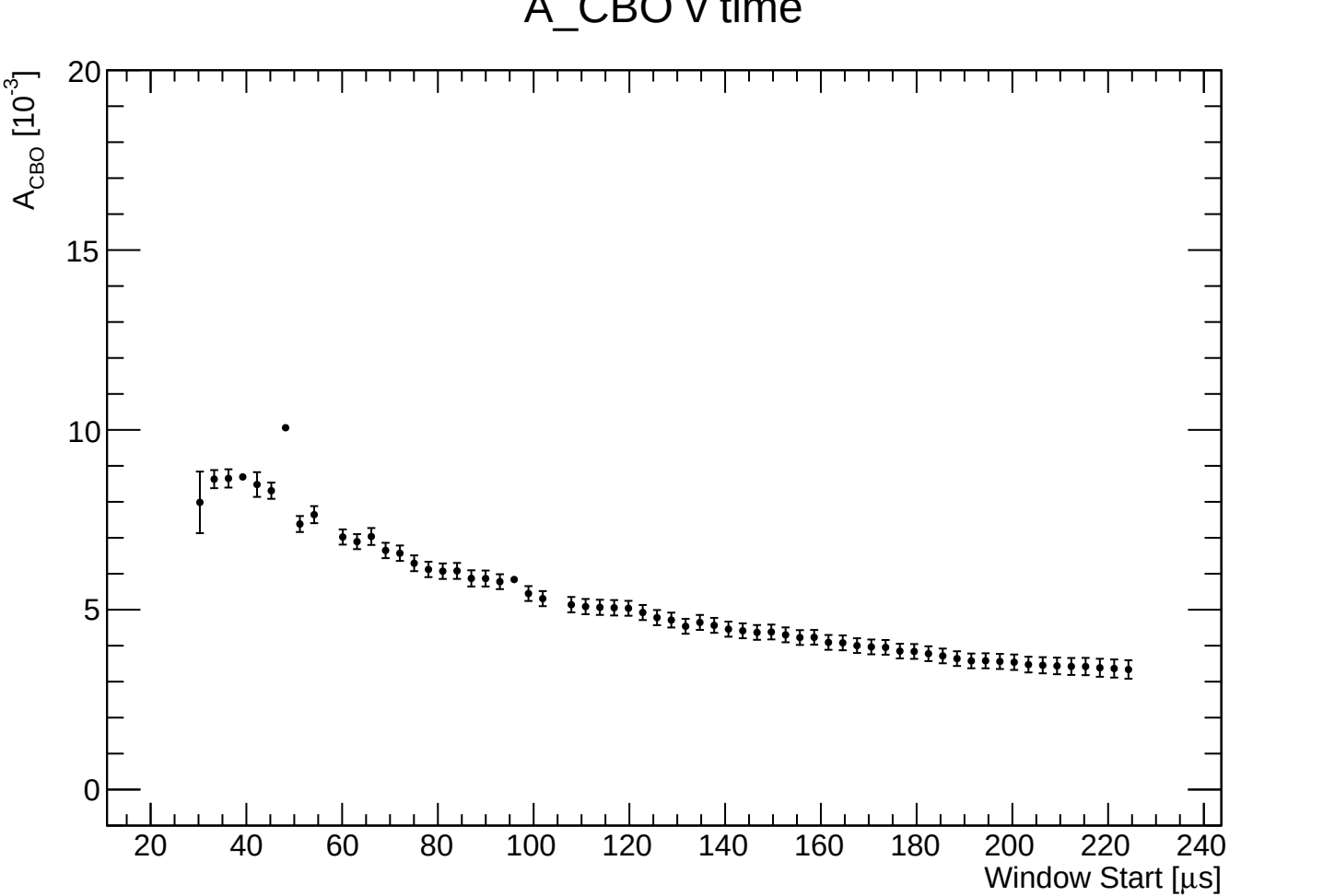
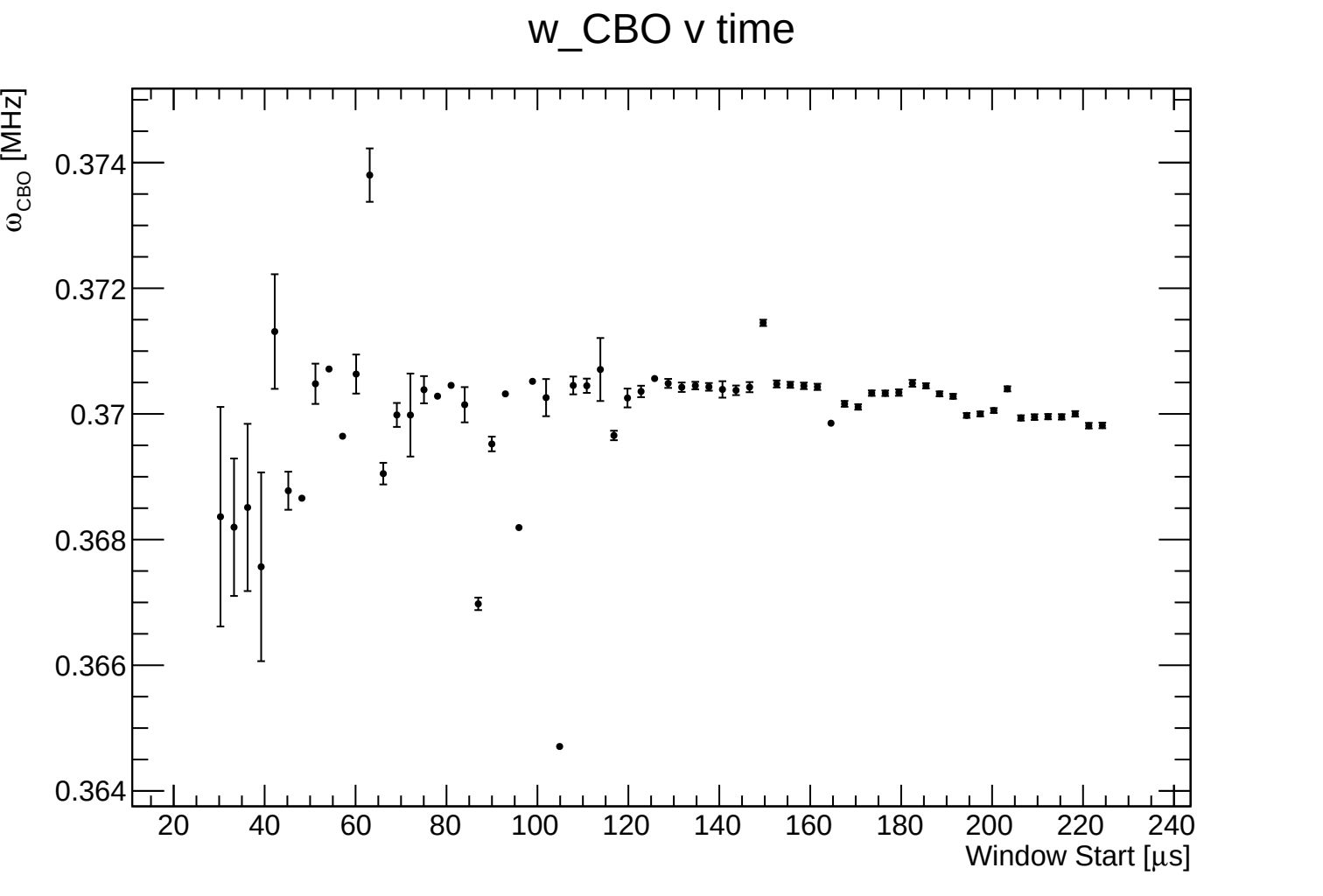
