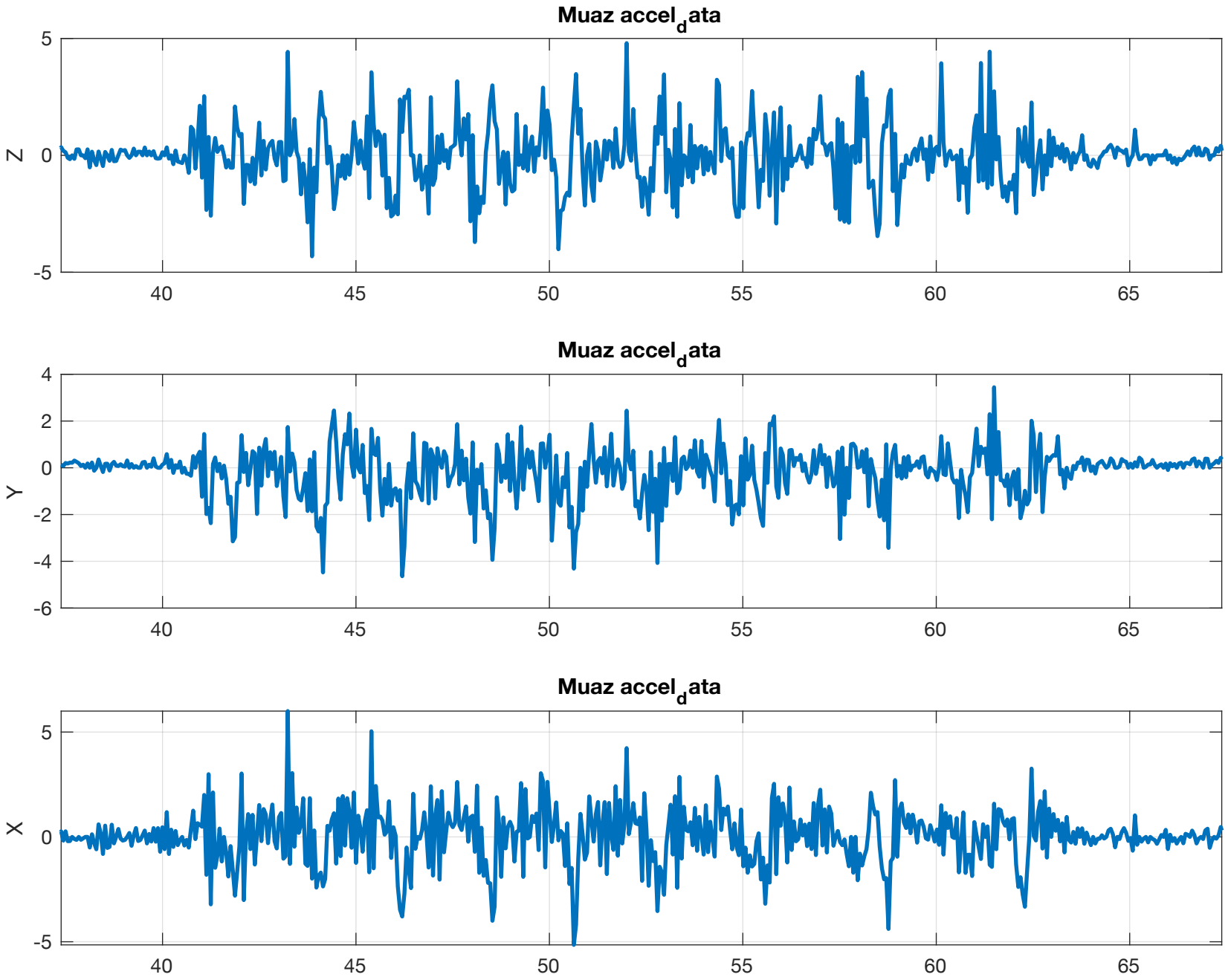
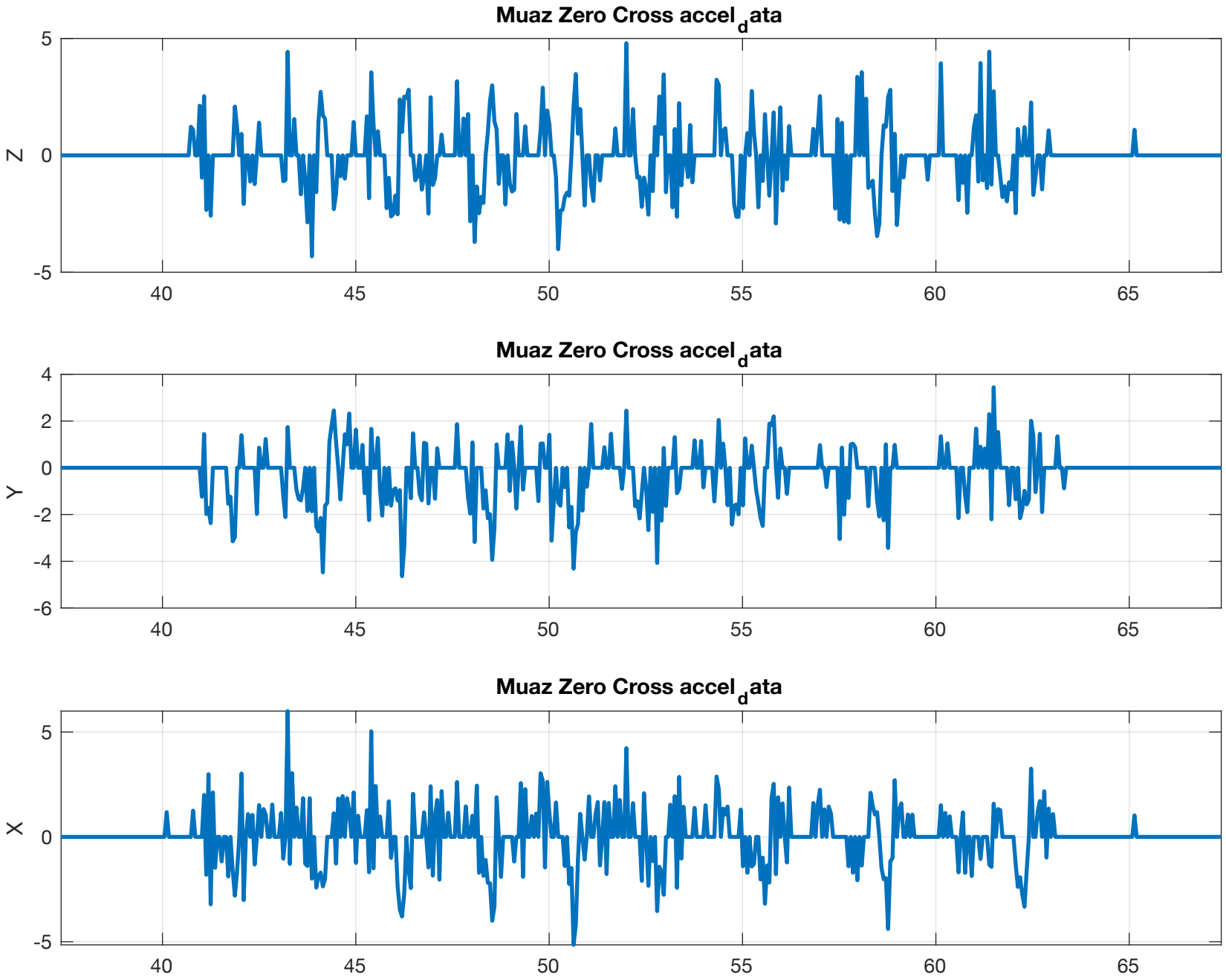
