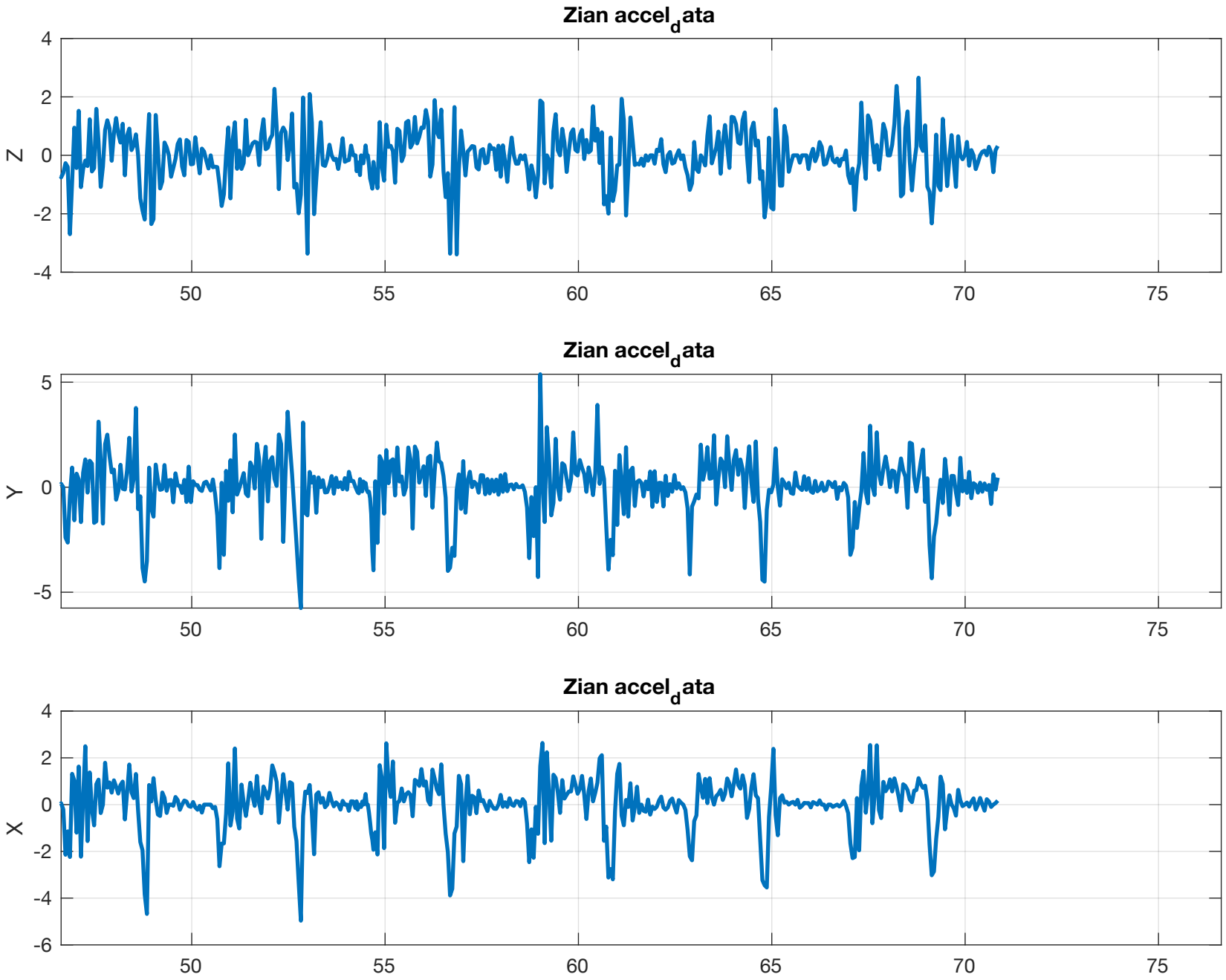
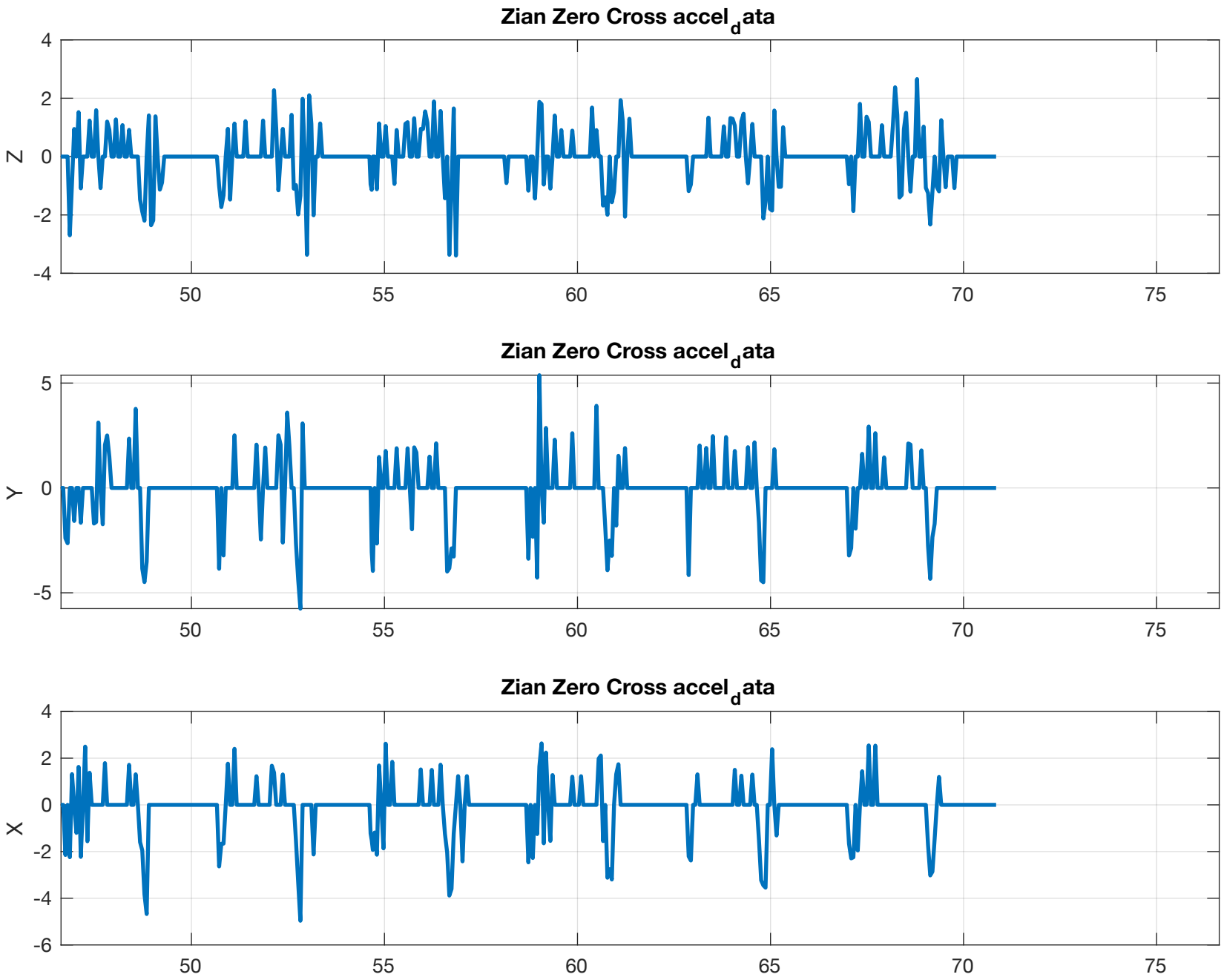