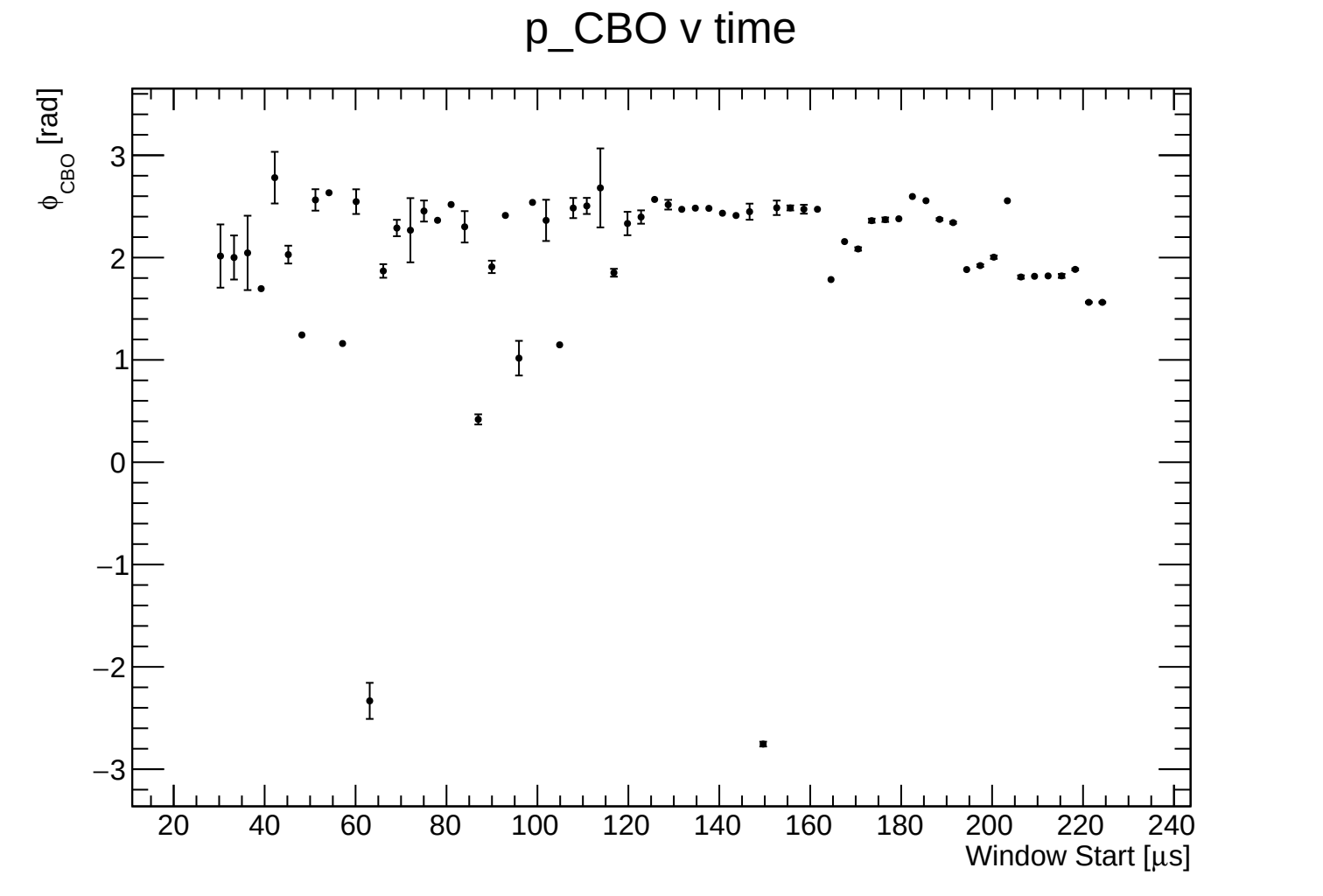
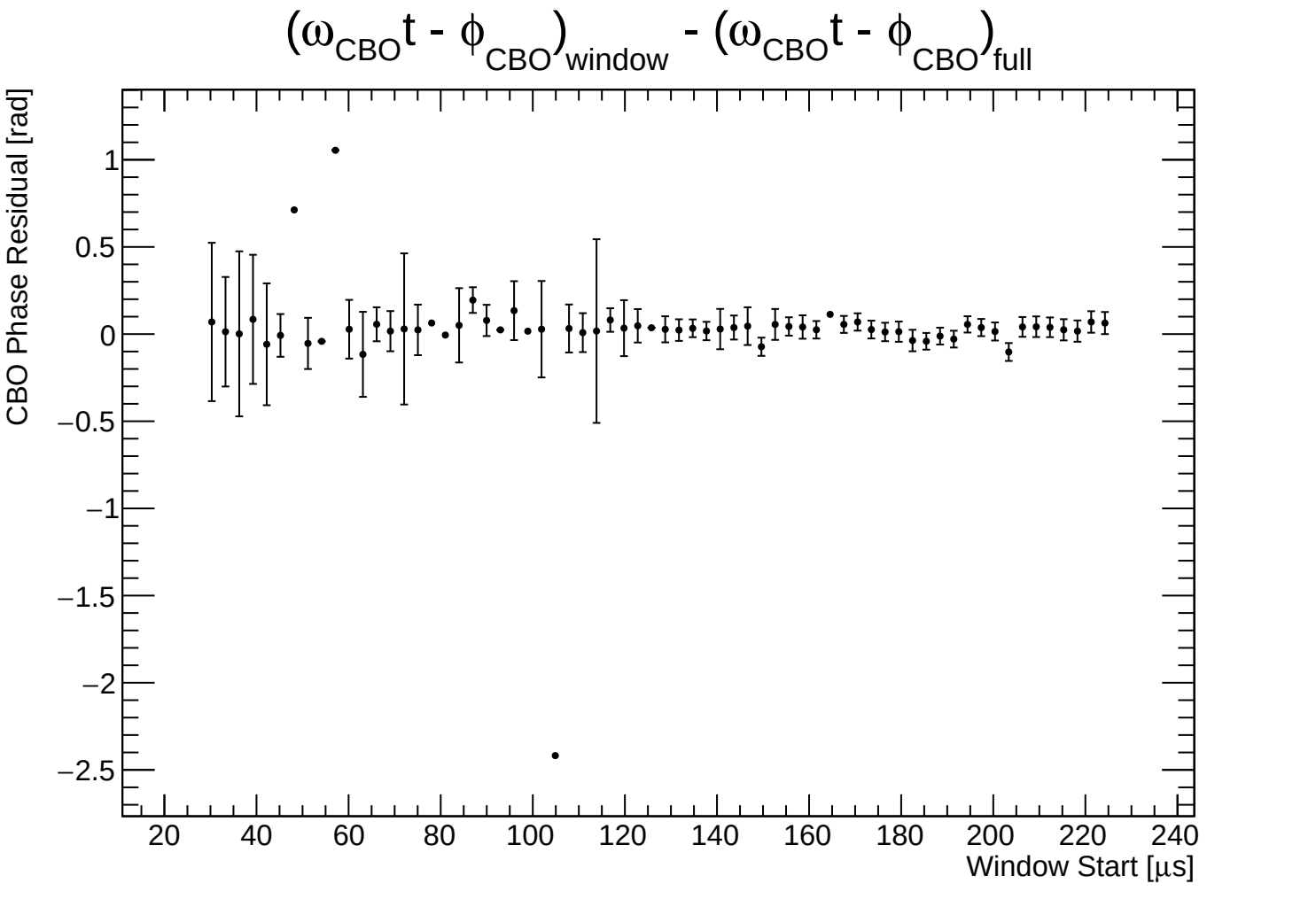