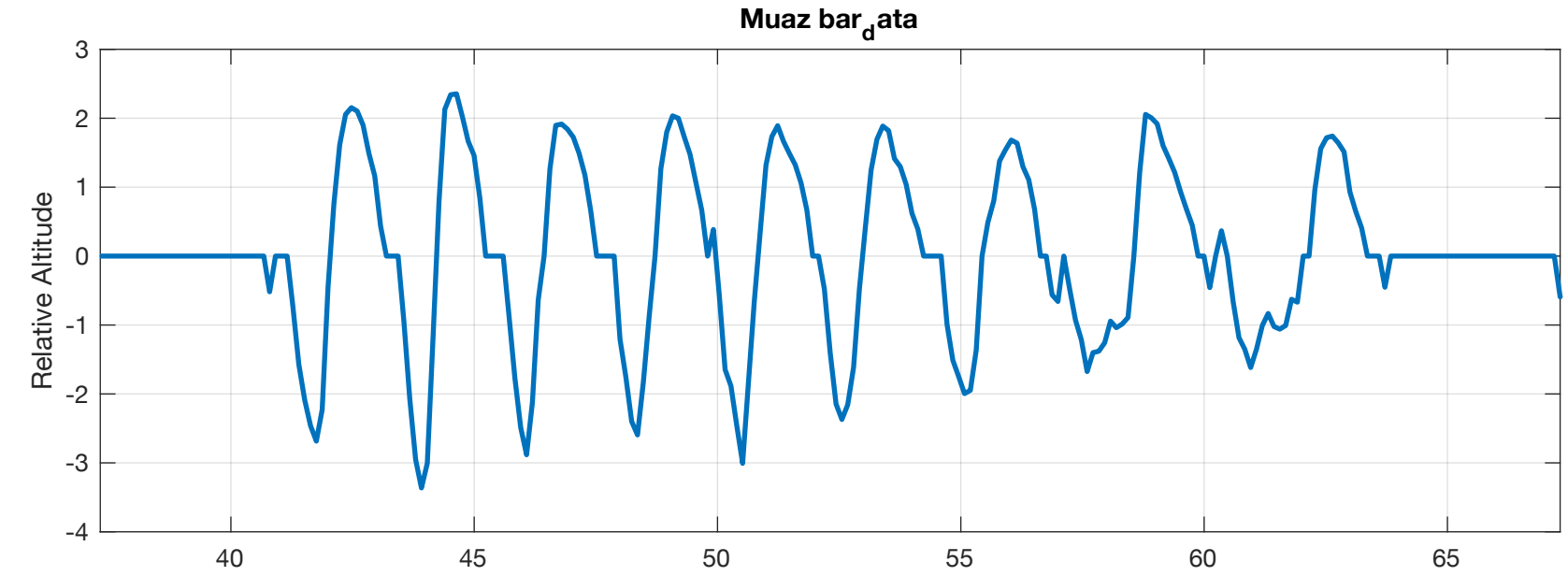