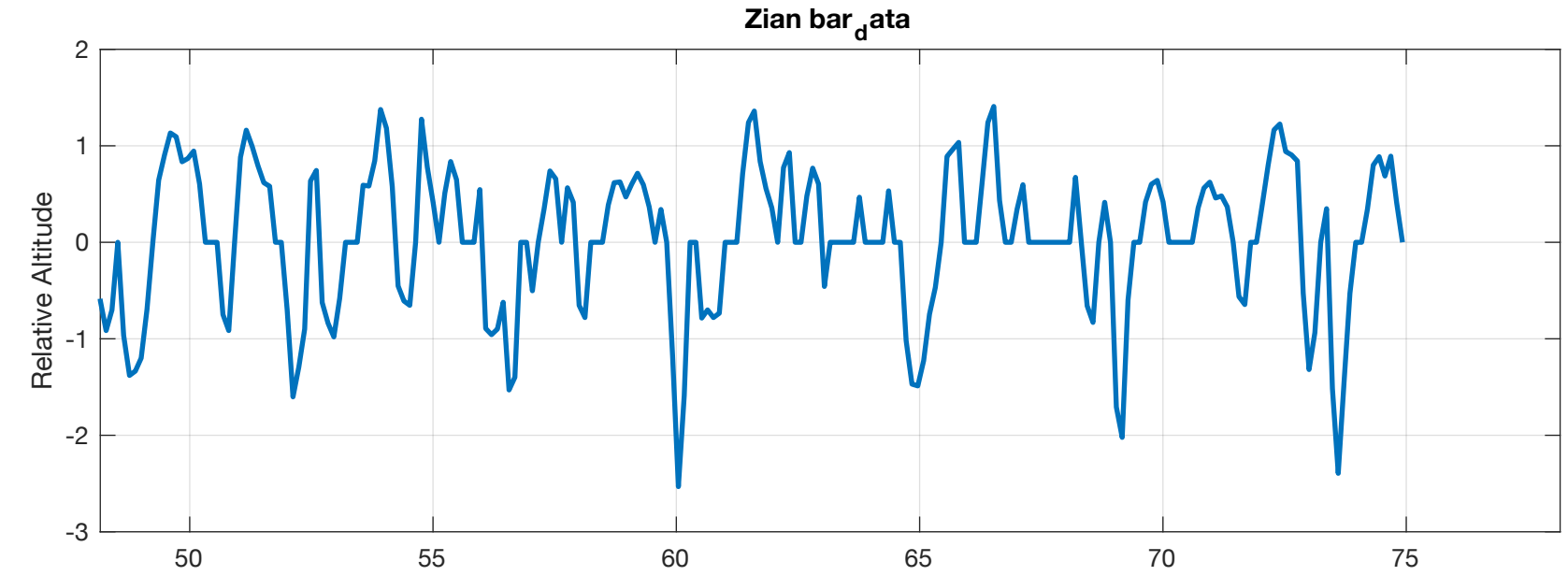