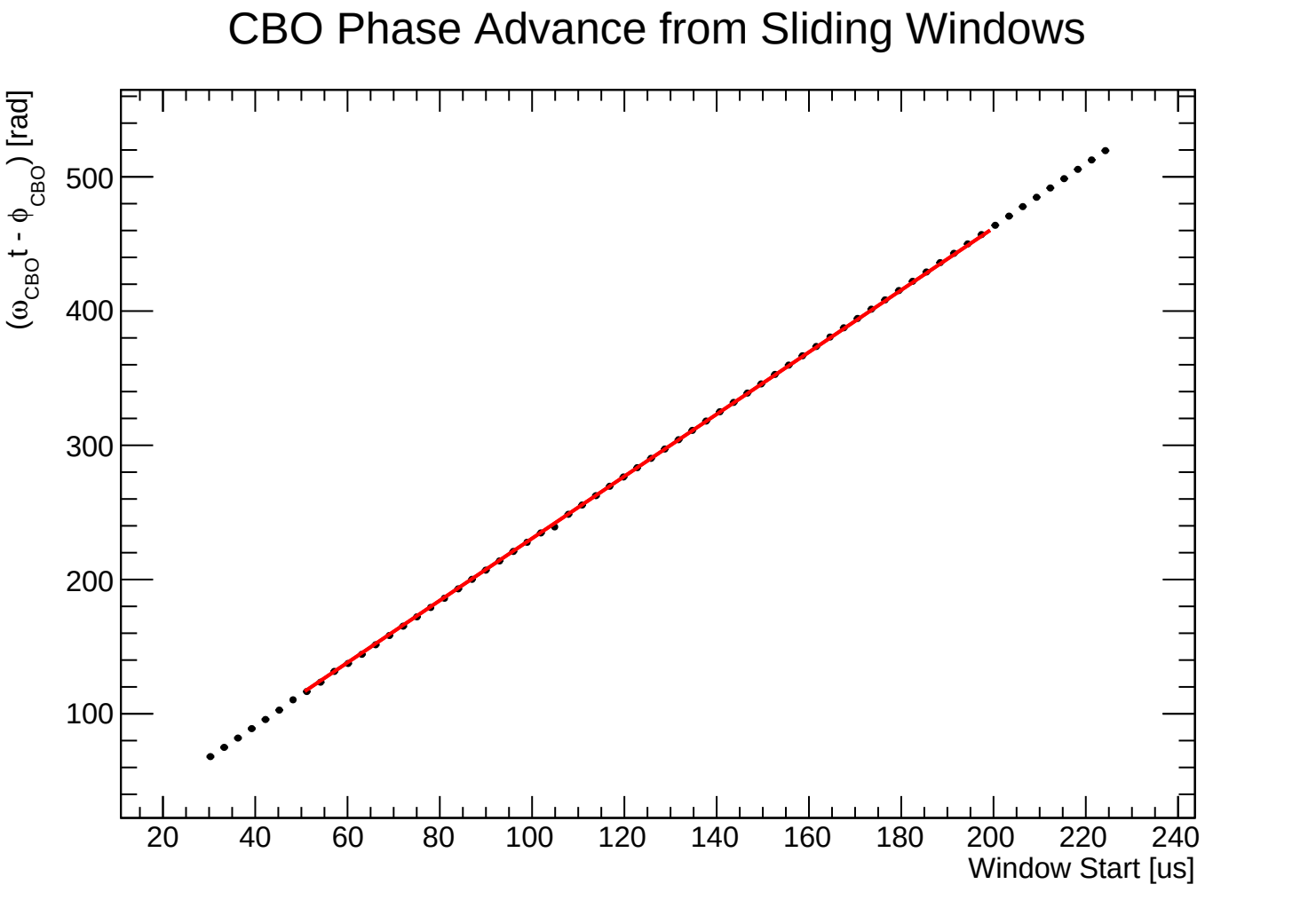
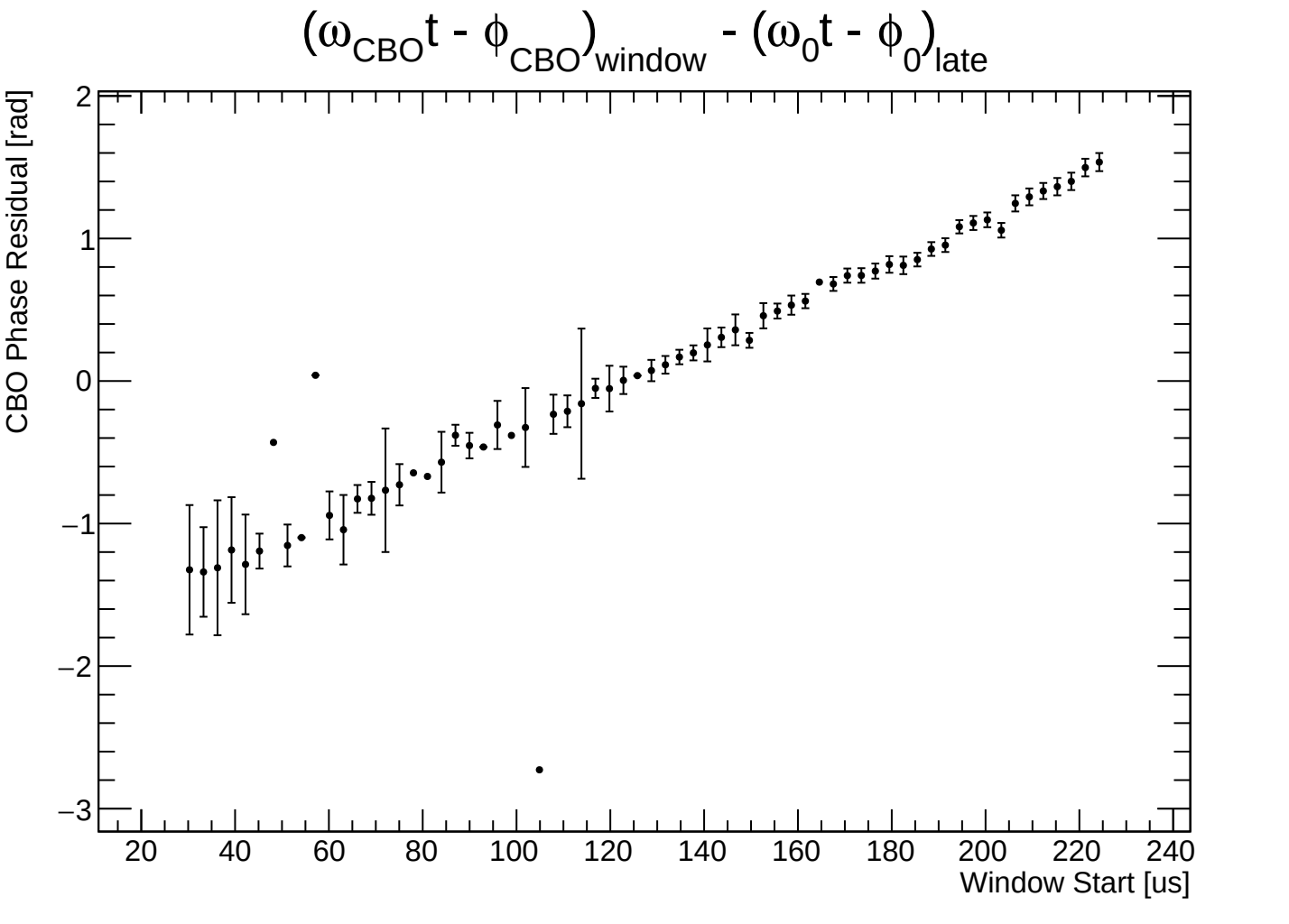