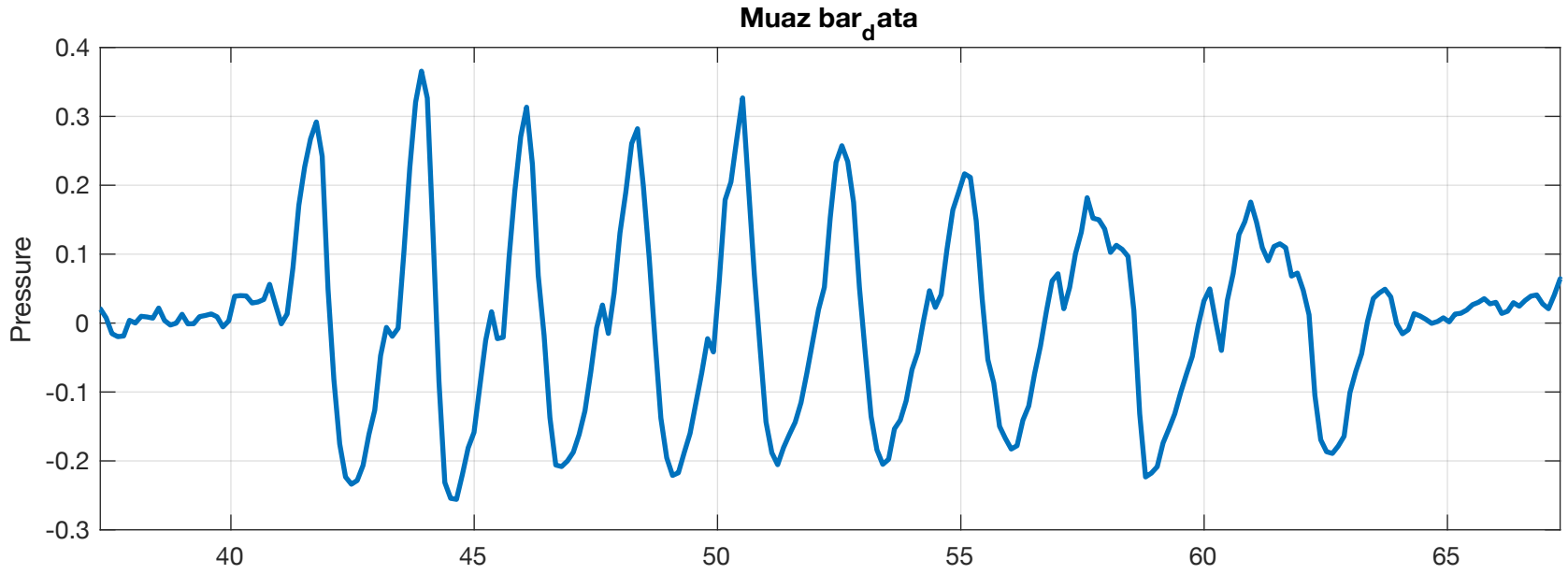
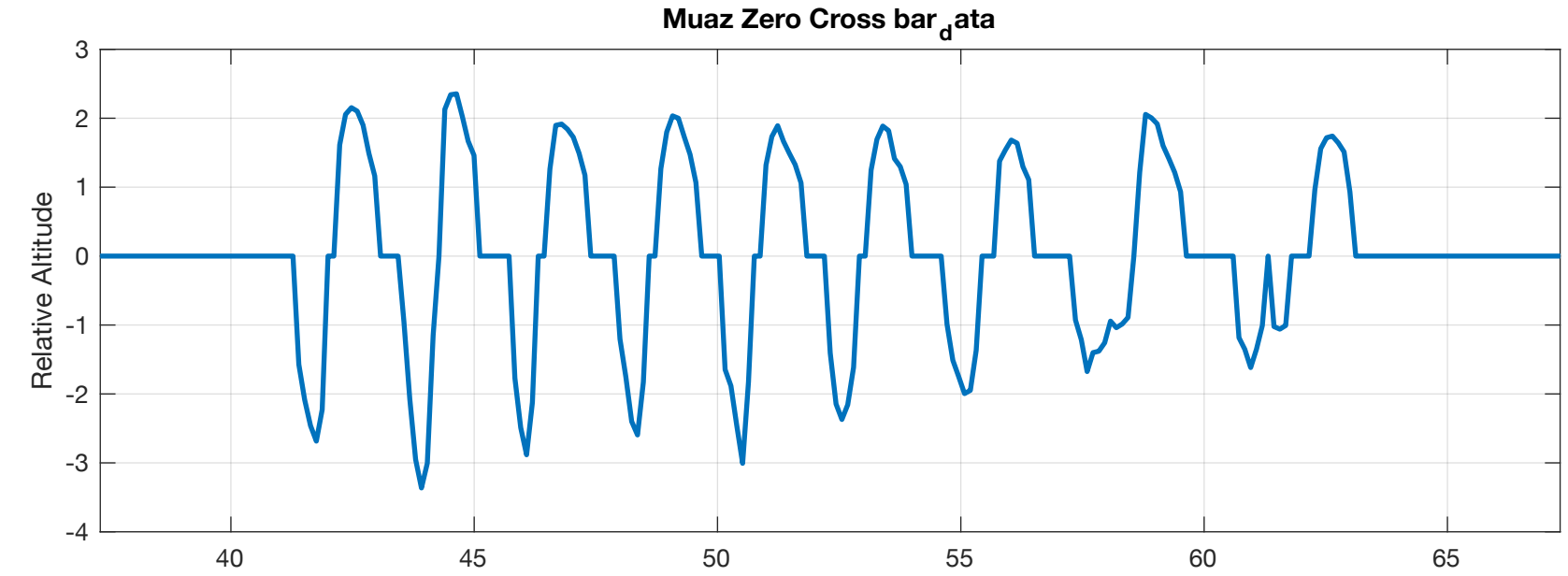

