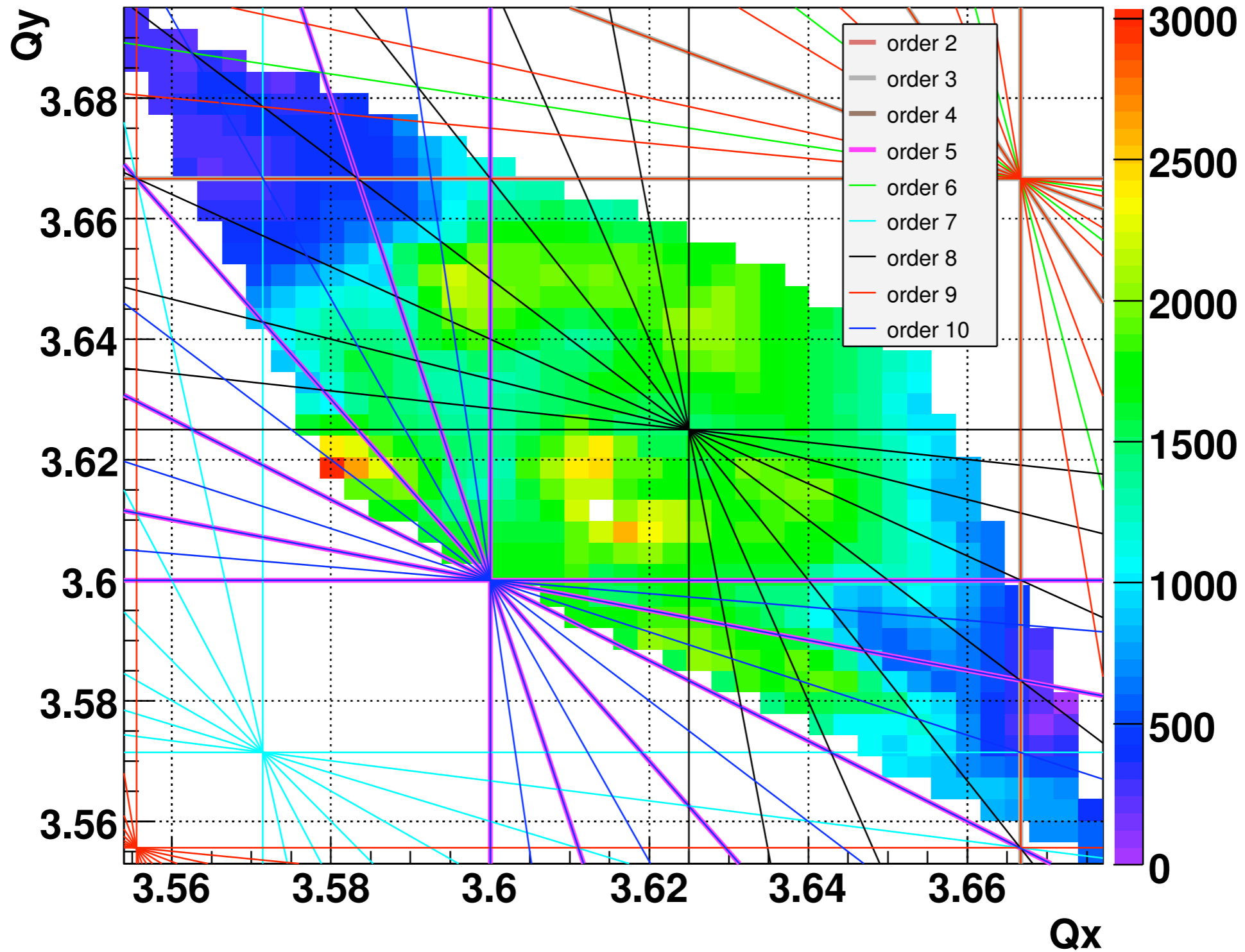
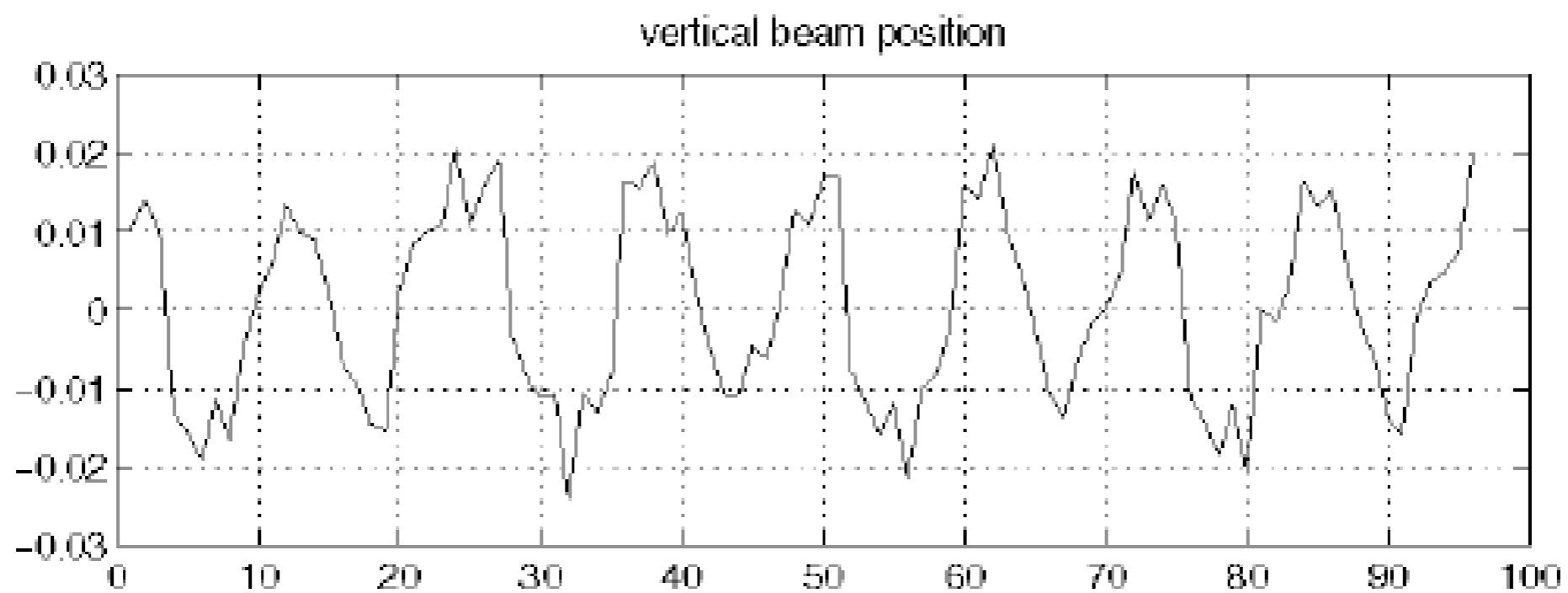


