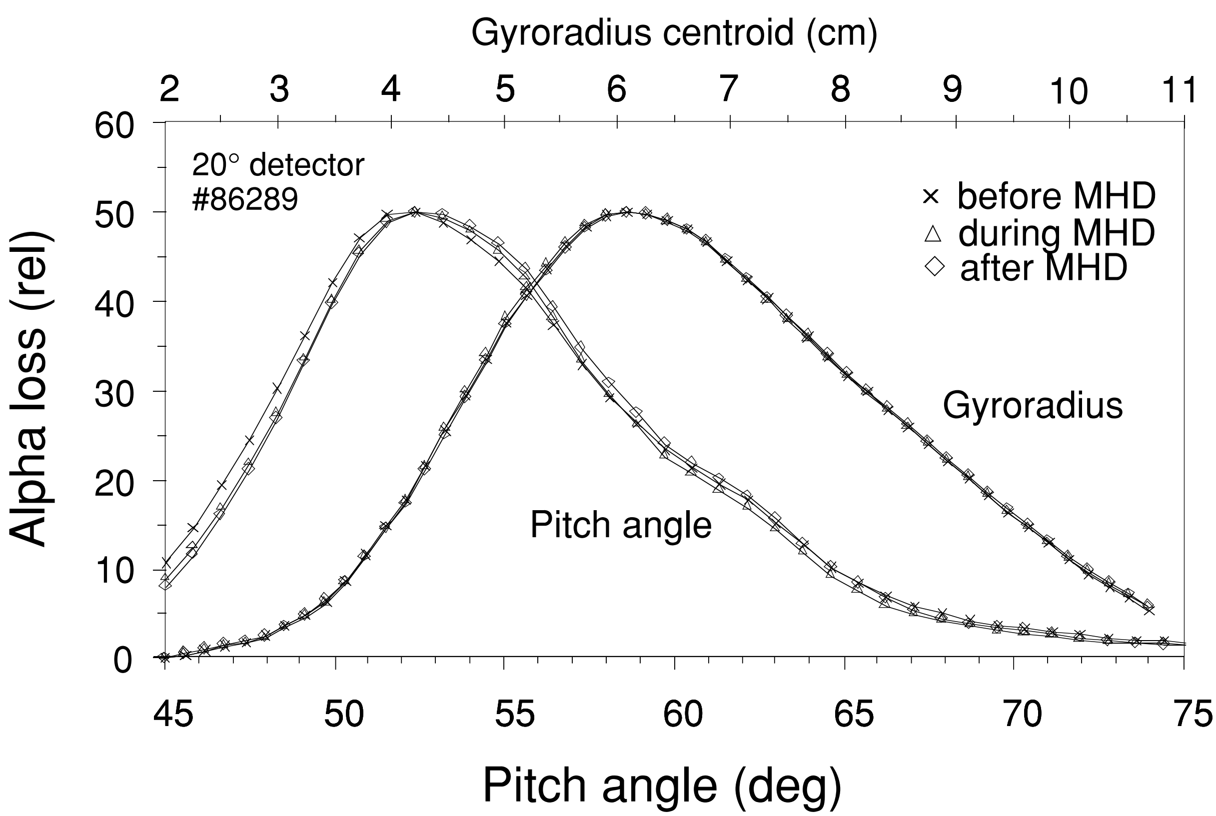
