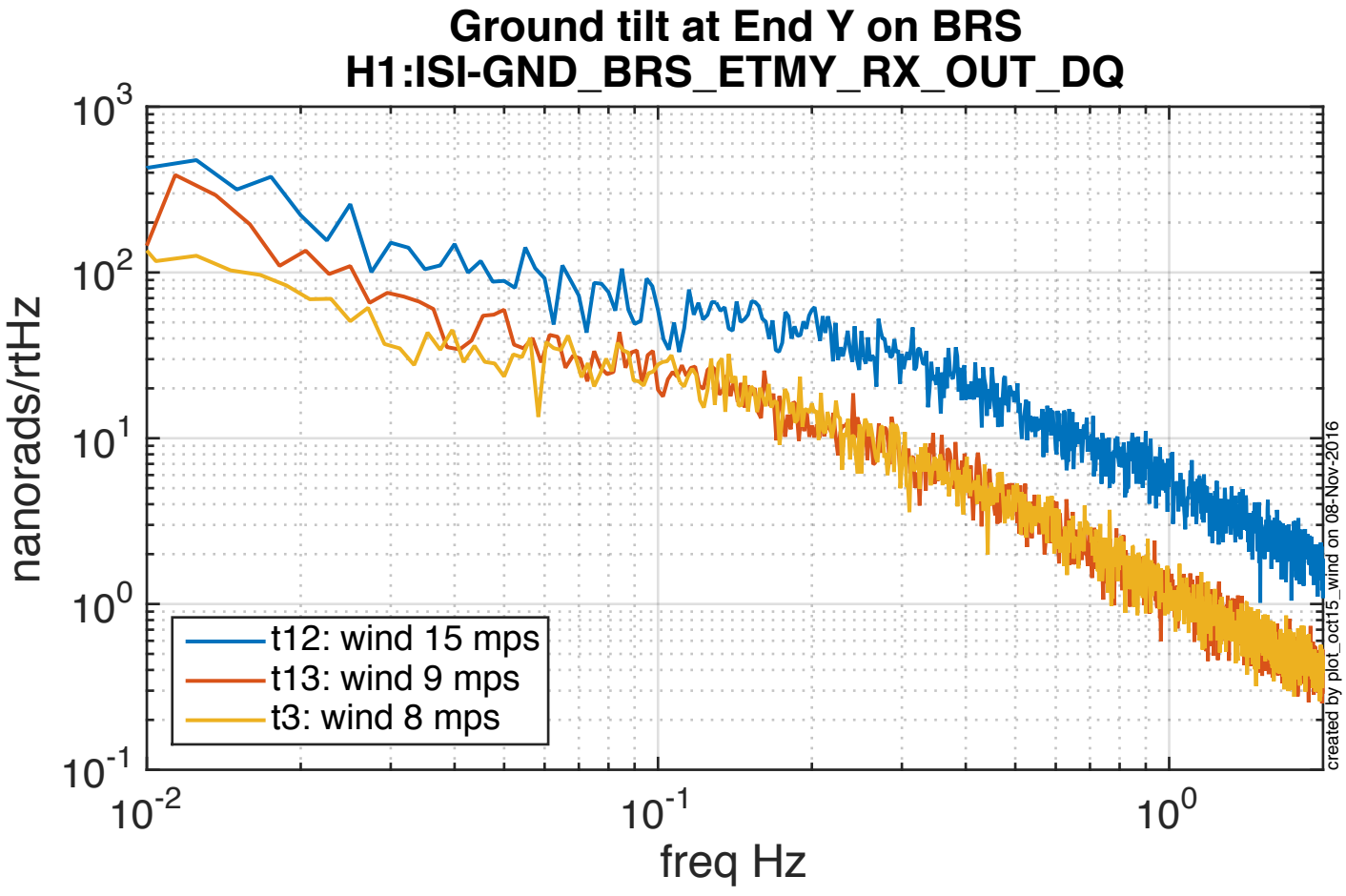

Coherence plots for segment t3 Hour 3.0 to 4.2
STS Y vs. BRS
1
0.8
0.6
0.4
0.2
0
10-2
10-1