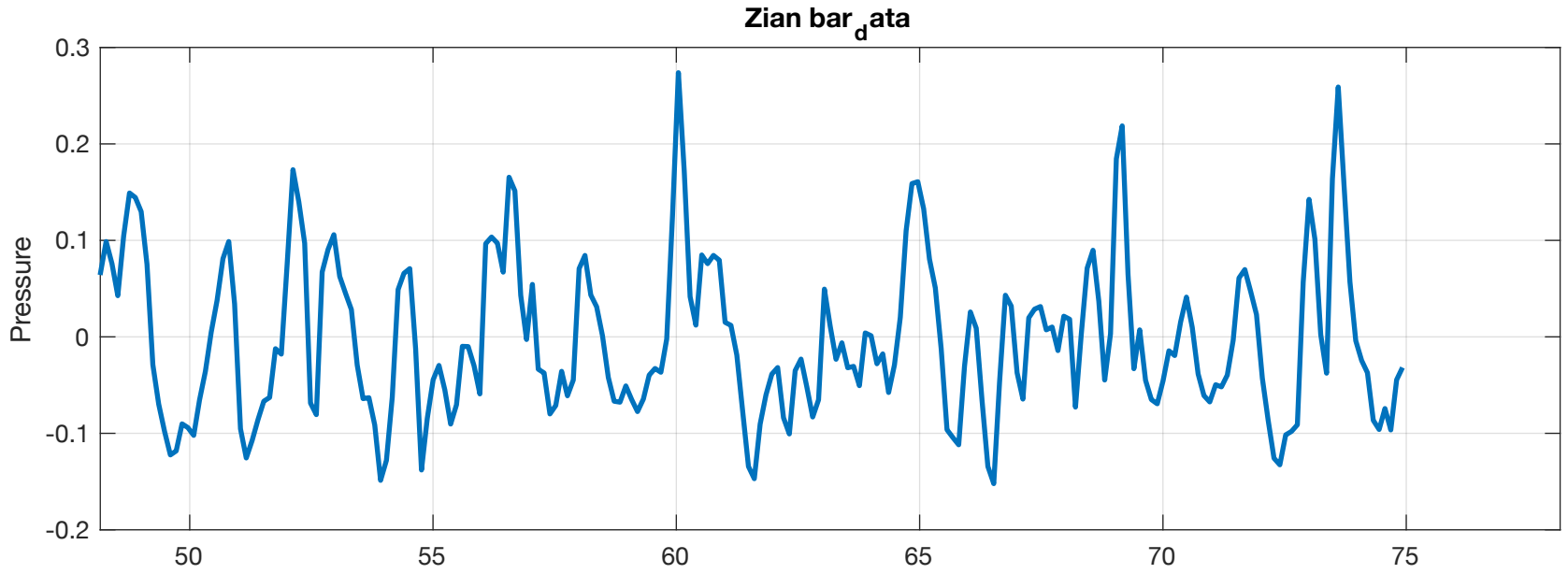
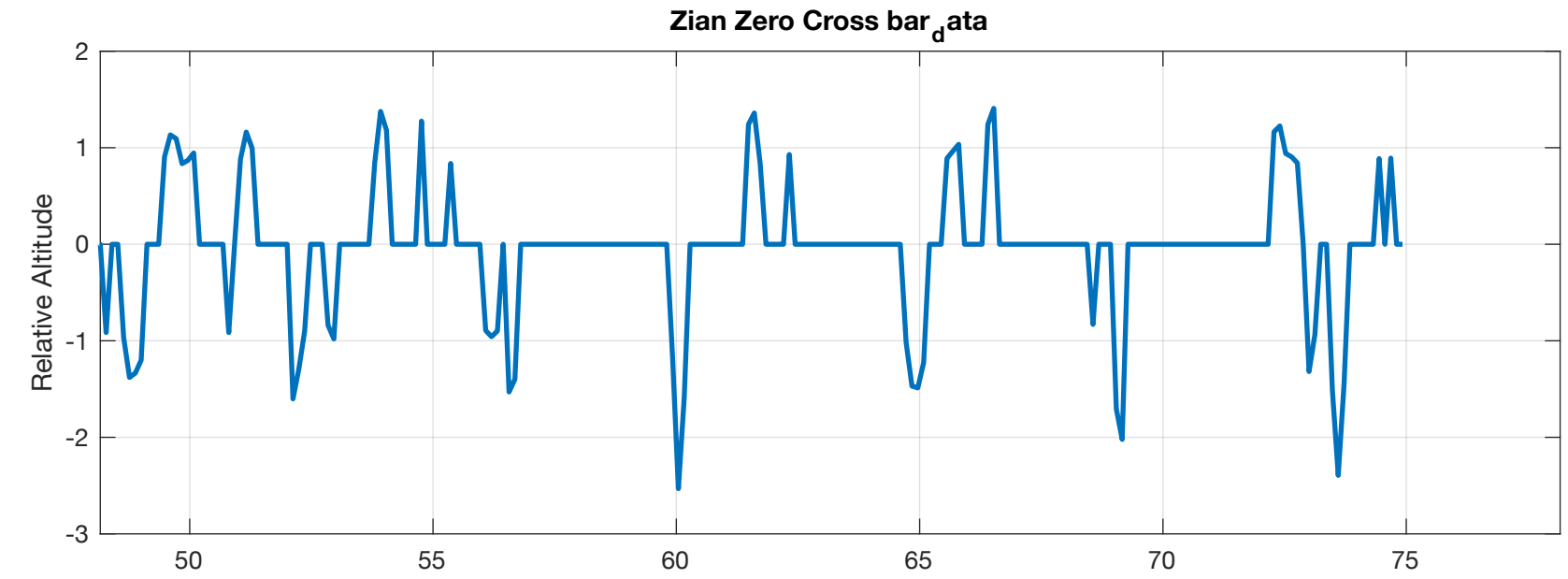