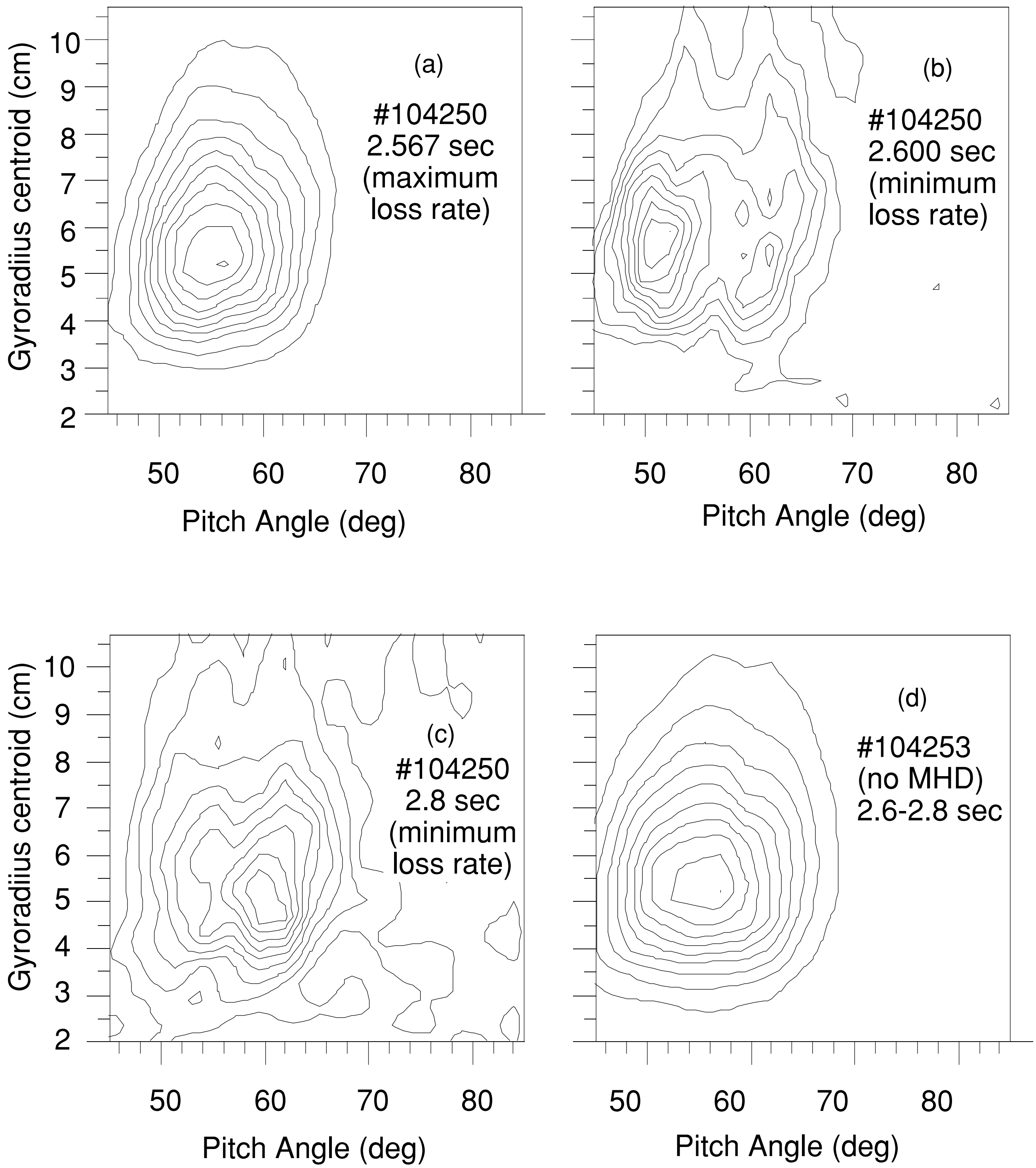