Muaz accel_data
Z
5
0
-5
40
45
50
55
60
65
Muaz accel_data
Y
4
2
0
-2
-4
-6
40
45
50
55
60
65
Muaz accel_data
X
5
0
-5
40
45
50
55
60
65

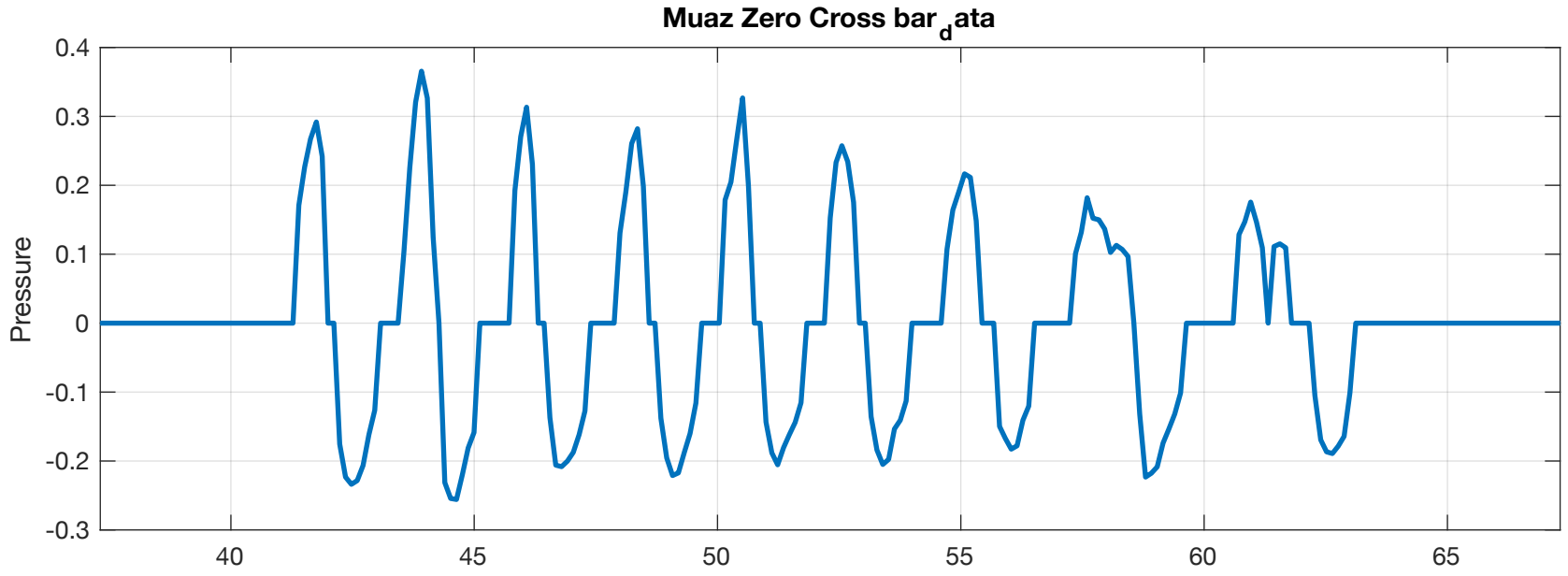

Muaz Zero Cross accel_data
Z
5
0
-5
40
45
50
55
60
65
Muaz Zero Cross accel_data
Y
4
2
0
-2
-4
-6
40
45
50
55
60
65
Muaz Zero Cross accel_data
X
5
0
-5
40
45
50
55
60
65

| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| 'Z' | -248.000 | -188.000 | -66.000 | -59.500 | "accel_data" |
| 'Y' | -261.000 | -229.000 | -73.000 | -54.500 | "accel_data" |
| 'X' | -271.000 | -215.000 | -79.000 | -73.500 | "accel_data" |