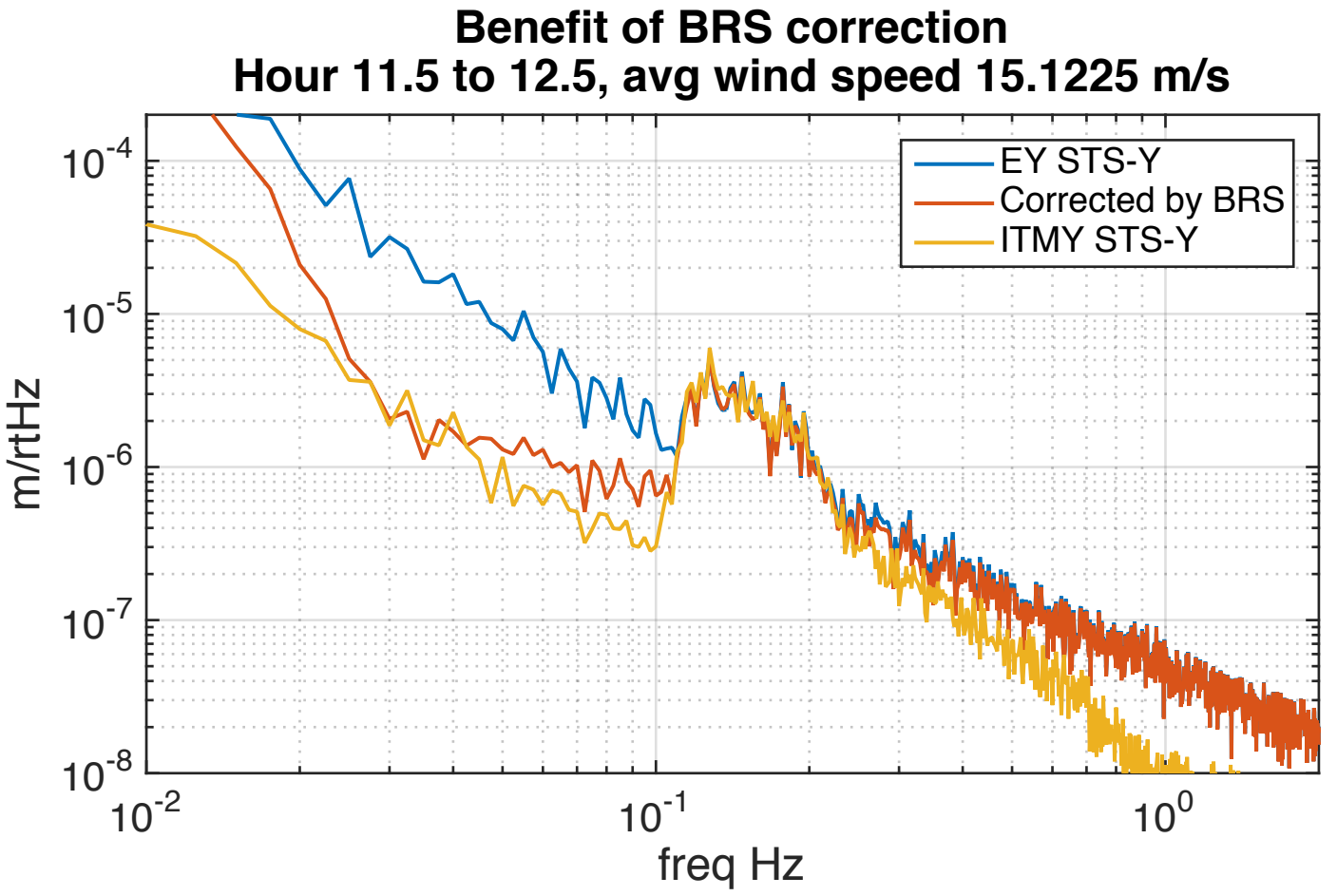

Other coherence measures
1
0.8
0.6
0.4
0.2
0
10-2
10-1
STS-Y vs. wind
STS-Y vs wind2
STS-Y vs STS-X
BRS vs wind
BRS vs wind2
created by plot_oct15_wind on 08-Nov-2016