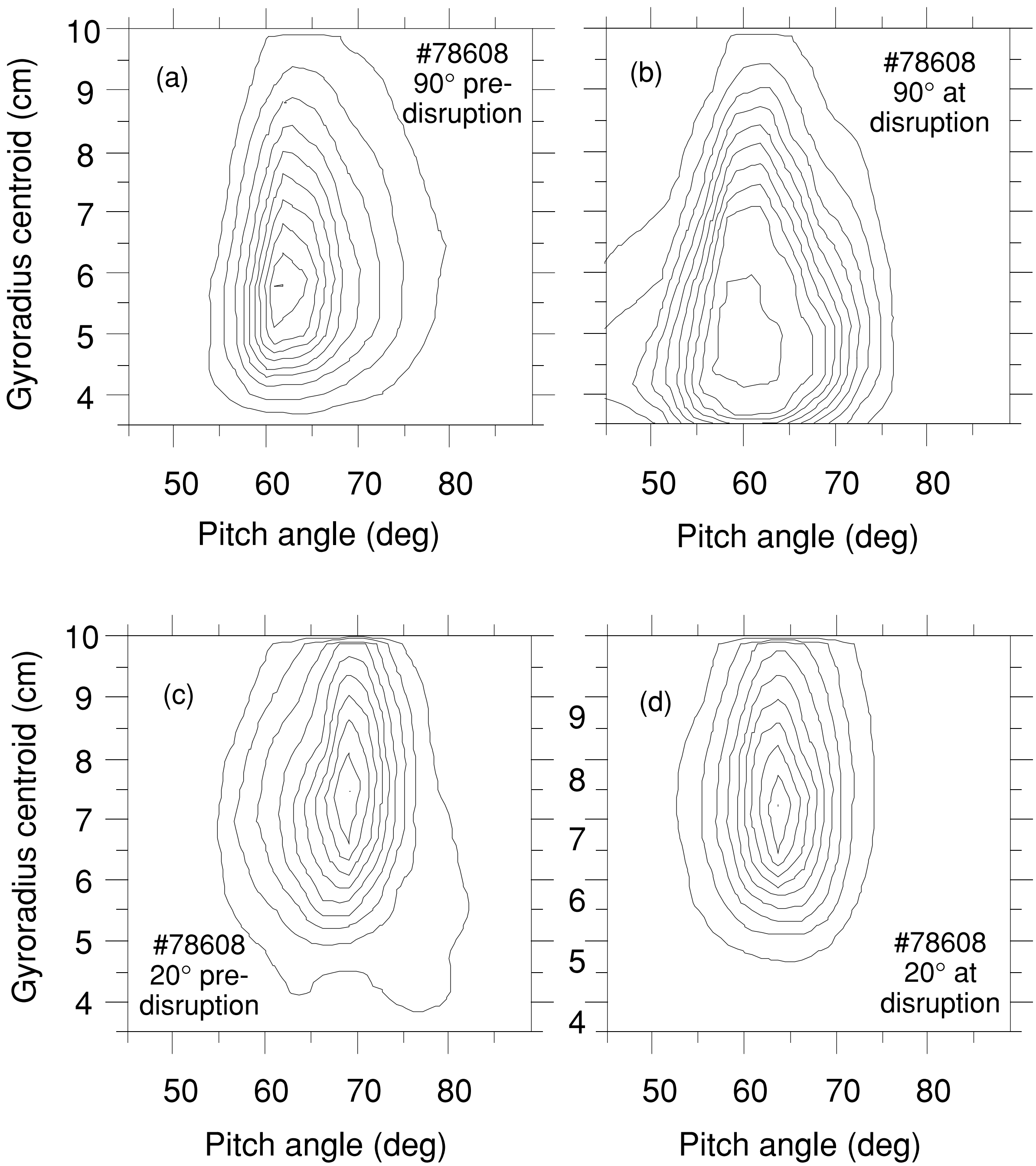
Gyroradius centroid (cm)
2
3
4
5
6
7
8
9
10
11
60
50
40
30
20
10
0
20° detector
#86289
× before MHD
△ during MHD
◇ after MHD
Gyroradius
Pitch angle
Alpha loss (rel)
45
50
55
60
65
70
75
Pitch angle (deg)

