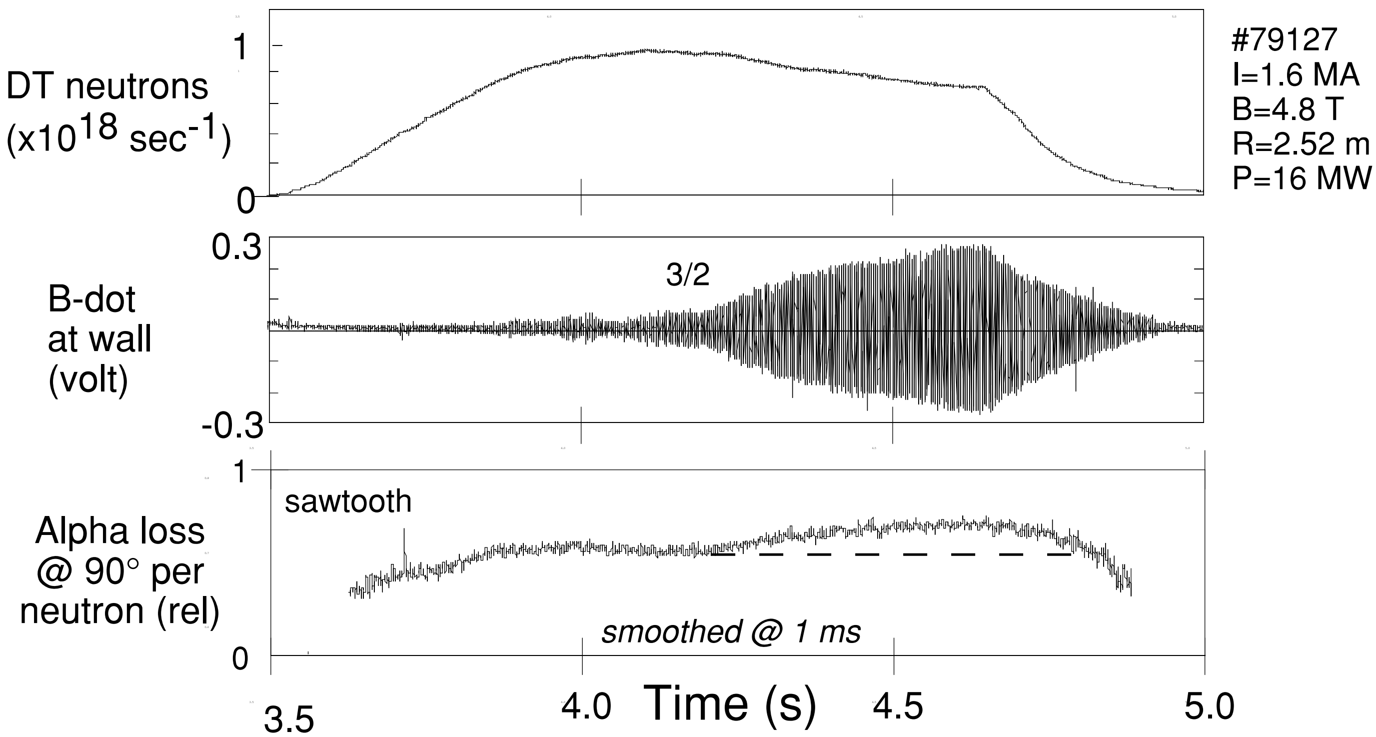