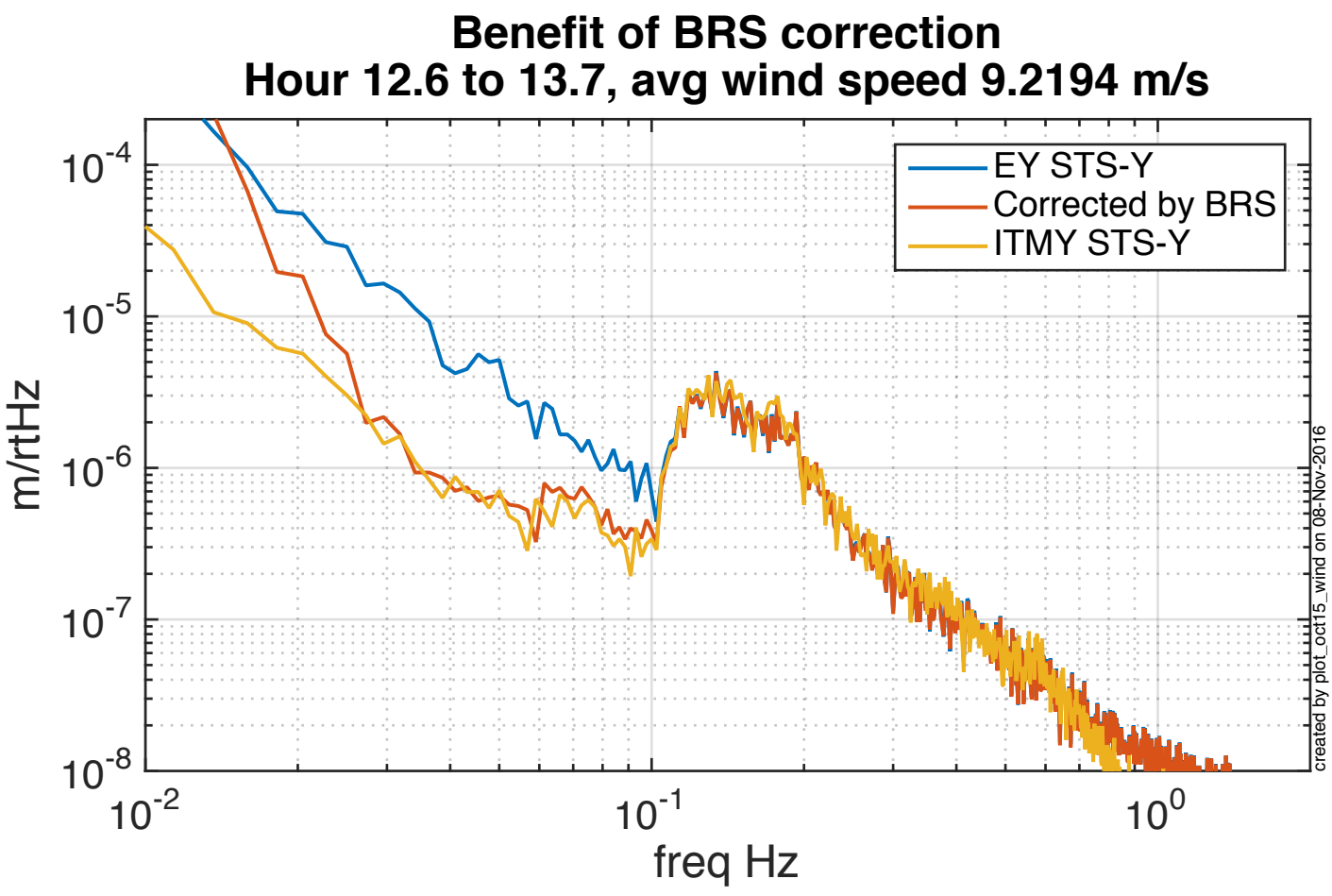

Ground motion at End Y
Hour 11.5 to 12.5, avg wind speed 15.1225 m/s
gnd-X
gnd-Y
m/rtHz
freq Hz
10^-4
10^-5
10^-6
10^-7
10^-8
10^-2
10^-1
10^0