Zian accel_data
Z
4
2
0
-2
-4
50
55
60
65
70
75
Zian accel_data
Y
5
0
-5
50
55
60
65
70
75
Zian accel_data
X
4
2
0
-2
-4
-6
50
55
60
65
70
75

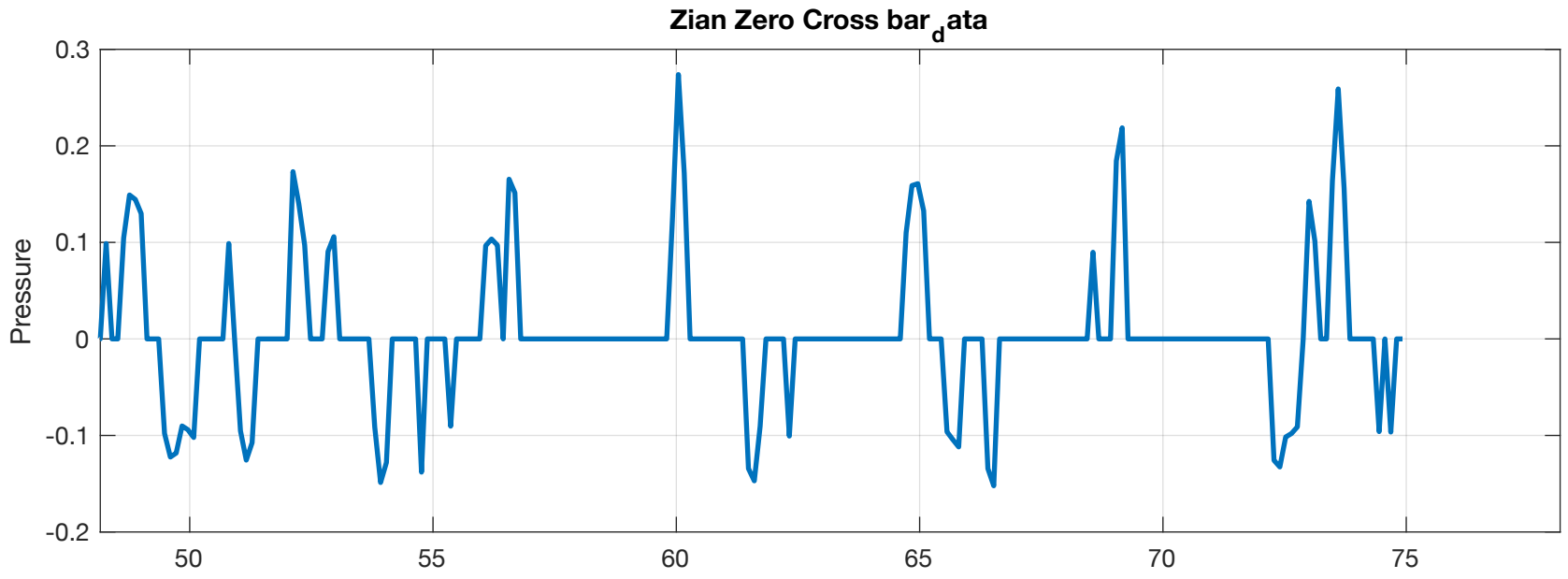

Zian Zero Cross accel_data
Z
4
2
0
-2
-4
50
55
60
65
70
75
Zian Zero Cross accel_data
Y
5
0
-5
50
55
60
65
70
75
Zian Zero Cross accel_data
X
4
2
0
-2
-4
-6
50
55
60
65
70
75

| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| 'Z' | -155.000 | -121.000 | -36.000 | -52.000 | "accel_data" |
| 'Y' | -181.000 | -165.000 | -49.000 | -40.500 | "accel_data" |
| 'X' | -162.000 | -142.000 | -45.000 | -32.500 | "accel_data" |