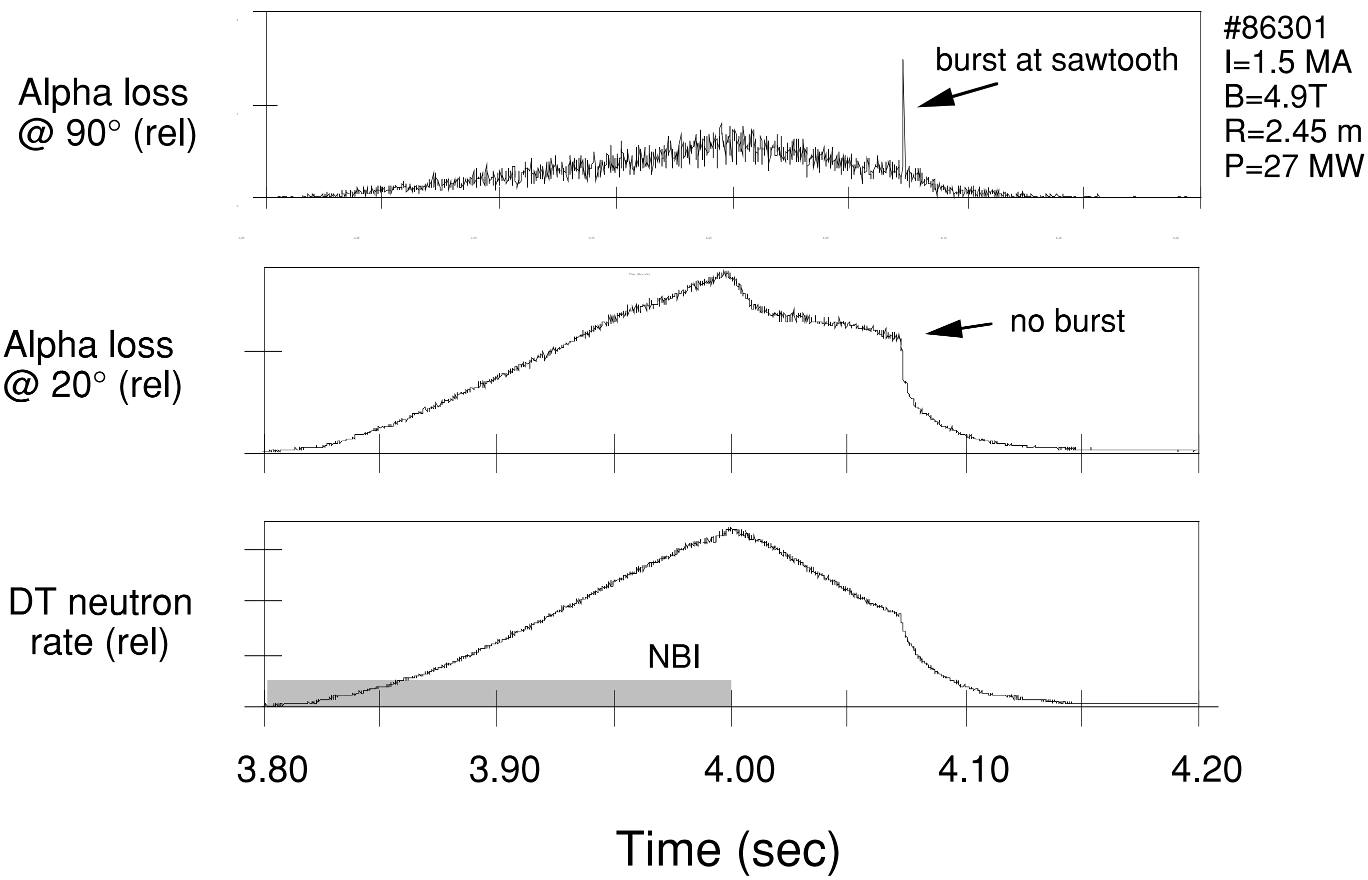