A_CBO v time
A_CBO [10^-3]
20
15
10
5
0
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]

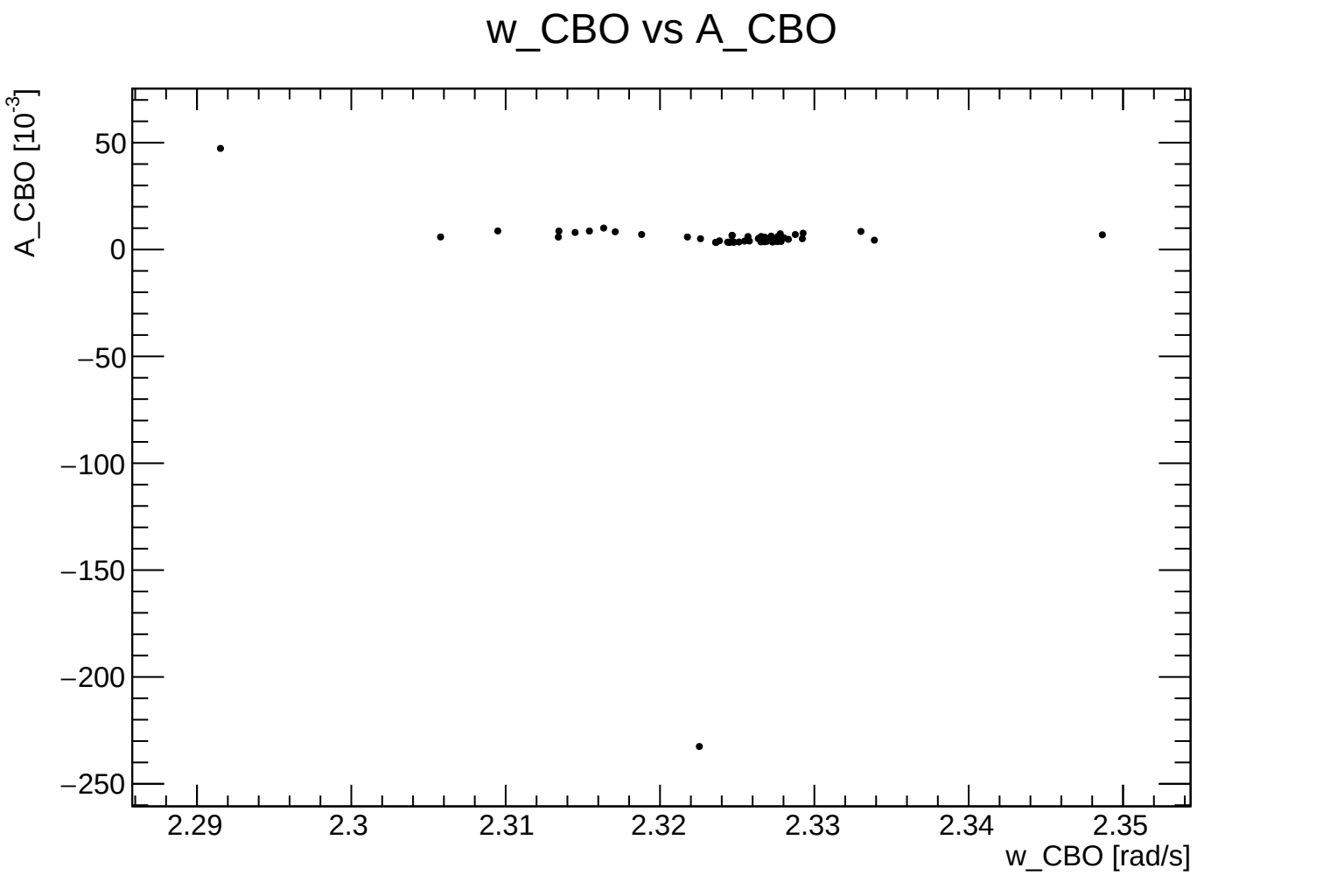

w_CBO v time
ω_{CBO} [MHz]
0.374
0.372
0.37
0.368
0.366
0.364
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]