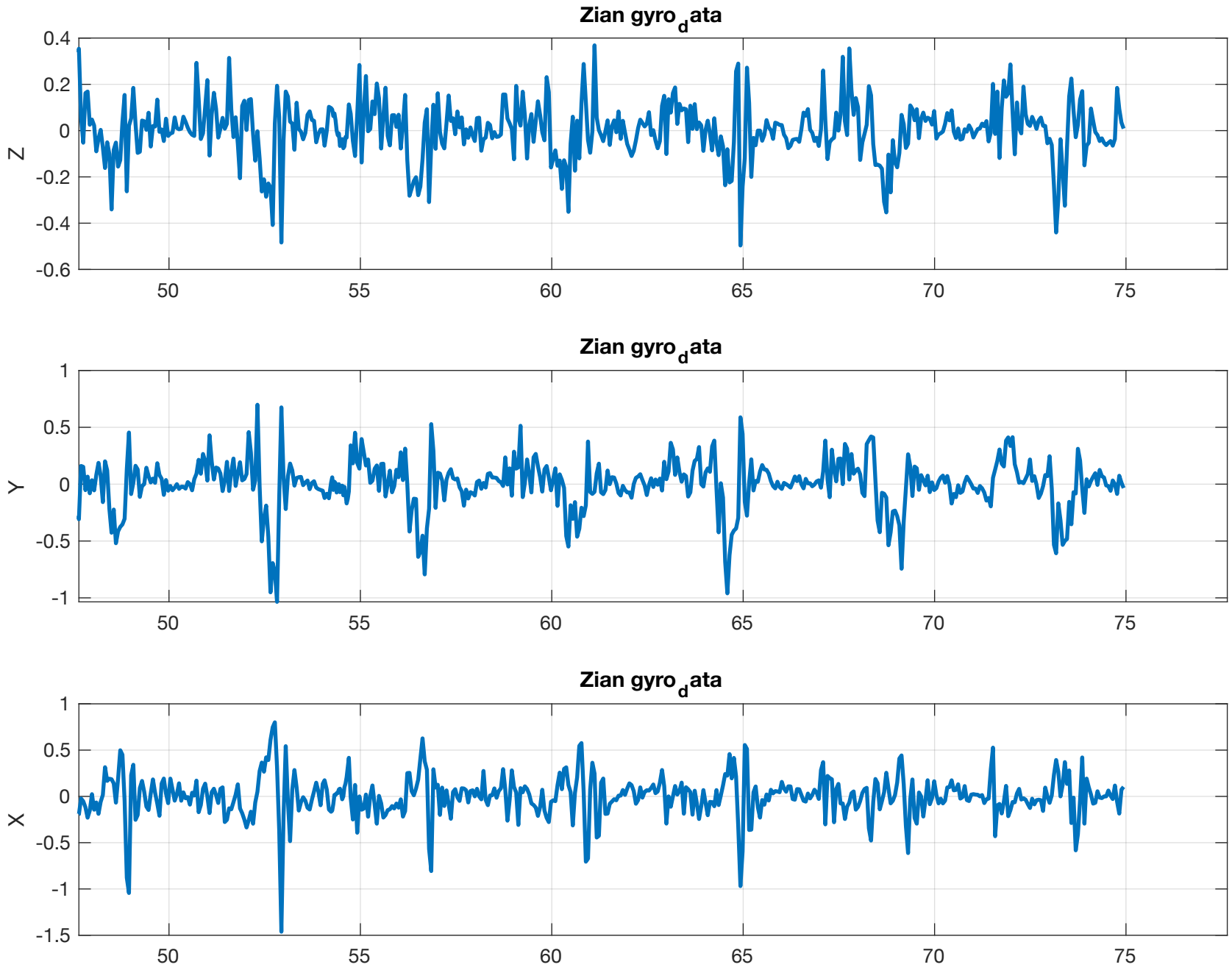

Zian bar_data
Relative Altitude
2
1
0
-1
-2
-3
50
55
60
65
70
75

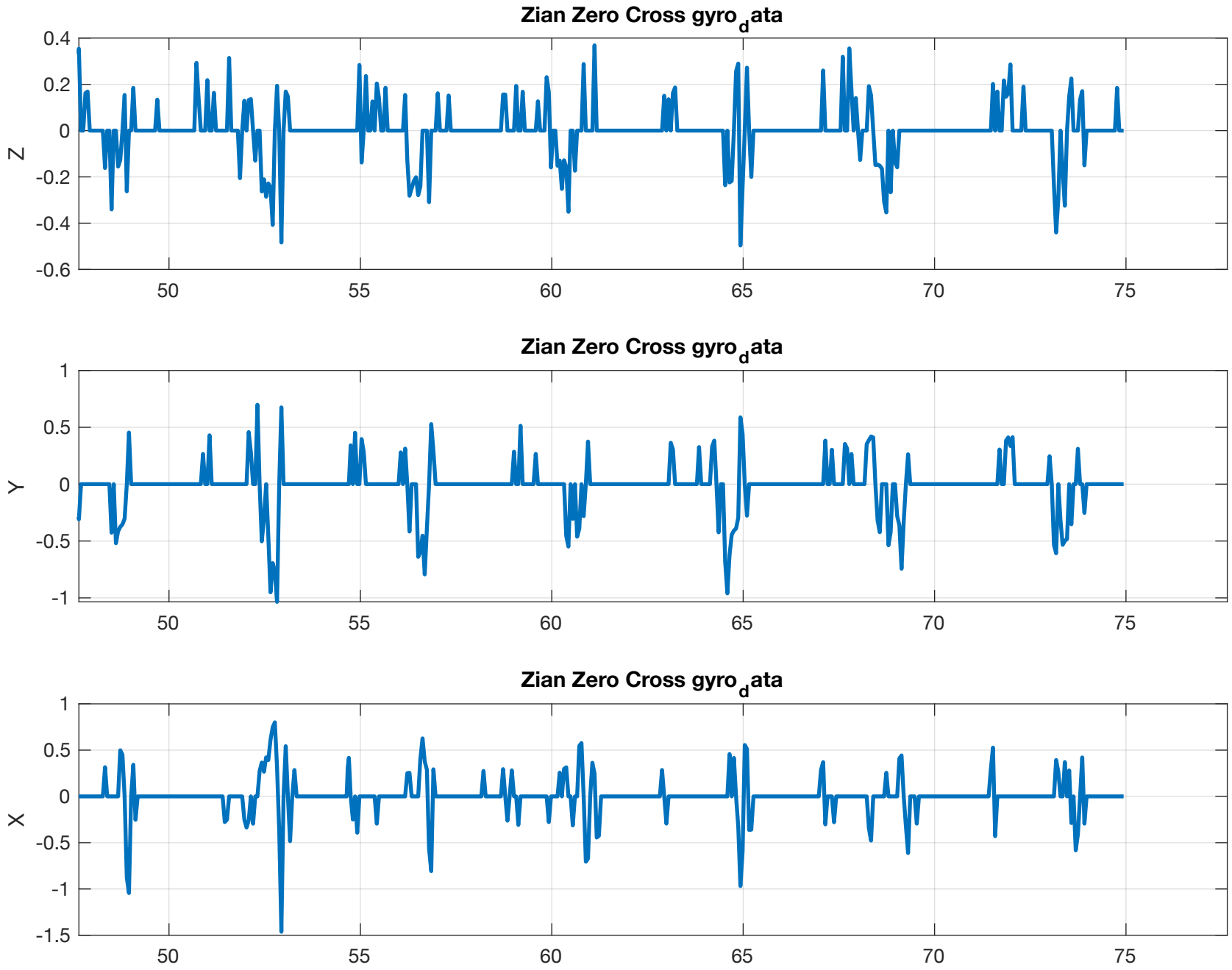

Zian bar_data
Pressure
0.3
0.2
0.1
0
-0.1
-0.2
50
55
60
65
70
75


Zian Zero Cross bar_data
Relative Altitude
2
1
0
-1
-2
-3
50
55
60
65
70
75

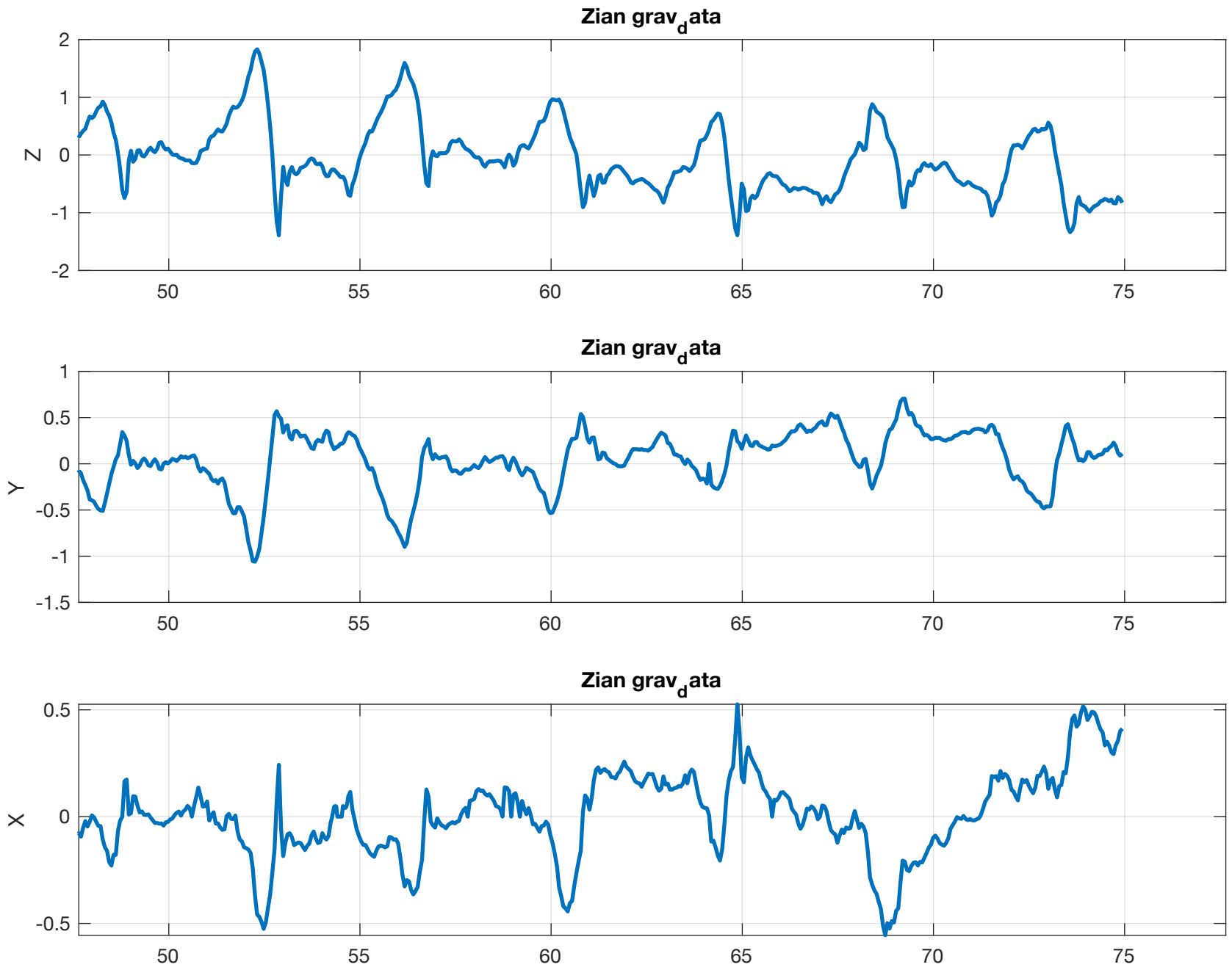