Vita media del fascio di protoni in COSY a 45 MeV  
in funzione dei numeri di betatrone

$\tau$  [s]

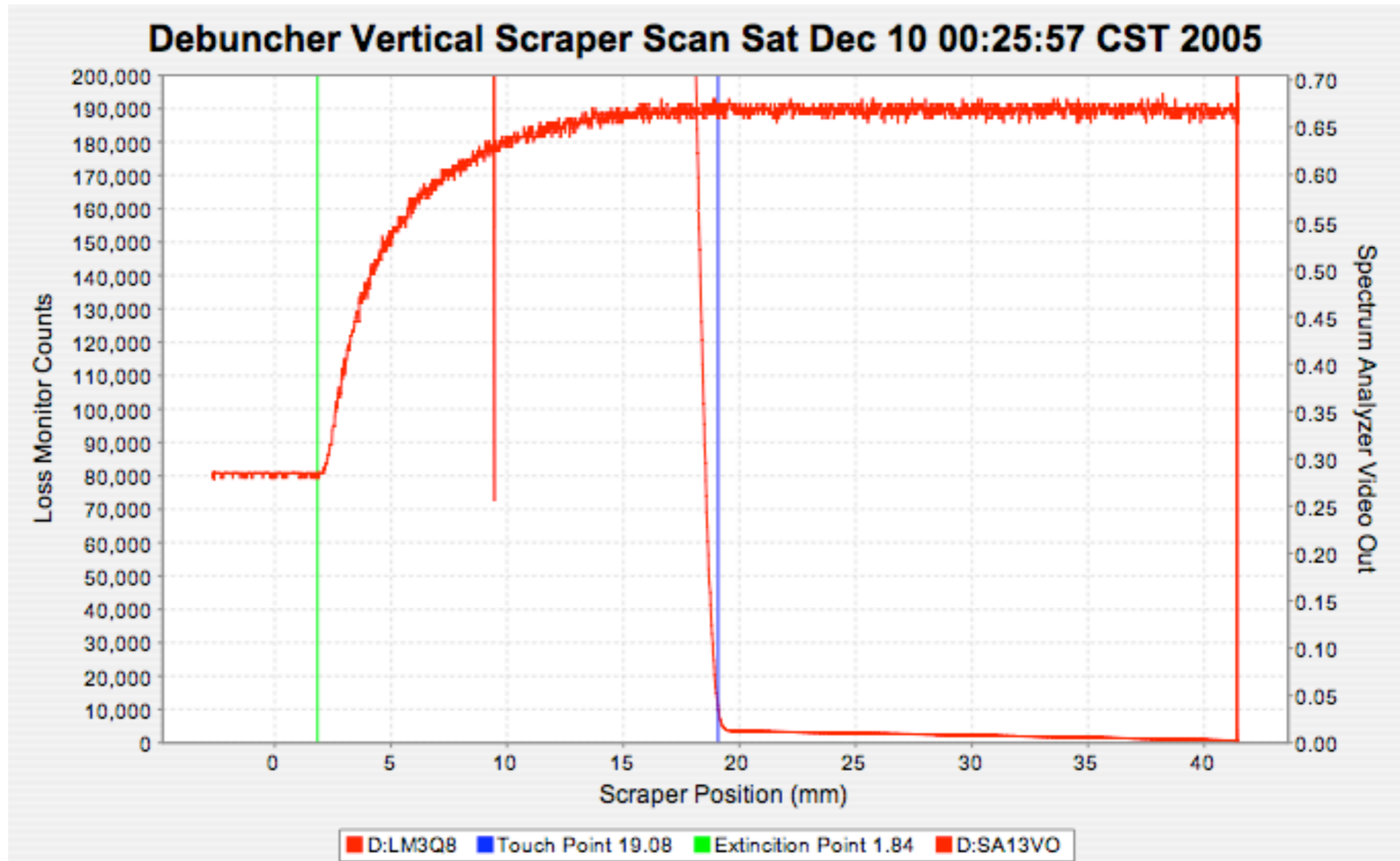


Orbita chiusa distorta generata da una deflessione verticale in Elettra (Trieste)



Il numero di betatrone è circa  $\nu_y = 8$

Accettanza verticale del Debuncher a Fermilab  
tramite scansione con coltello calibrato



$$\beta_y = 15.2 \text{ m}$$

# Misura della funzione di dispersione nell'Antiproton Accumulator a Fermilab

## ACCUMULATOR CLOSED ORBIT (HORIZONTAL)

```