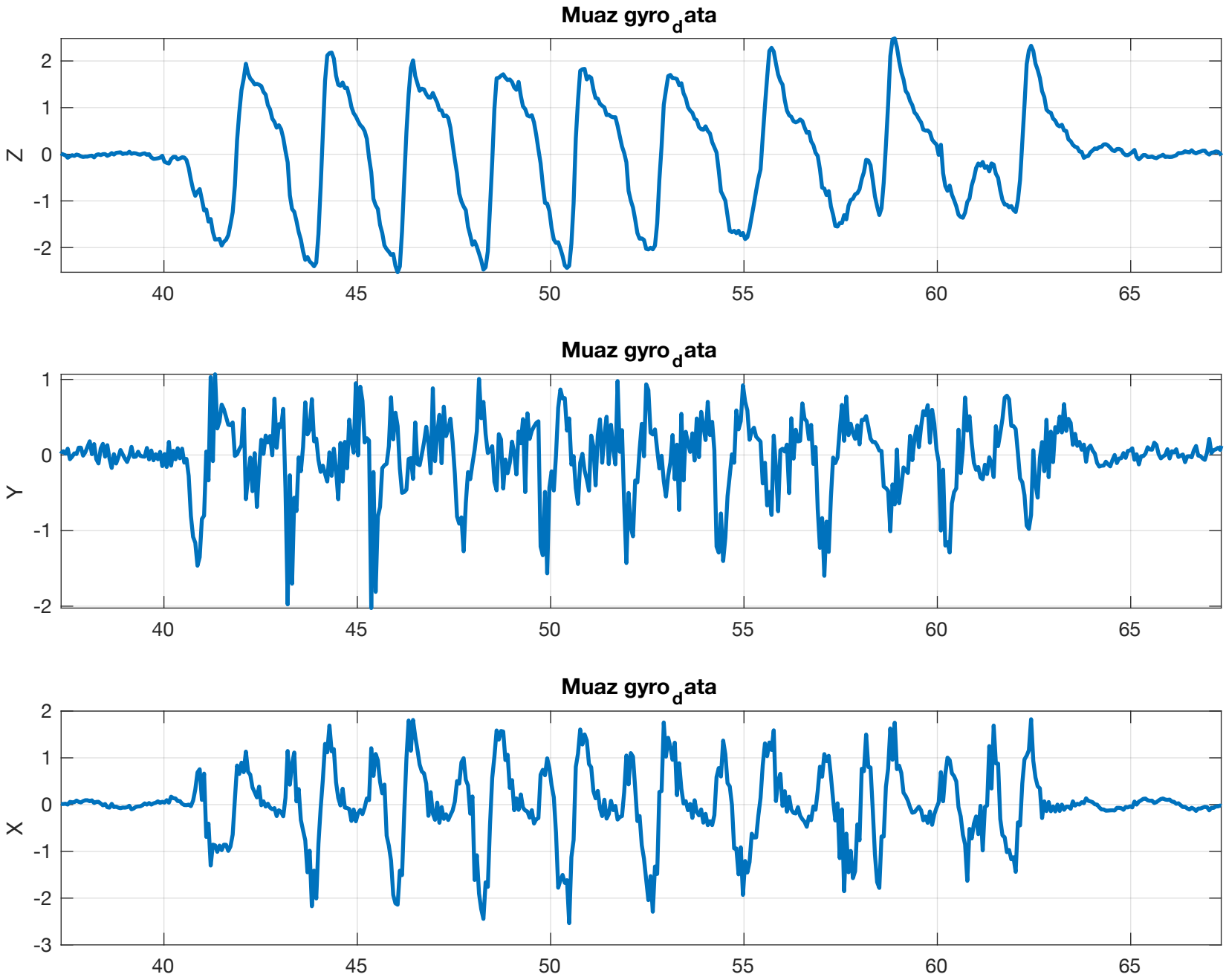

Muaz bar_data
Relative Altitude
3
2
1
0
-1
-2
-3
-4
40
45
50
55
60
65

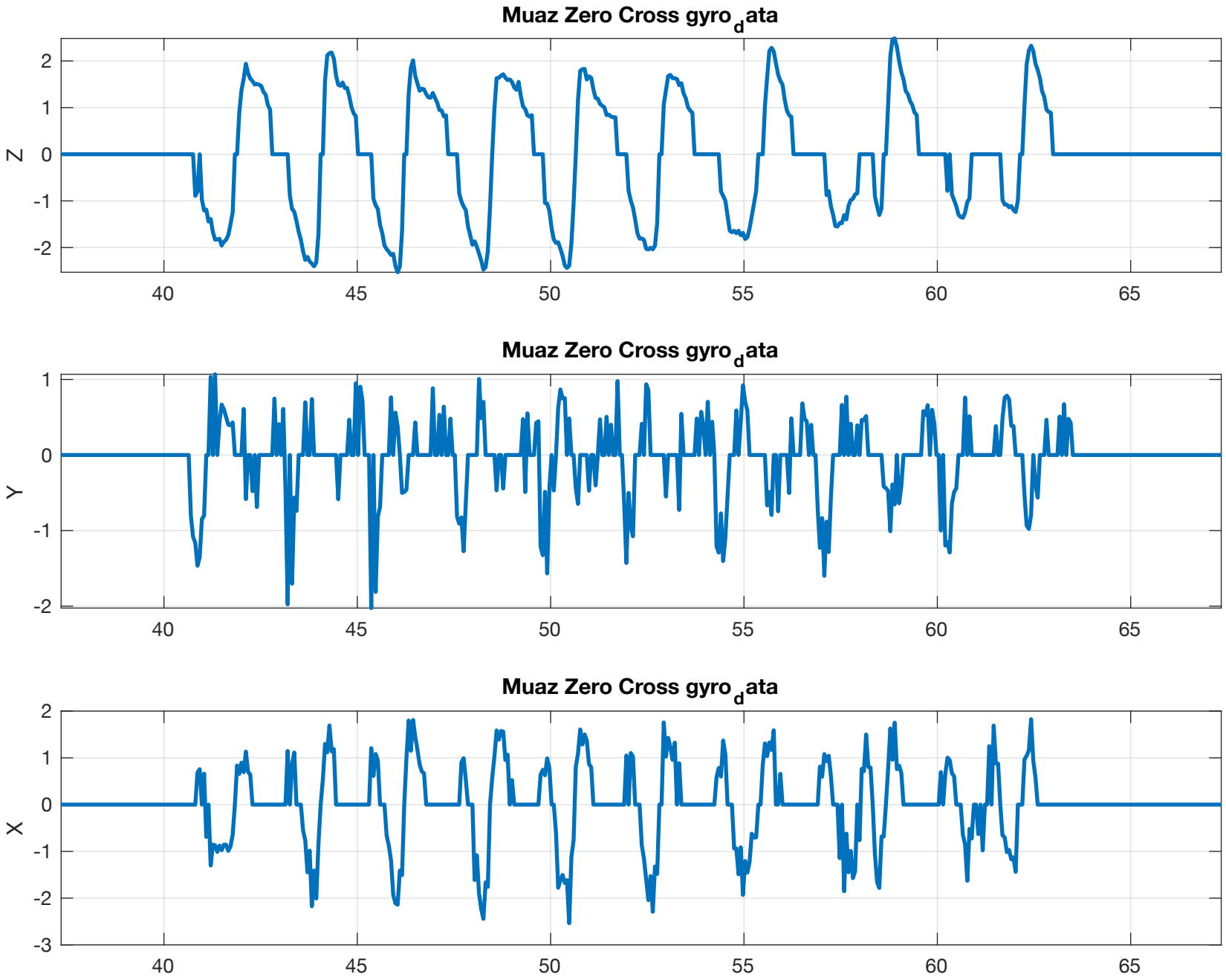

Muaz bar_data
Pressure
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
40
45
50
55
60
65