#79127
I=1.6 MA
B=4.8 T
R=2.52 m
P=16 MW
DT neutrons
(x10^18 sec^-1)
1
0
B-dot
at wall
(volt)
0.3
-0.3
3/2
Alpha loss
@ 90° per
neutron (rel)
1
0
sawtooth
smoothed @ 1 ms
3.5
4.0
4.5
5.0
Time (s)

Fig. 21



Alpha loss
@ 90° (rel)
burst at sawtooth
#86301
I=1.5 MA
B=4.9T
R=2.45 m
P=27 MW
Alpha loss
@ 20° (rel)
no burst
DT neutron
rate (rel)
NBI
3.80
3.90
4.00
4.10
4.20
Time (sec)

Fig. 22

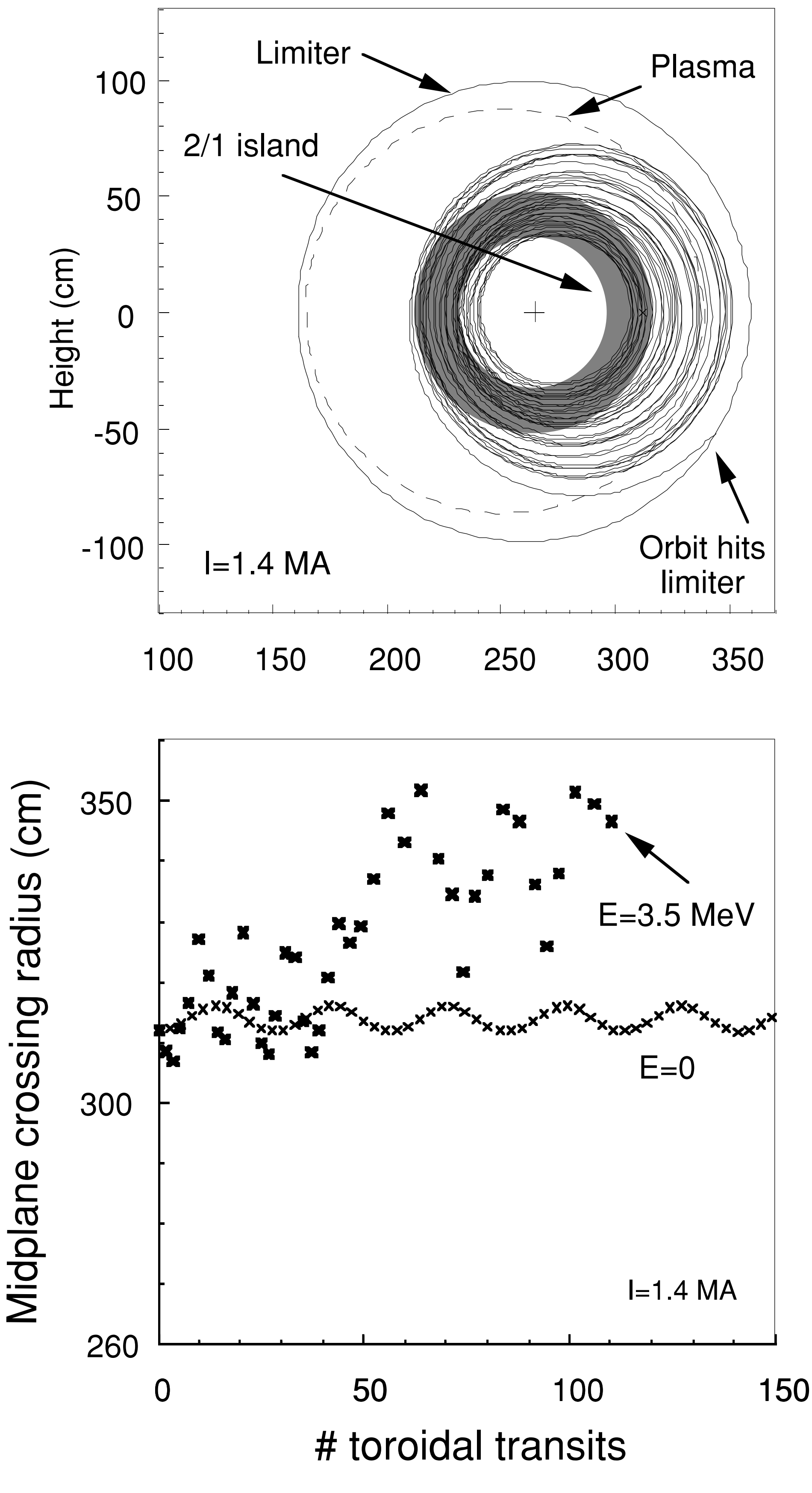

Limiter
Plasma
2/1 island
Height (cm)
100
50
0
-50
-100
I=1.4 MA
Orbit hits limiter
100
150
200
250
300
350
Midplane crossing radius (cm)
350
300
260
E=3.5 MeV
E=0
I=1.4 MA
0
50
100
150
toroidal transits