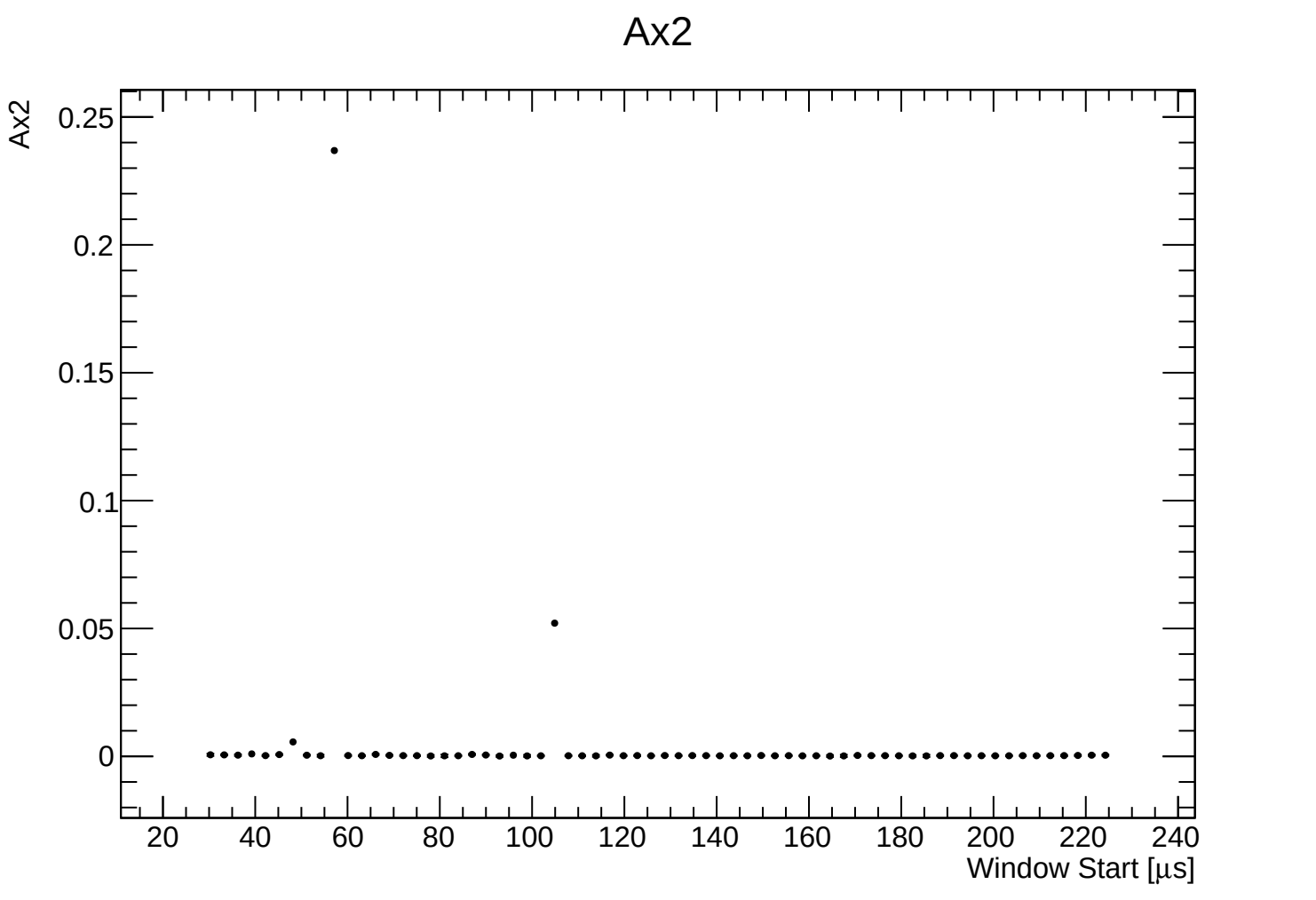

p_CBO v time
ϕ_{CBO} [rad]
3
2
1
0
−1
−2
−3
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]

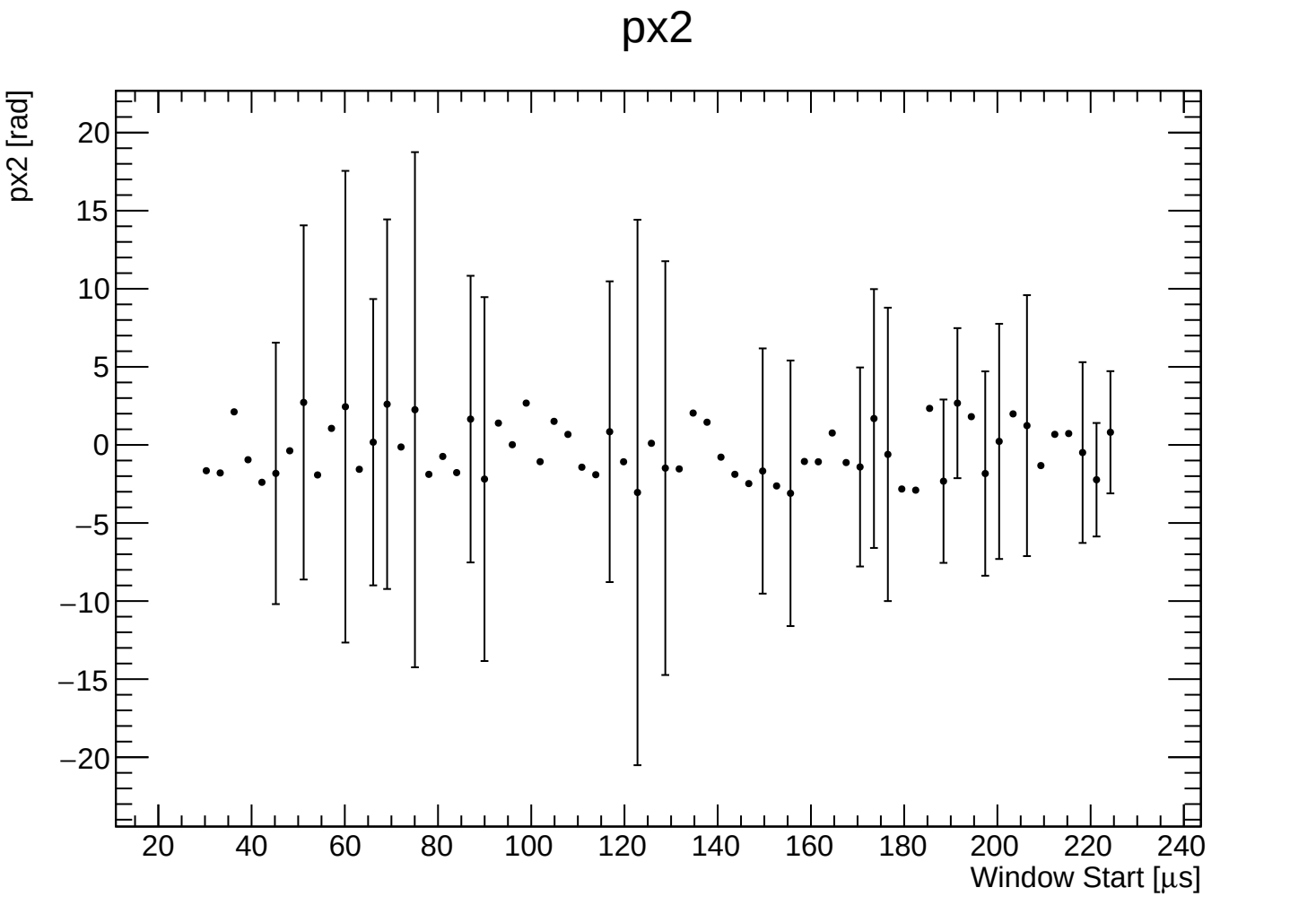

$(\omega_{CBO}t - \phi_{CBO})_{window} - (\omega_{CBO}t - \phi_{CBO})_{full}$
CBO Phase Residual [rad]
1
0.5
0
−0.5
−1
−1.5
−2
−2.5
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]