Zian Zero Cross bar_data
Pressure
0.3
0.2
0.1
0
-0.1
-0.2
50
55
60
65
70
75

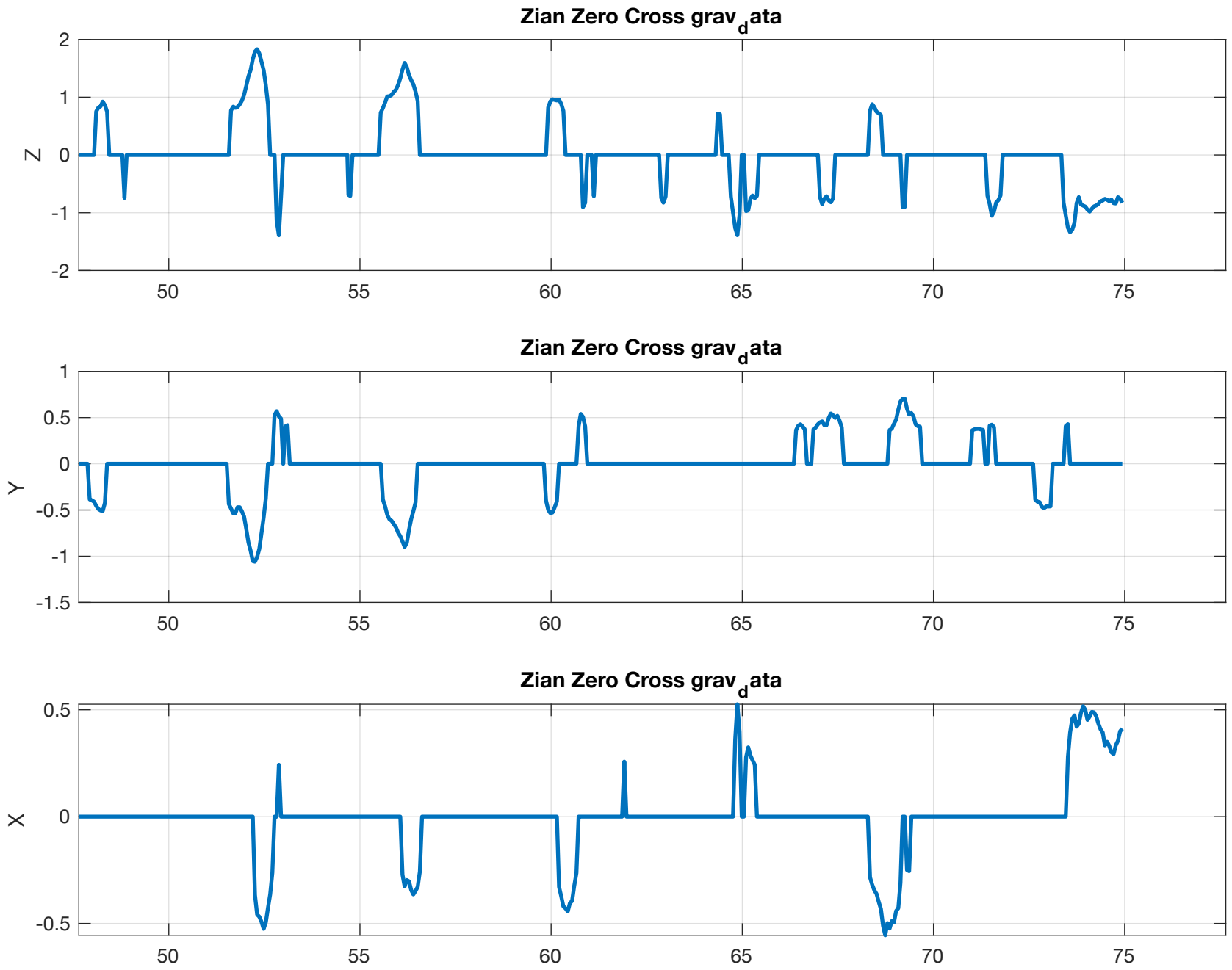
| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| "Relative Altitude" | -39.000 | -30.000 | -4.000 | -6.000 | "bar_data" |
| "Pressure" | -49.000 | -27.000 | -6.000 | -6.000 | "bar_data" |