Muaz Zero Cross bar_data
Relative Altitude
3
2
1
0
-1
-2
-3
-4
40
45
50
55
60
65

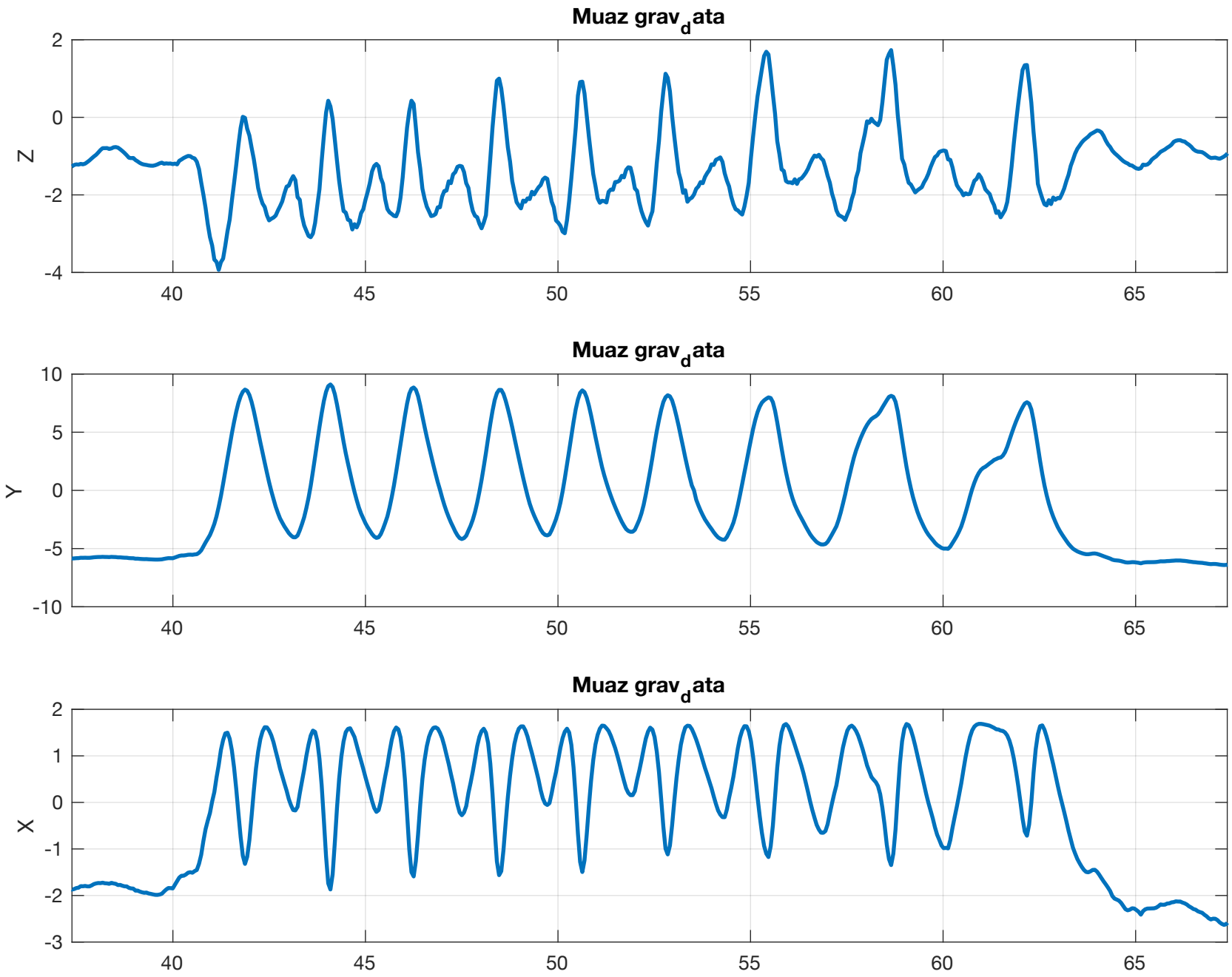

Muaz Zero Cross bar_data
Pressure
0.4
0.3
0.2
0.1
0
-0.1
-0.2
-0.3
40
45
50
55
60
65

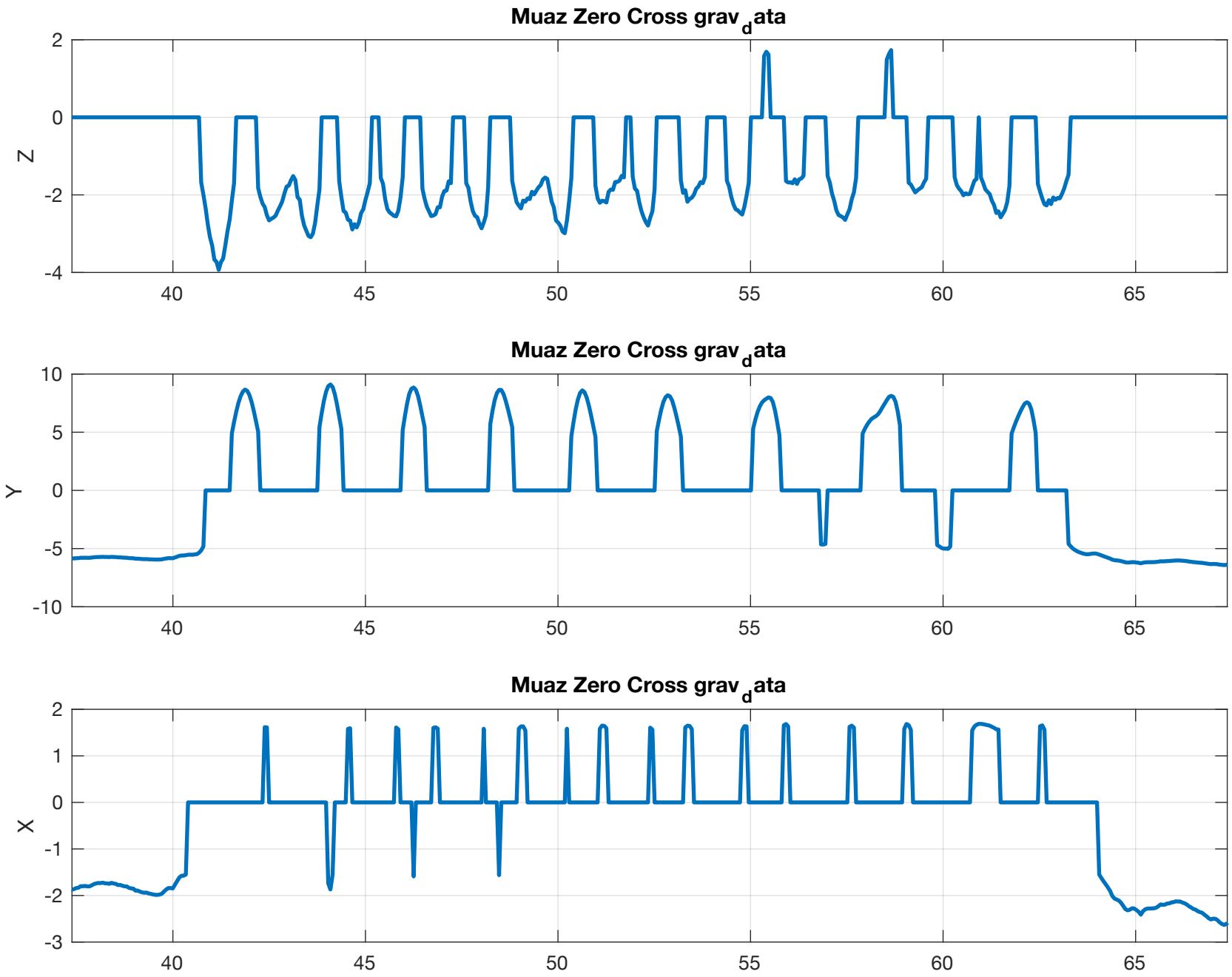
| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| "Relative Altitude" | -24.000 | -11.000 | 1.000 | -2.000 | "bar_data" |
| "Pressure" | -57.000 | -38.000 | -8.000 | -2.000 | "bar_data" |