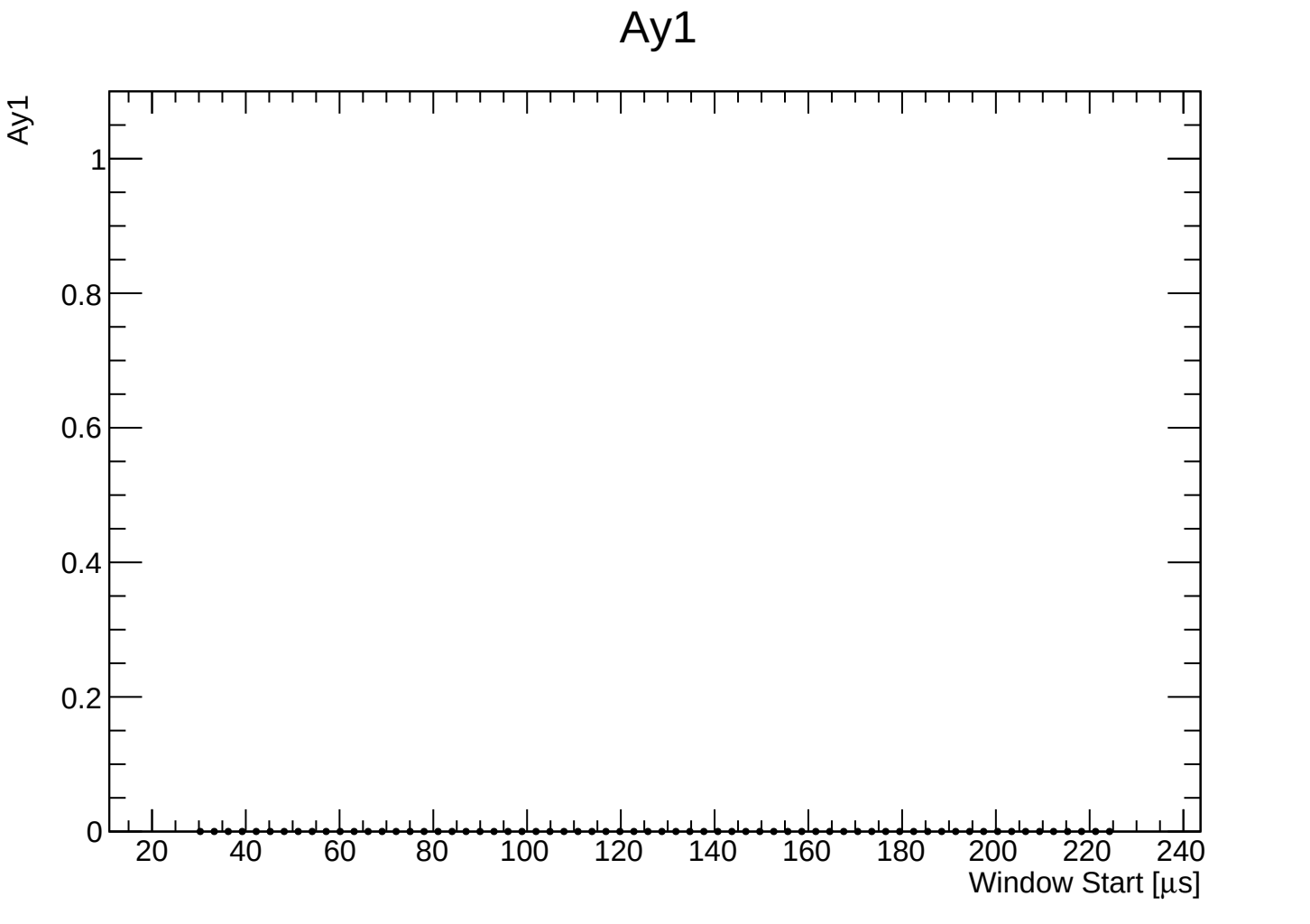

CBO Phase Advance from Sliding Windows
$(\omega_{CBO}t - \phi_{CBO})$ [rad]
100
200
300
400
500
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [us]

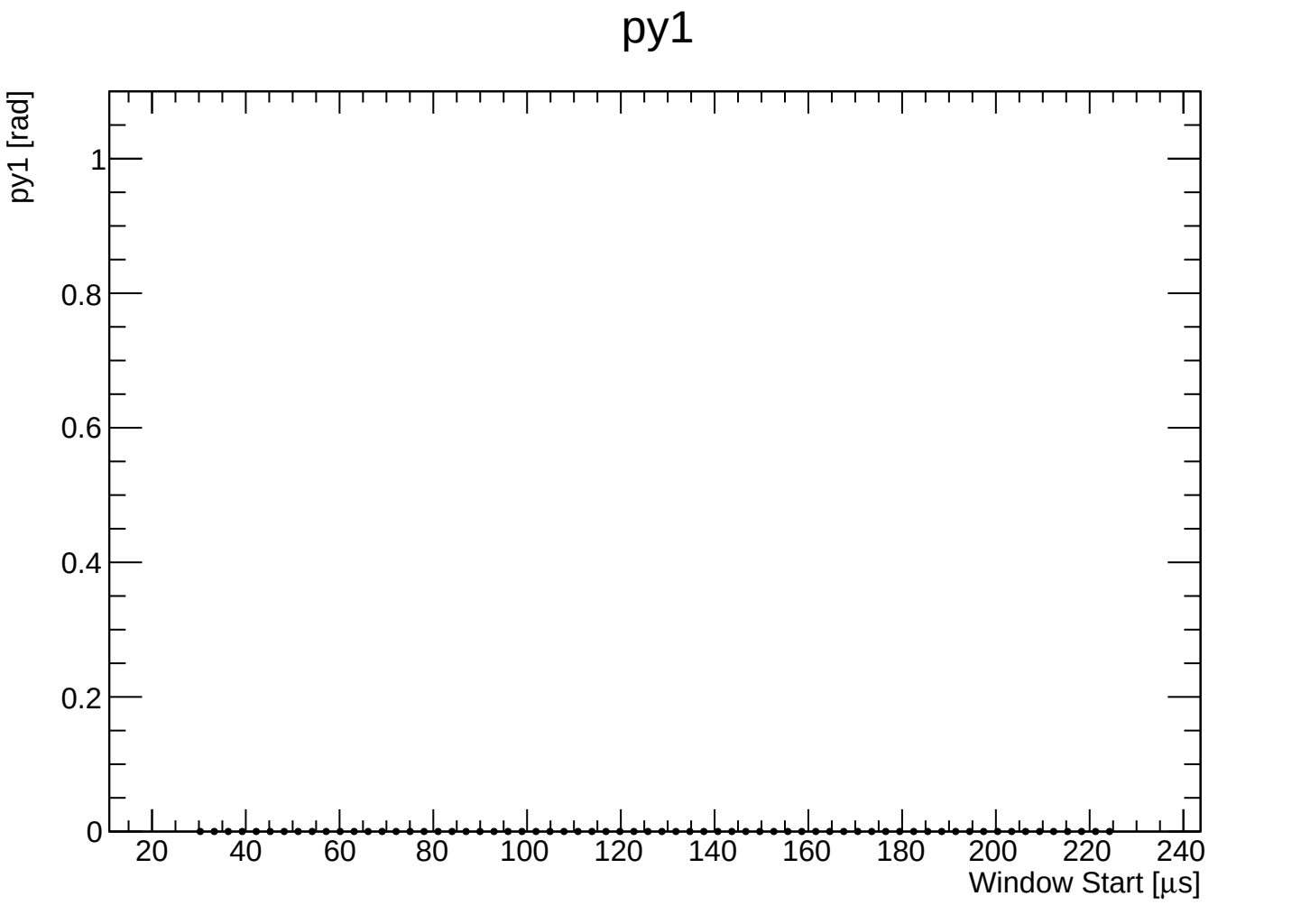

$(\omega_{CBO}t - \phi_{CBO})_{window} - (\omega_0 t - \phi_0)_{late}$
CBO Phase Residual [rad]
2
1
0
−1
−2
−3
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [us]