Zian gyro_data
Z
0.4
0.2
0
-0.2
-0.4
-0.6
50
55
60
65
70
75
Zian gyro_data
Y
1
0.5
0
-0.5
-1
50
55
60
65
70
75
Zian gyro_data
X
1
0.5
0
-0.5
-1
-1.5
50
55
60
65
70
75

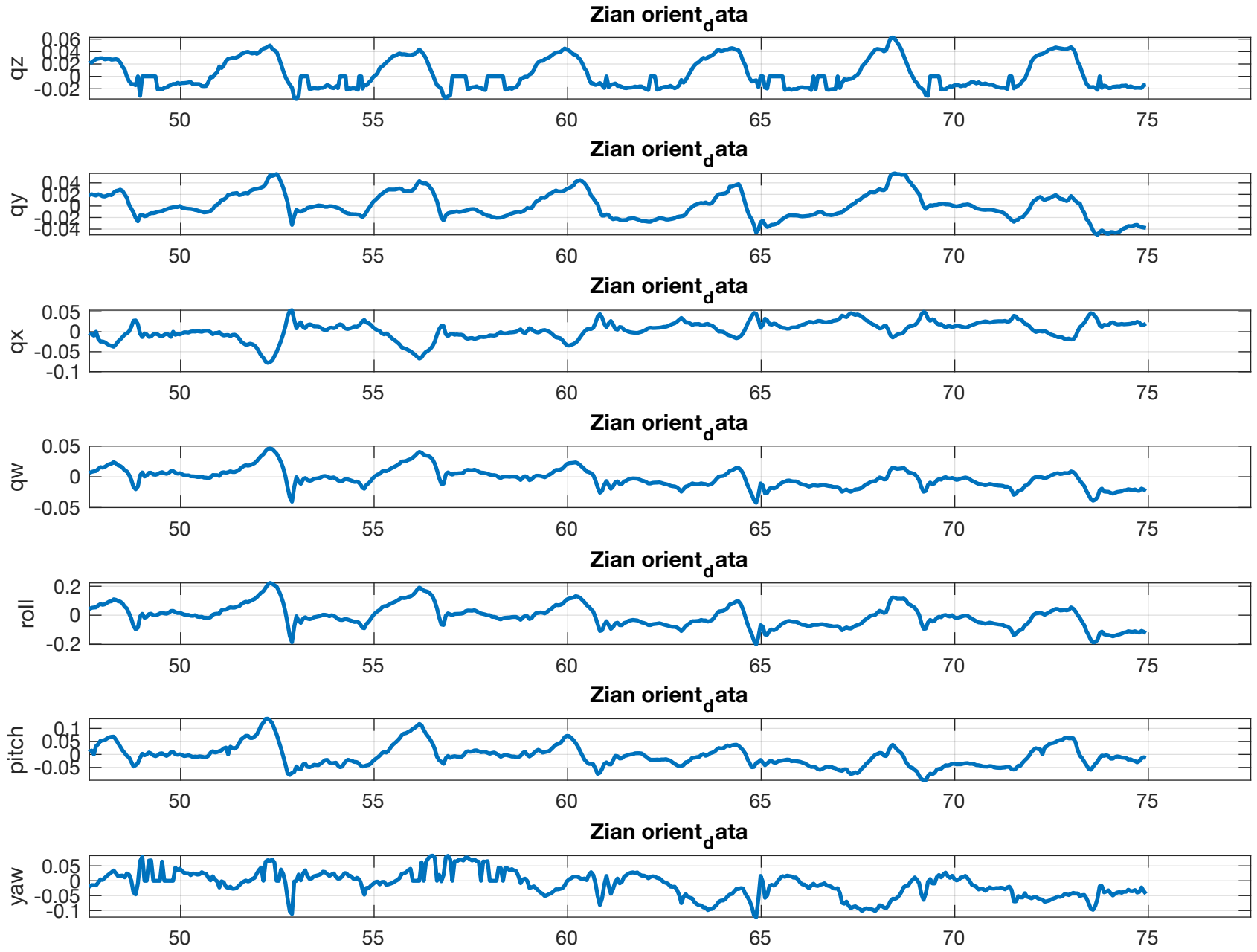

Zian Zero Cross gyro_data
Z
0.4
0.2
0
-0.2
-0.4
-0.6
50
55
60
65
70
75
Zian Zero Cross gyro_data
Y
1
0.5
0
-0.5
-1
50
55
60
65
70
75
Zian Zero Cross gyro_data
X
1
0.5
0
-0.5
-1
-1.5
50
55
60
65
70
75