Fig. 10



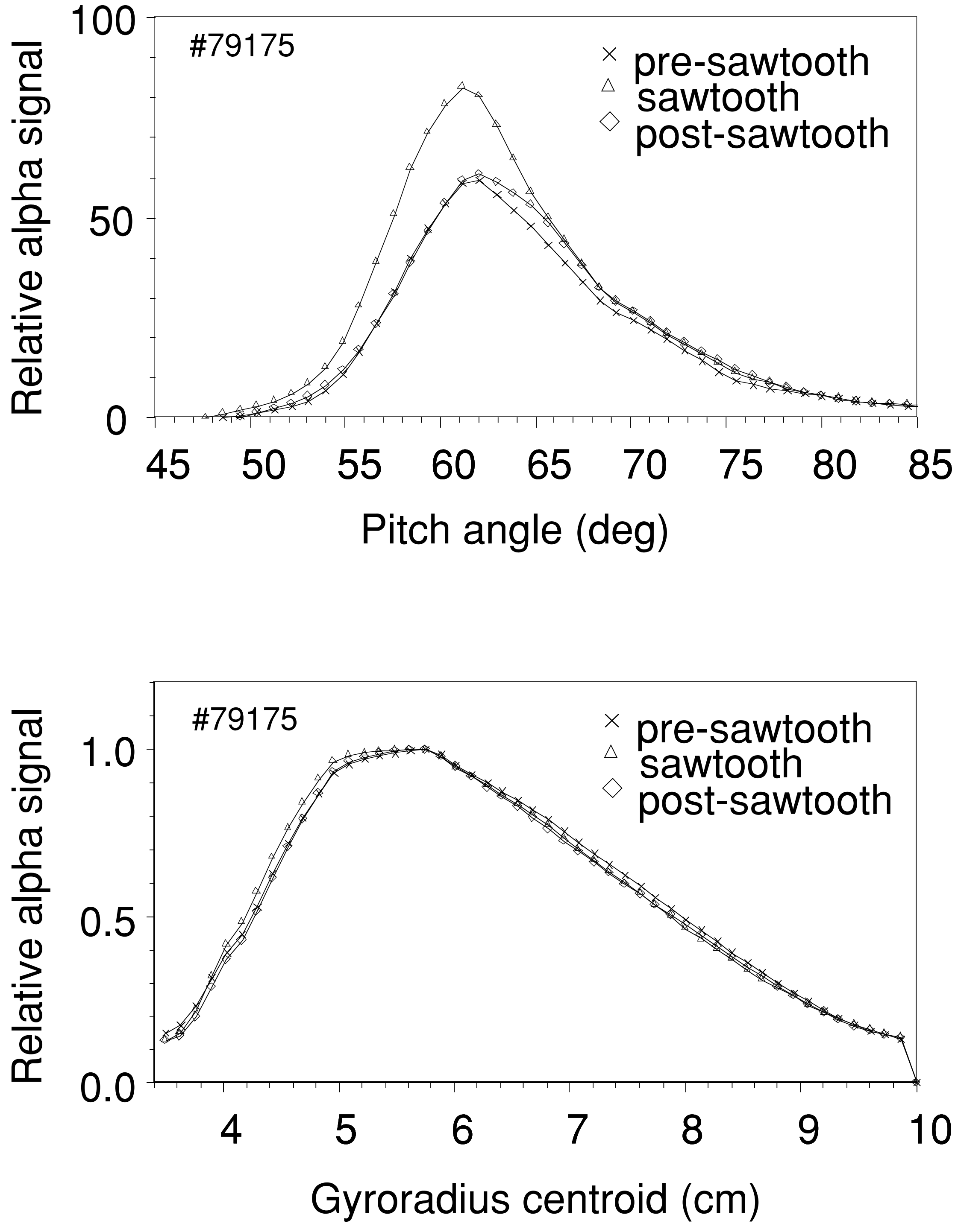
Gyroradiius centroid (cm)
Pitch Angle (deg)
(a)
#104250
2.567 sec
(maximum
loss rate)
(b)
#104250
2.600 sec
(minimum
loss rate)
(c)
#104250
2.8 sec
(minimum
loss rate)
(d)
#104253
(no MHD)
2.6-2.8 sec

Fig. 11



(a)
#78608
90° pre-
disruption
(b)
#78608
90° at
disruption
(c)
#78608
20° pre-
disruption
(d)
#78608
20° at
disruption
Gyroradius centroid (cm)
Pitch angle (deg)

Fig. 12



#79175
pre-sawtooth
sawtooth
post-sawtooth
Relative alpha signal
Pitch angle (deg)
100
50
0
45
50
55
60
65
70
75
80
85
#79175
pre-sawtooth
sawtooth
post-sawtooth
Relative alpha signal
Gyroradius centroid (cm)
1.0
0.5
0.0
4
5
6
7
8
9
10

Fig. 13