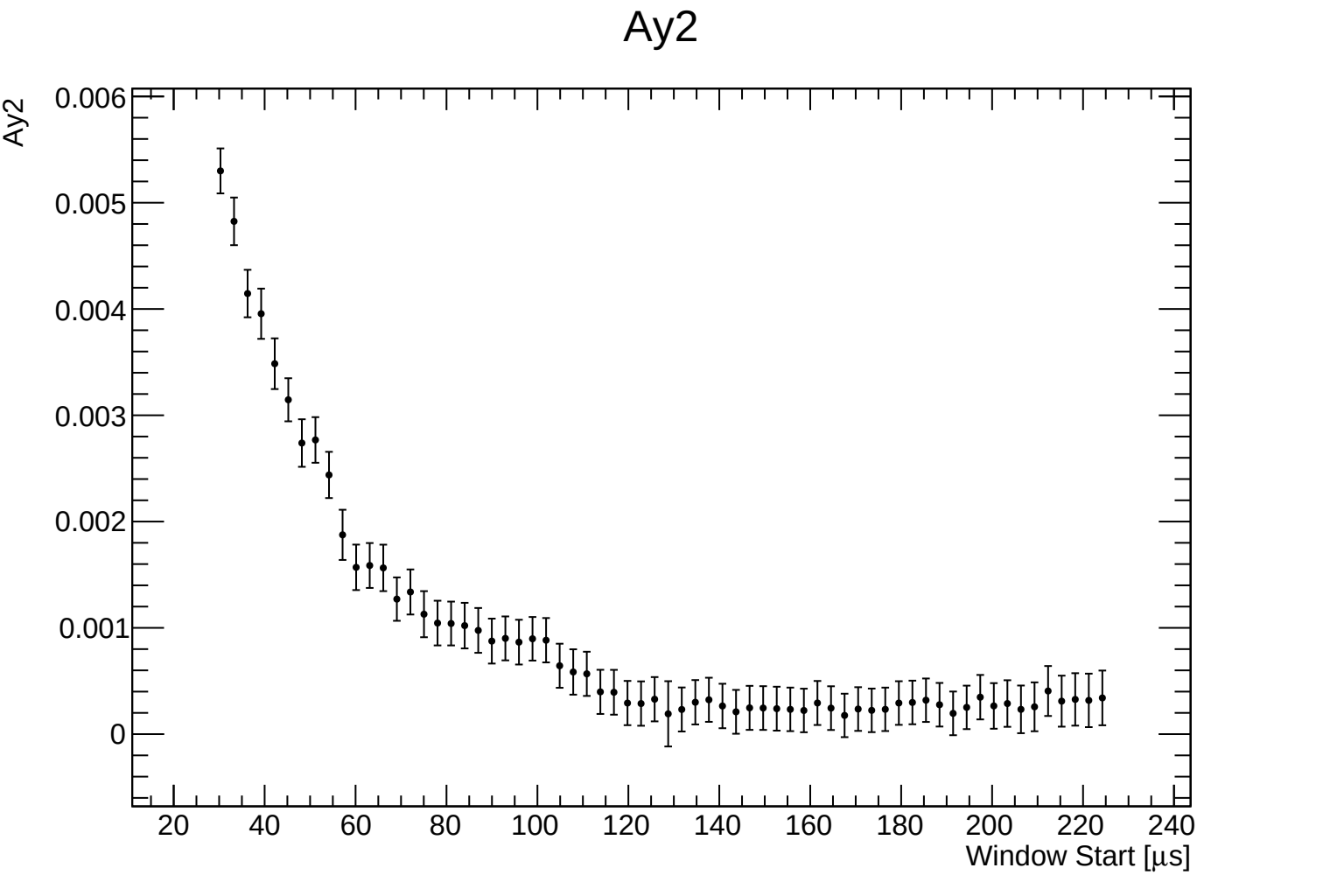

w_CBO vs A_CBO
A_CBO [10^-3]
50
0
−50
−100
−150
−200
−250
2.29
2.3
2.31
2.32
2.33
2.34
2.35
w_CBO [rad/s]

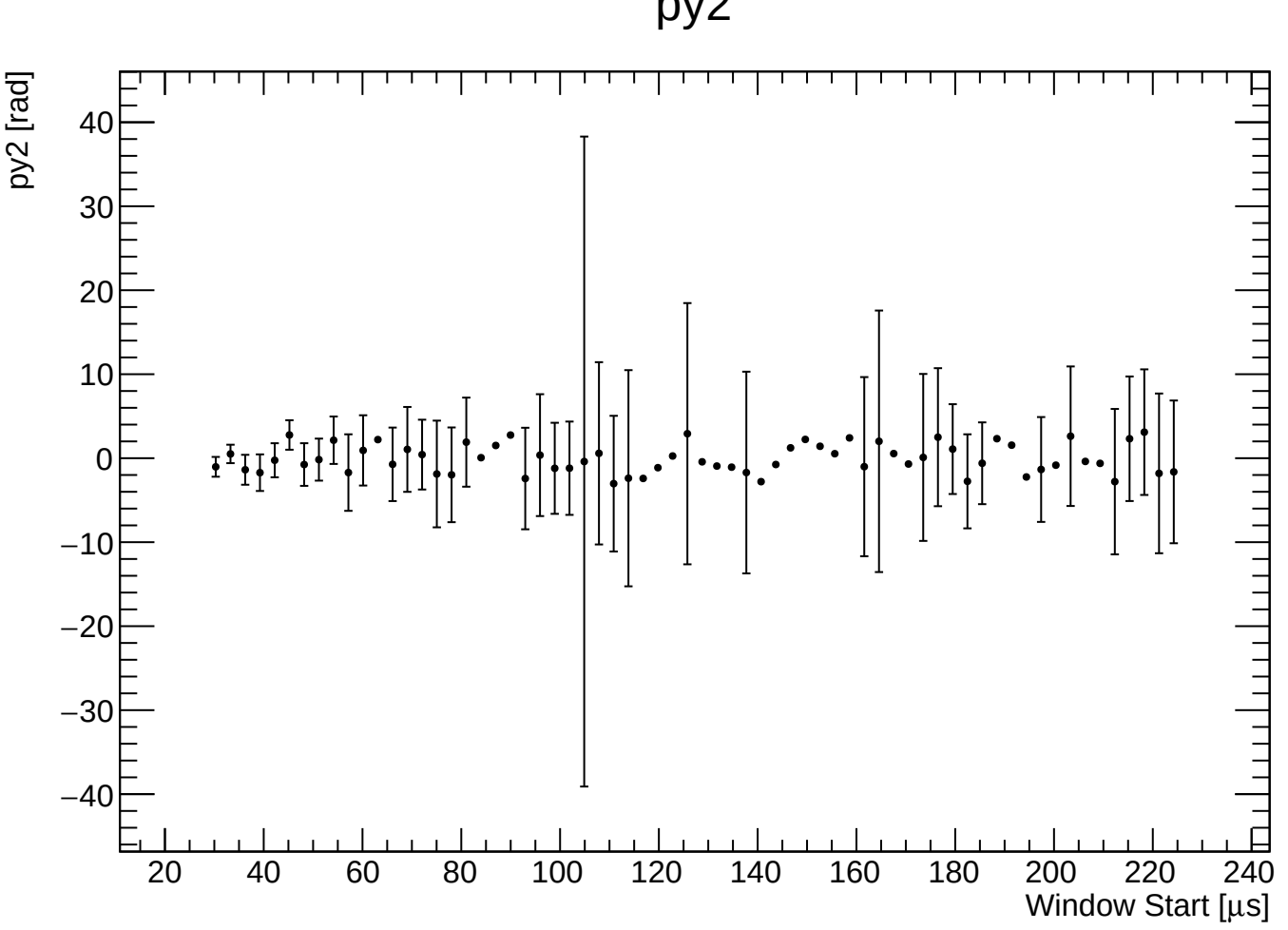

Ax2
Ax2
0.25
0.2
0.15
0.1
0.05
0
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]