Fig. 23

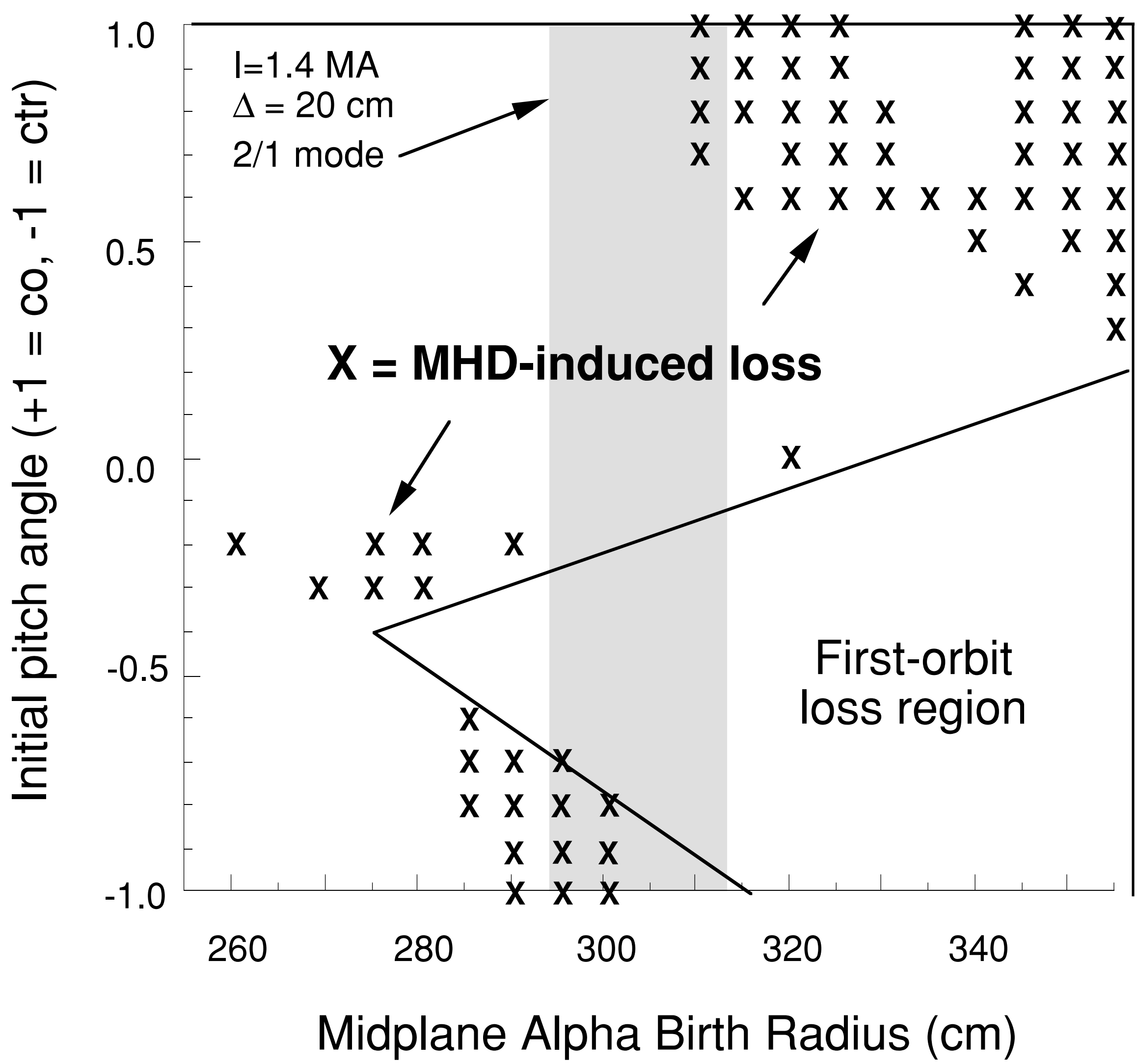
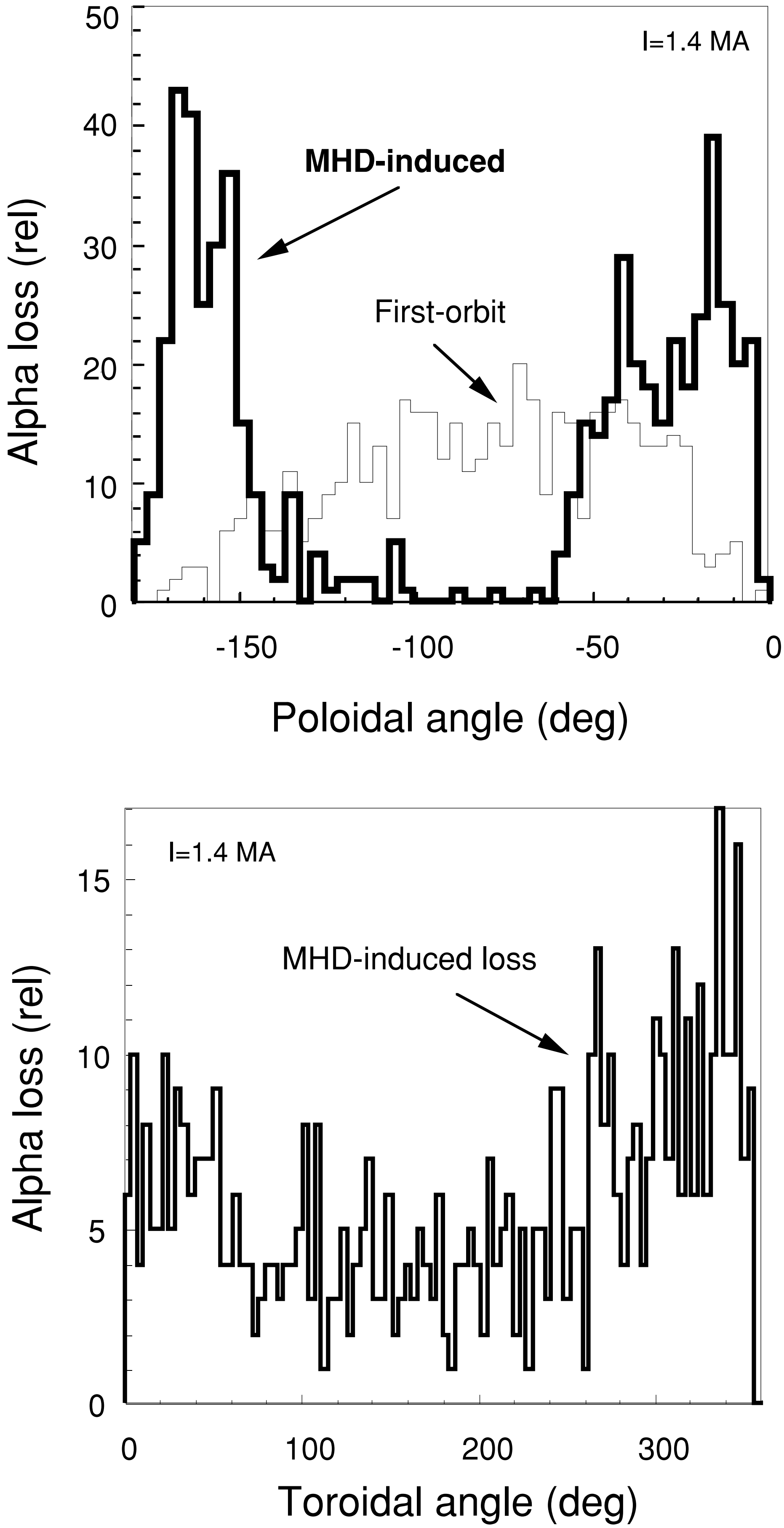

I=1.4 MA
Δ = 20 cm
2/1 mode
X = MHD-induced loss
First-orbit loss region
Initial pitch angle (+1 = co, -1 = ctr)
Midplane Alpha Birth Radius (cm)
1.0
0.5
0.0
-0.5
-1.0
260
280
300
320
340

Fig. 24



I=1.4 MA
MHD-induced
First-orbit
Alpha loss (rel)
Poloidal angle (deg)
0
10
20
30
40
50
-150
-100
-50
0
I=1.4 MA
MHD-induced loss
Alpha loss (rel)
Toroidal angle (deg)
0
5
10
15
0
100
200
300

Fig. 25