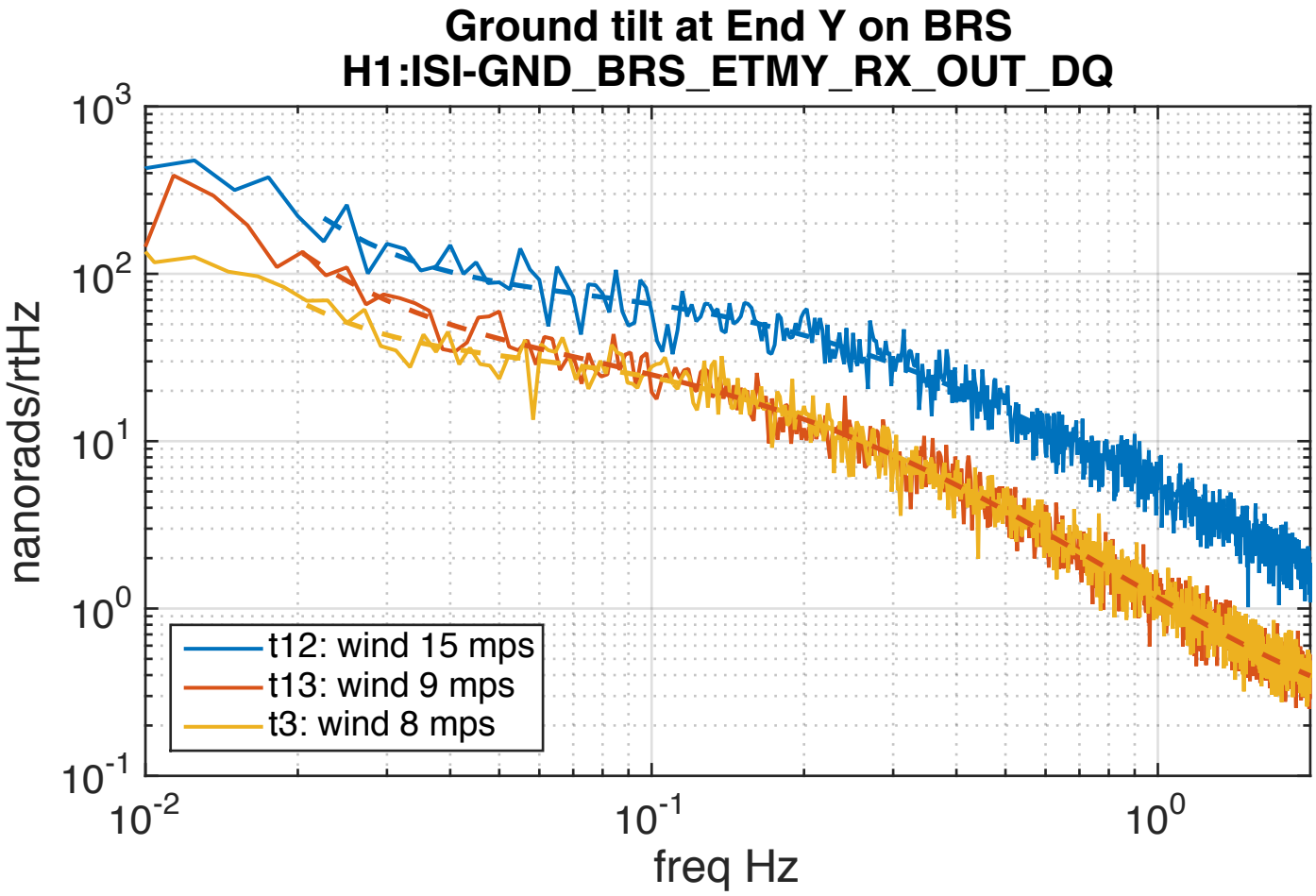

Hour 12.6 to 13.7, avg wind speed 9.2194 m/s
gnd-X
gnd-Y
m/rtHz
freq Hz
10^-4
10^-5
10^-6
10^-7
10^-8
10^-2
10^-1
10^0
created by plot_oct15_wind on 08-Nov-2016