Muaz gyro_data
Z
2
1
0
-1
-2
40
45
50
55
60
65
Muaz gyro_data
Y
1
0
-1
-2
40
45
50
55
60
65
Muaz gyro_data
X
2
1
0
-1
-2
-3
40
45
50
55
60
65

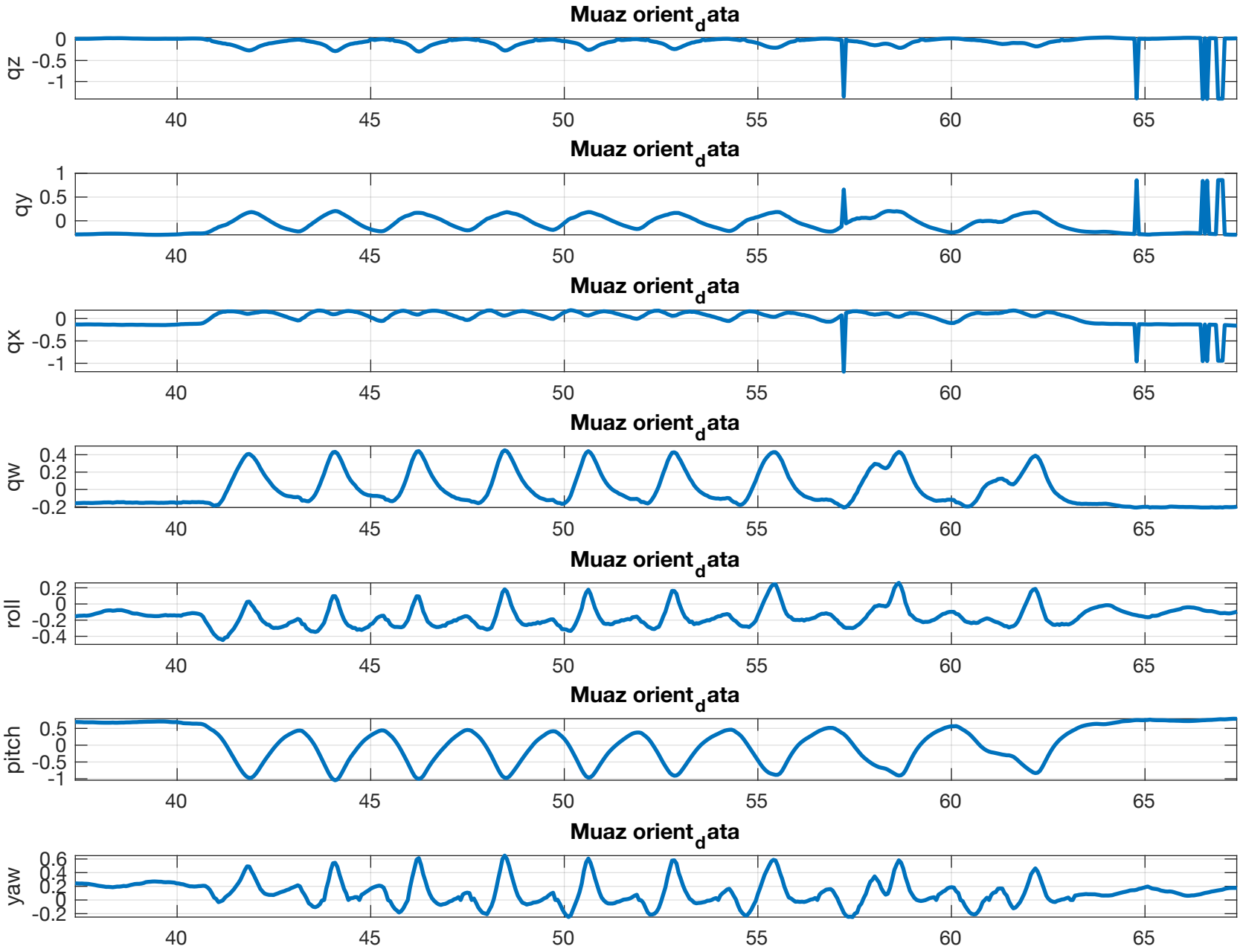

Muaz Zero Cross gyro_data
Z
2
1
0
-1
-2
40
45
50
55
60
65
Muaz Zero Cross gyro_data
Y
1
0
-1
-2
40
45
50
55
60
65
Muaz Zero Cross gyro_data
X
2
1
0
-1
-2
-3
40
45
50
55
60
65