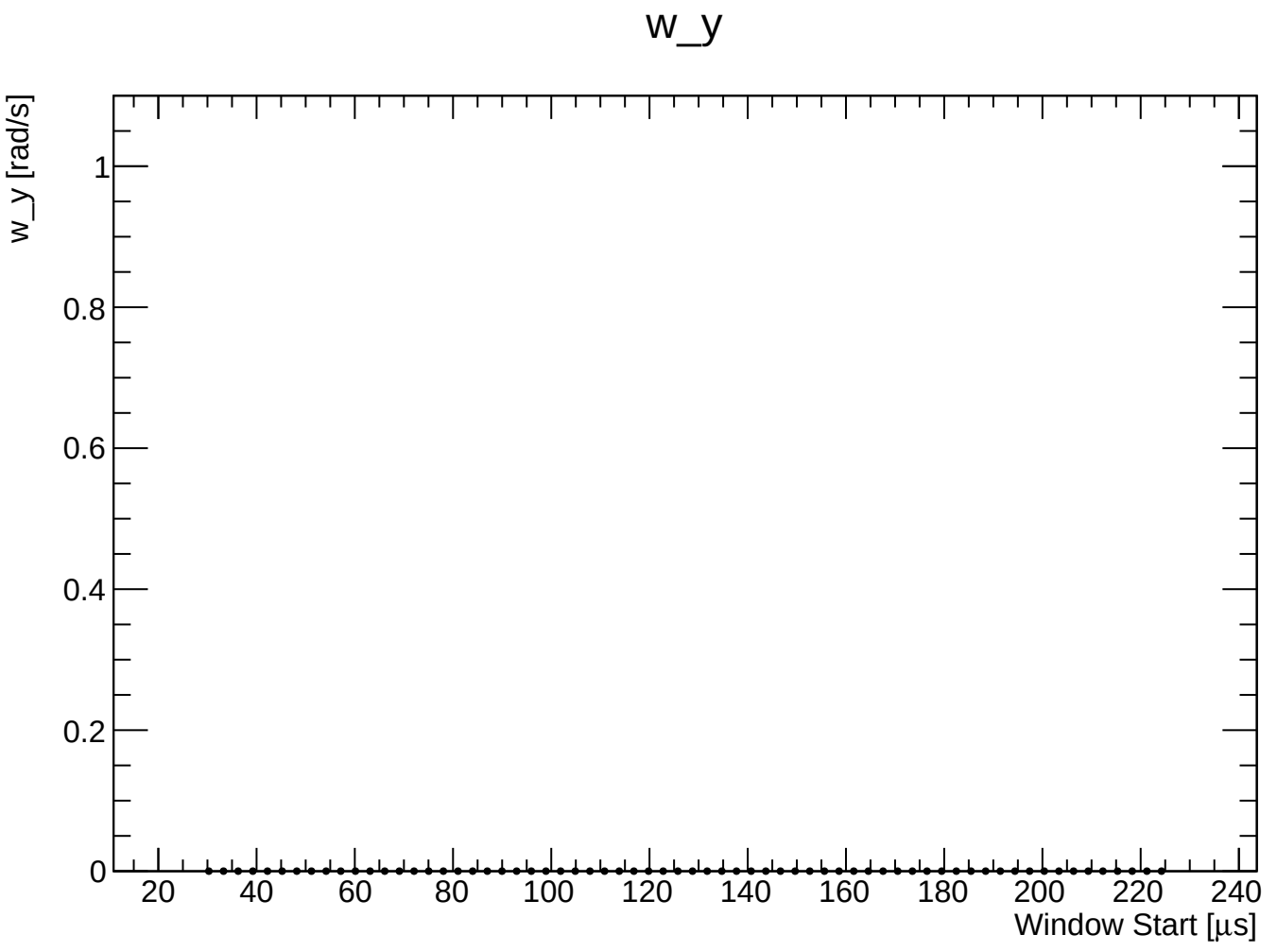

px2
px2 [rad]
20
15
10
5
0
−5
−10
−15
−20
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]

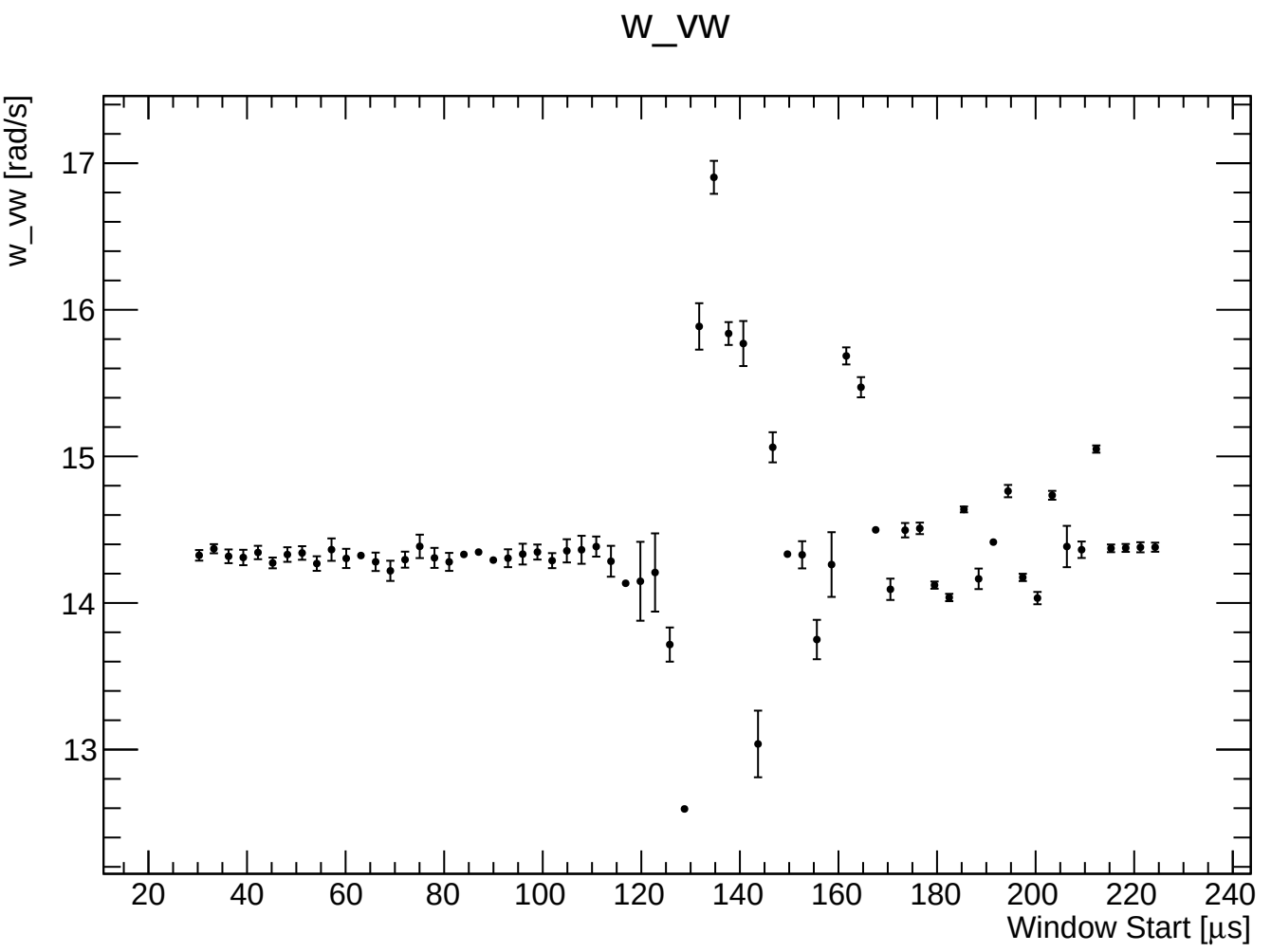

Ay1
Ay1
1
0.8
0.6
0.4
0.2
0
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]


py1
py1 [rad]
1
0.8
0.6
0.4
0.2
0
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]


Ay2
Ay2
0.006
0.005
0.004
0.003
0.002
0.001
0
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]


py2
py2 [rad]
40
30
20
10
0
−10
−20
−30
−40
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]


w_y
w_y [rad/s]
1
0.8
0.6
0.4
0.2
0
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]


W_VW
w_vw [rad/s]
17
16
15
14
13
20
40
60
80
100
120
140
160
180
200
220
240
Window Start [μs]