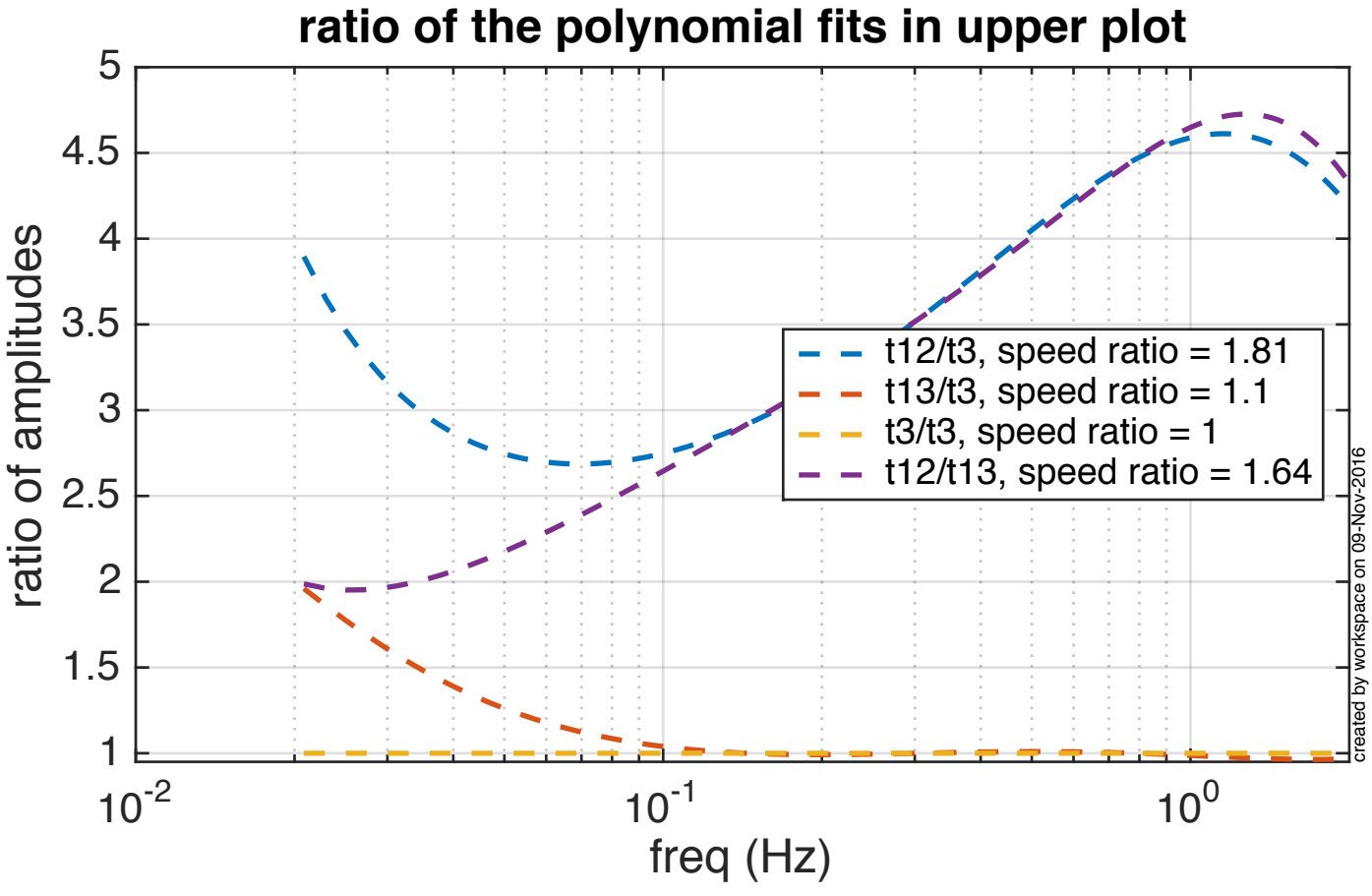

Ground motion at End Y
Hour 3.0 to 4.2, avg wind speed 8.3672 m/s
gnd-X
gnd-Y
m/rtHz
freq Hz
created by plot_oct15_wind on 08-Nov-2016