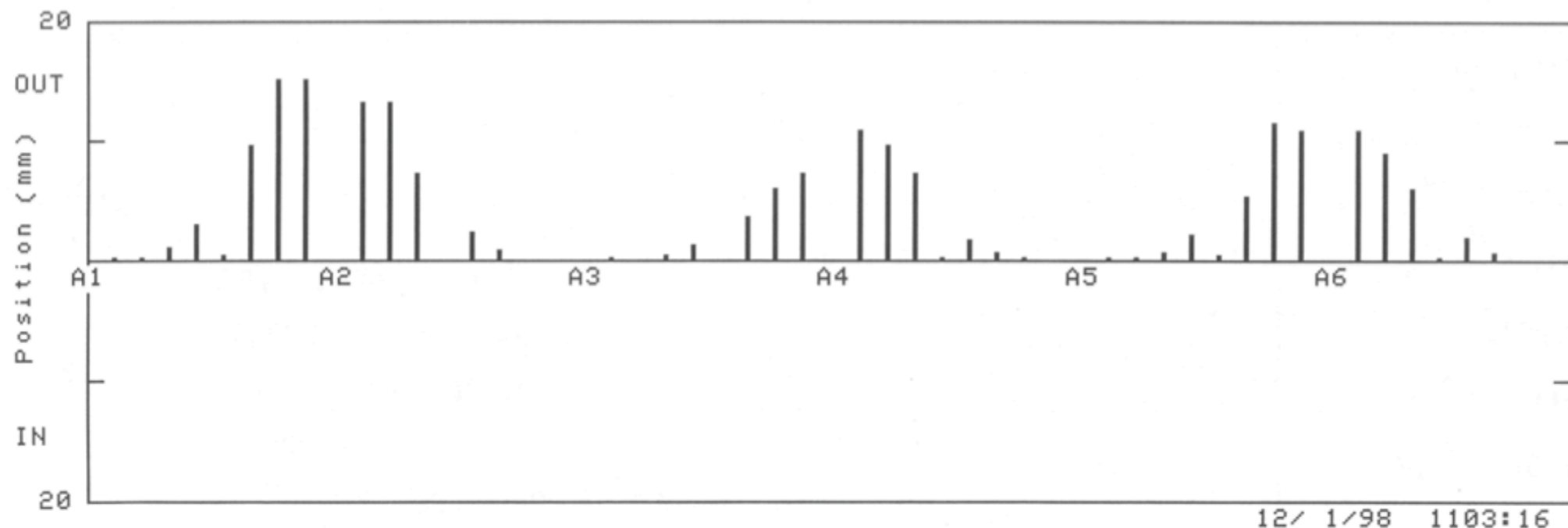
A:IBEAM          14.2527      A:R3HLFB          74.24352
A:BFIELD         16743.68     A:RLLFS0          628851.9
RECORD 101 C0 Date/Time: 8/20/97 0003:36 8 GEV CENTRAL ORBIT -15 HZ
MINUS          AVG OVER 16 FRAMES ( 16 16 16 16 16 16 )
RECORD 95 C0 Date/Time: 8/19/97 2328:40 8 GEV CENTRAL ORBIT
AVG OVER 16 FRAMES ( 16 16 16 16 16 16 )
Deltap/p = .0012
    
```