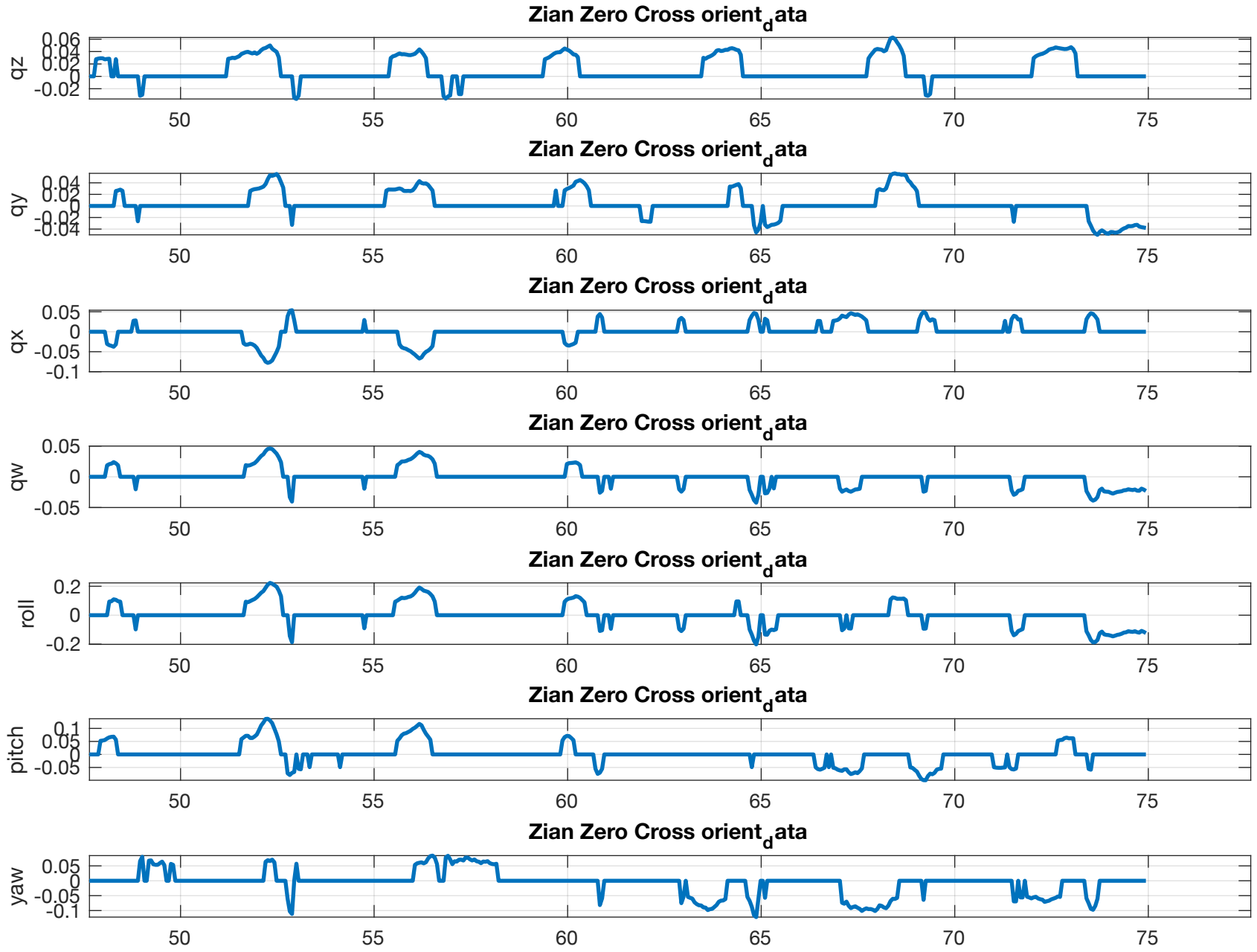
| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| 'Z' | -175.000 | -142.000 | -41.000 | -43.500 | "gyro_data" |
| 'Y' | -178.000 | -140.000 | -40.000 | -28.000 | "gyro_data" |
| 'X' | -163.000 | -129.000 | -36.000 | -35.000 | "gyro_data" |


Zian grav_data
Z
2
1
0
-1
-2
50
55
60
65
70
75
Zian grav_data
Y
1
0.5
0
-0.5
-1
-1.5
50
55
60
65
70
75
Zian grav_data
X
0.5
0
-0.5
50
55
60
65
70
75


Zian Zero Cross grav_data
Z
2
1
0
-1
-2
50
55
60
65
70
75
Zian Zero Cross grav_data
Y
1
0.5
0
-0.5
-1
-1.5
50
55
60
65
70
75
Zian Zero Cross grav_data
X
0.5
0
-0.5
50
55
60
65
70
75

| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| 'Z' | -67.000 | -25.000 | -2.000 | -1.250 | "grav_data" |
| 'Y' | -80.000 | -64.000 | -12.000 | 1.000 | "grav_data" |
| 'X' | -106.000 | -60.000 | -15.000 | 1.750 | "grav_data" |


Zian orientdata
qz
0.06
0.04
0.02
0
-0.02
50
55
60
65
70
75
Zian orientdata
qy
0.04
0.02
0
-0.02
-0.04
50
55
60
65
70
75
Zian orientdata
qx
0.05
0
-0.05
-0.1
50
55
60
65
70
75
Zian orientdata
qw
0.05
0
-0.05
50
55
60
65
70
75
Zian orientdata
roll
0.2
0
-0.2
50
55
60
65
70
75
Zian orientdata
pitch
0.1
0.05
0
-0.05
50
55
60
65
70
75
Zian orientdata
yaw
0.05
0
-0.05
-0.1
50
55
60
65
70
75


Zian Zero Cross orientdata
qz
0.06
0.04
0.02
0
-0.02
50
55
60
65
70
75
Zian Zero Cross orientdata
qy
0.04
0.02
0
-0.02
-0.04
50
55
60
65
70
75
Zian Zero Cross orientdata
qx
0.05
0
-0.05
-0.1
50
55
60
65
70
75
Zian Zero Cross orientdata
qw
0.05
0
-0.05
50
55
60
65
70
75
Zian Zero Cross orientdata
roll
0.2
0
-0.2
50
55
60
65
70
75
Zian Zero Cross orientdata
pitch
0.1
0.05
0
-0.05
50
55
60
65
70
75
Zian Zero Cross orientdata
yaw
0.05
0
-0.05
-0.1
50
55
60
65
70
75

| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| 'qz' | -95.000 | -20.000 | -2.000 | 1.500 | "orient_data" |
| 'qy' | -67.000 | -34.000 | -5.000 | 0.750 | "orient_data" |
| 'qx' | -86.000 | -57.000 | -11.000 | -0.500 | "orient_data" |
| 'qw' | -72.000 | -32.000 | -2.000 | -0.250 | "orient_data" |
| 'roll' | -72.000 | -30.000 | -5.000 | -2.250 | "orient_data" |
| 'pitch' | -80.000 | -30.000 | -4.000 | -1.000 | "orient_data" |
| 'yaw' | -118.000 | -69.000 | -13.000 | -2.500 | "orient_data" |

| Sensor | Sensor Axis | Method | Error |
|---|---|---|---|
| 'accel_data' | "X" | 'zero_cross' | 32.500 |
| 'bar_data' | "Relative Altitude" | 'double_findpeaks' | 4.000 |
| 'gyro_data' | "Y" | 'zero_cross' | 28.000 |
| 'grav_data' | "Y" | 'zero_cross' | 1.000 |
| 'orient_data' | "qw" | 'zero_cross' | 0.250 |