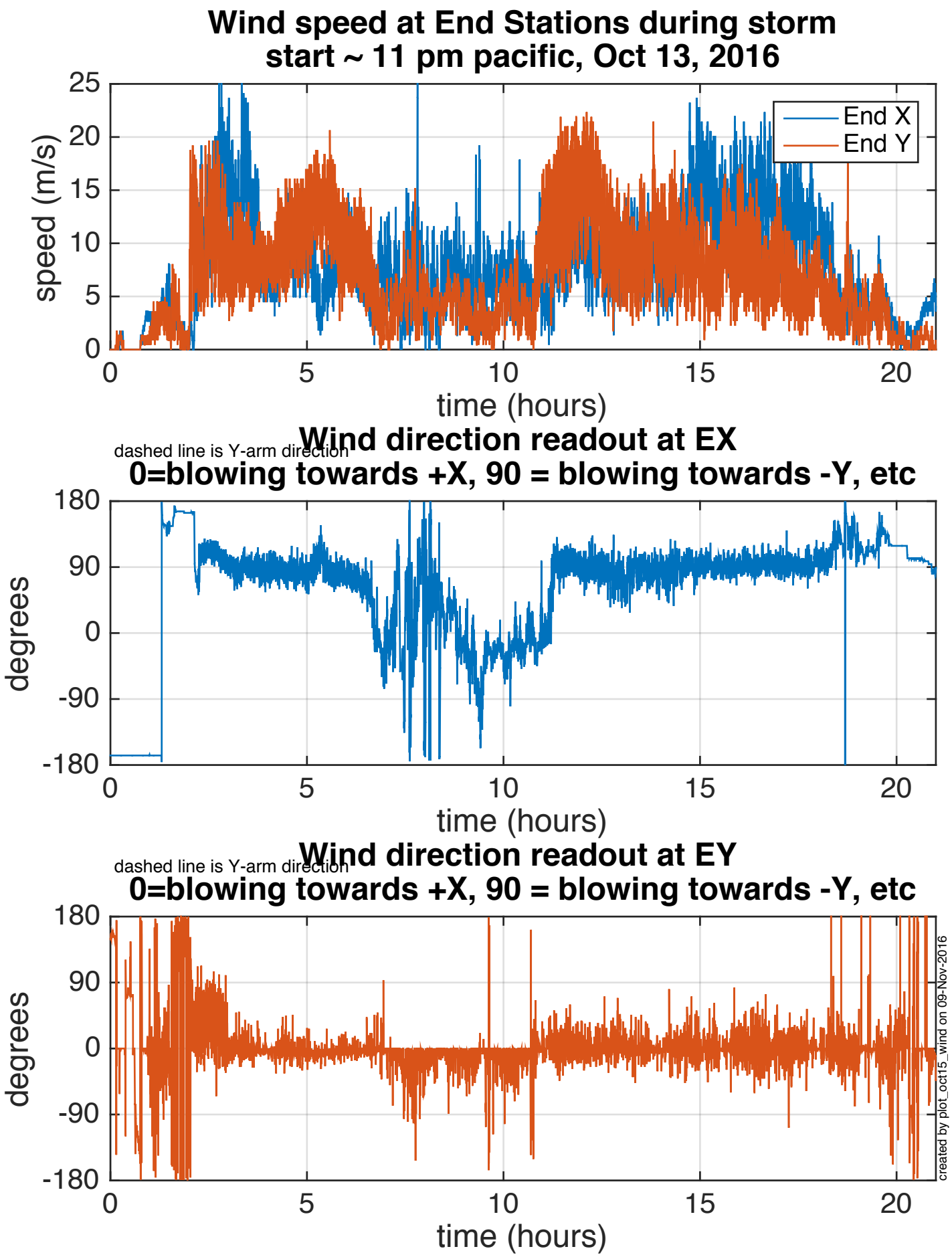

Ground tilt at End Y on BRS
H1:ISI-GND_BRS_ETMY_RX_OUT_DQ
t12: wind 15 mps
t13: wind 9 mps
t3: wind 8 mps
nanorads/rtHz
freq Hz
created by plot_oct15_wind on 08-Nov-2016


Benefit of BRS correction
Hour 11.5 to 12.5, avg wind speed 15.1225 m/s
EY STS-Y
Corrected by BRS
ITMY STS-Y
m/rtHz
freq Hz


Benefit of BRS correction
Hour 12.6 to 13.7, avg wind speed 9.2194 m/s
EY STS-Y
Corrected by BRS
ITMY STS-Y
m/rtHz
freq Hz
created by plot_oct15_wind on 08-Nov-2016


Ground tilt at End Y on BRS
H1:ISI-GND_BRS_ETMY_RX_OUT_DQ
nanorads/rtHz
freq Hz
t12: wind 15 mps
t13: wind 9 mps
t3: wind 8 mps


ratio of the polynomial fits in upper plot
ratio of amplitudes
freq (Hz)
t12/t3, speed ratio = 1.81
t13/t3, speed ratio = 1.1
t3/t3, speed ratio = 1
t12/t13, speed ratio = 1.64
created by workspace on 09-Nov-2016


Wind speed at End Stations during storm
start ~ 11 pm pacific, Oct 13, 2016
speed (m/s)
time (hours)
End X
End Y
Wind direction readout at EX
dashed line is Y-arm direction
0=blowing towards +X, 90 = blowing towards -Y, etc
degrees
time (hours)
Wind direction readout at EY
dashed line is Y-arm direction
0=blowing towards +X, 90 = blowing towards -Y, etc
degrees
time (hours)
created by plot_oct15_wind on 09-Nov-2016