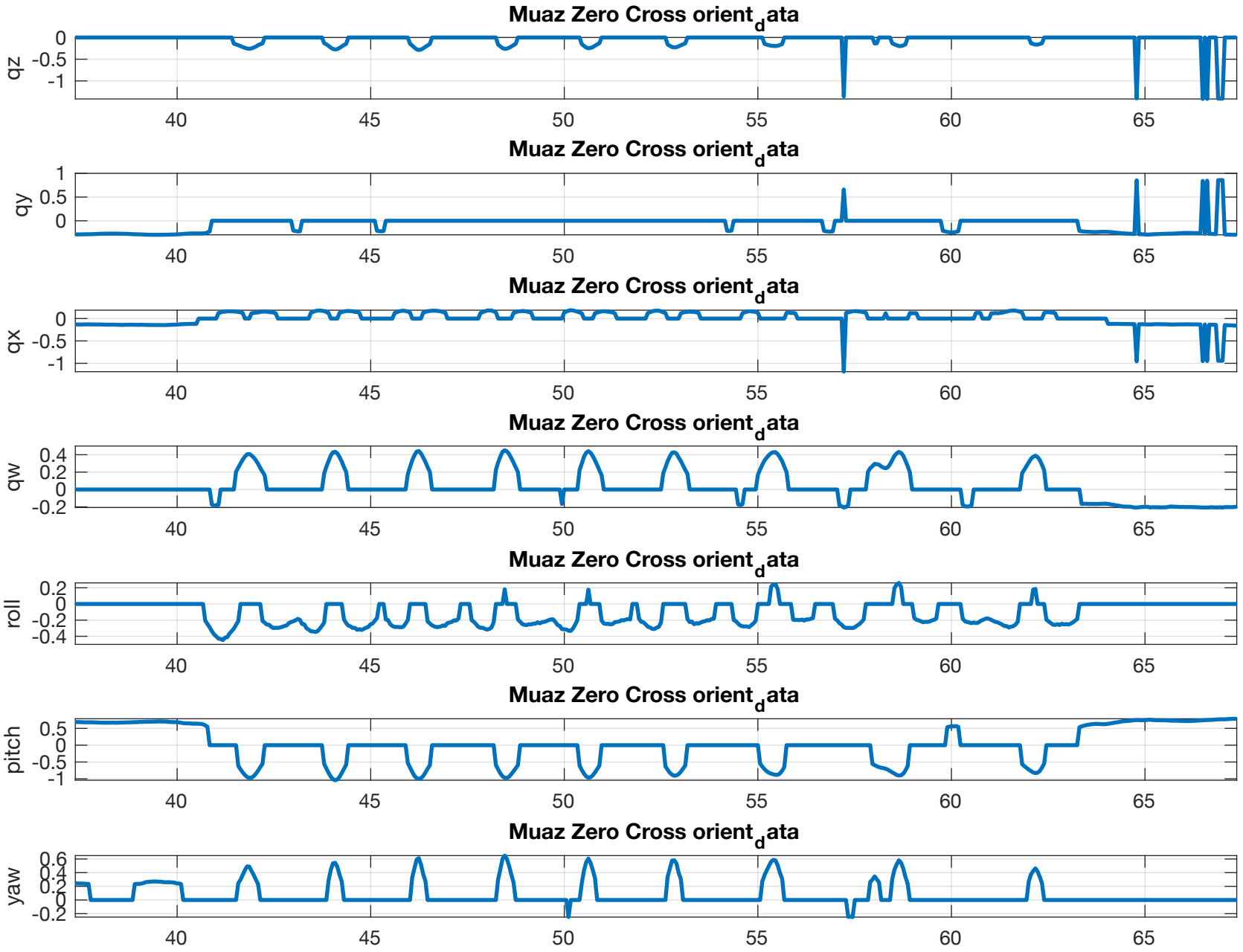
| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| 'Z' | -153.000 | -76.000 | -21.000 | -2.000 | "gyro_data" |
| 'Y' | -246.000 | -197.000 | -57.000 | -44.000 | "gyro_data" |
| 'X' | -225.000 | -145.000 | -38.000 | -16.000 | "gyro_data" |


Muaz grav_data
Z
2
0
-2
-4
40
45
50
55
60
65
Muaz grav_data
Y
10
5
0
-5
-10
40
45
50
55
60
65
Muaz grav_data
X
2
1
0
-1
-2
-3
40
45
50
55
60
65


Muaz Zero Cross grav_data
Z
2
0
-2
-4
40
45
50
55
60
65
Muaz Zero Cross grav_data
Y
10
5
0
-5
-10
40
45
50
55
60
65
Muaz Zero Cross grav_data
X
2
1
0
-1
-2
-3
40
45
50
55
60
65

| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| 'Z' | -82.000 | -29.000 | -9.000 | -1.500 | "grav_data" |
| 'Y' | -50.000 | -12.000 | 3.000 | 2.500 | "grav_data" |
| 'X' | -60.000 | -32.000 | -6.000 | -2.500 | "grav_data" |


Muaz orientdata
qz
0
-0.5
-1
40
45
50
55
60
65
Muaz orientdata
qy
1
0.5
0
40
45
50
55
60
65
Muaz orientdata
qx
0
-0.5
-1
40
45
50
55
60
65
Muaz orientdata
qw
0.4
0.2
0
-0.2
40
45
50
55
60
65
Muaz orientdata
roll
0.2
0
-0.2
-0.4
40
45
50
55
60
65
Muaz orientdata
pitch
0.5
0
-0.5
-1
40
45
50
55
60
65
Muaz orientdata
yaw
0.6
0.4
0.2
0
-0.2
40
45
50
55
60
65


Muaz Zero Cross orientdata
qz
qy
qx
qw
roll
pitch
yaw
40
45
50
55
60
65

| Axis | findpeaks | findpeaks_above_zero | double_findpeaks | zero_cross | Sensor |
|---|---|---|---|---|---|
| 'qz' | -73.000 | -51.000 | -11.000 | 0.000 | "orient_data" |
| 'qy' | -45.000 | -29.000 | -3.000 | 1.000 | "orient_data" |
| 'qx' | -75.000 | -35.000 | -8.000 | -3.000 | "orient_data" |
| 'qw' | -87.000 | -6.000 | -1.000 | -1.250 | "orient_data" |
| 'roll' | -86.000 | -30.000 | -9.000 | -2.500 | "orient_data" |
| 'pitch' | -49.000 | -39.000 | -5.000 | 3.000 | "orient_data" |
| 'yaw' | -73.000 | -47.000 | -12.000 | -1.250 | "orient_data" |

| Sensor | Sensor Axis | Method | Error |
|---|---|---|---|
| 'accel_data' | "Y" | 'zero_cross' | 54.500 |
| 'bar_data' | "Relative Altitude" | 'double_findpeaks' | 1.000 |
| 'gyro_data' | "Z" | 'zero_cross' | 2.000 |
| 'grav_data' | "Z" | 'zero_cross' | 1.500 |
| 'orient_data' | "qz" | 'zero_cross' | 0.000 |