$$f_{riv} = 628867 \text{ Hz}$$

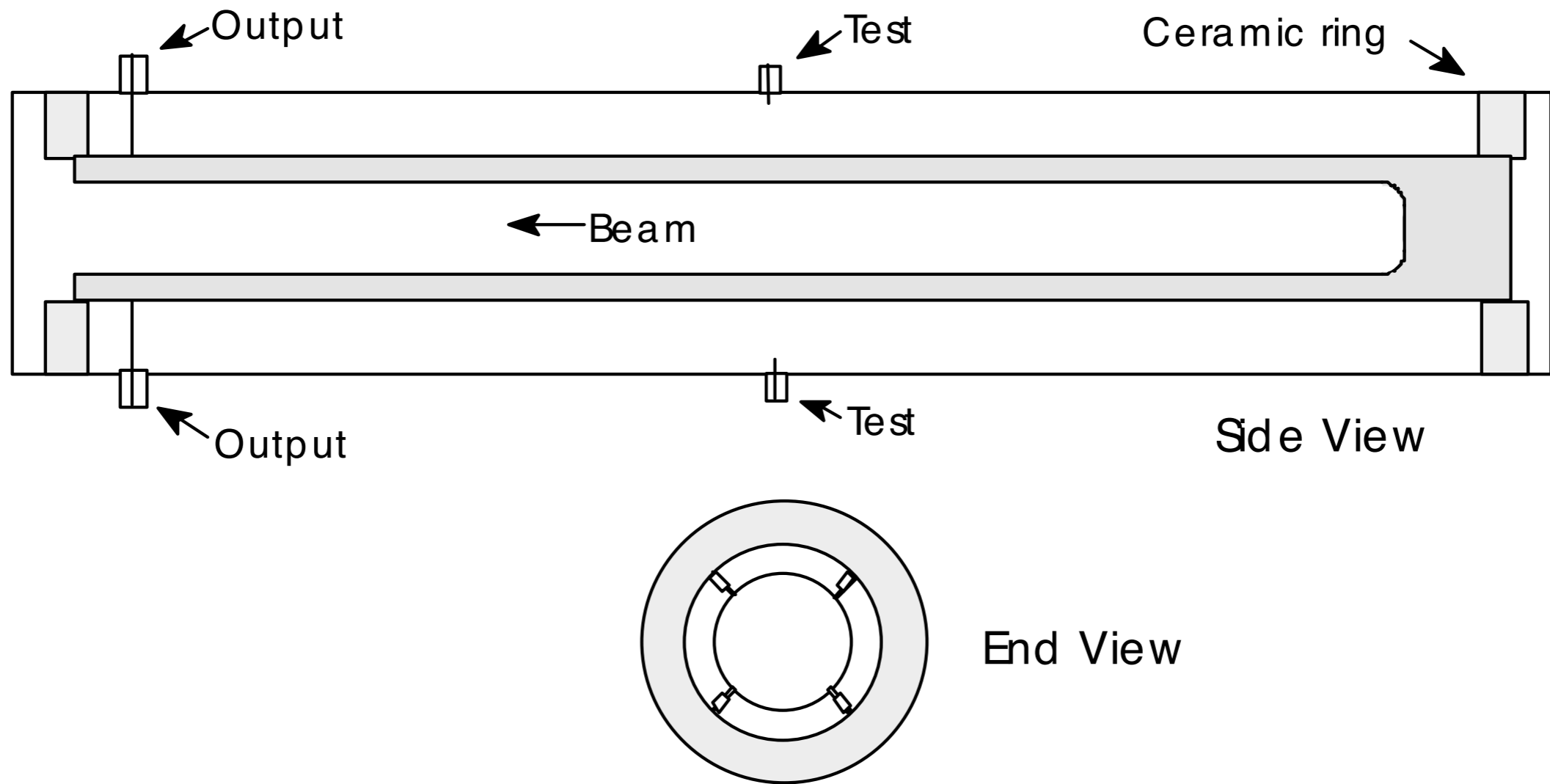
$$\eta = 0.023$$

### BEAM POSITIONS (mm)

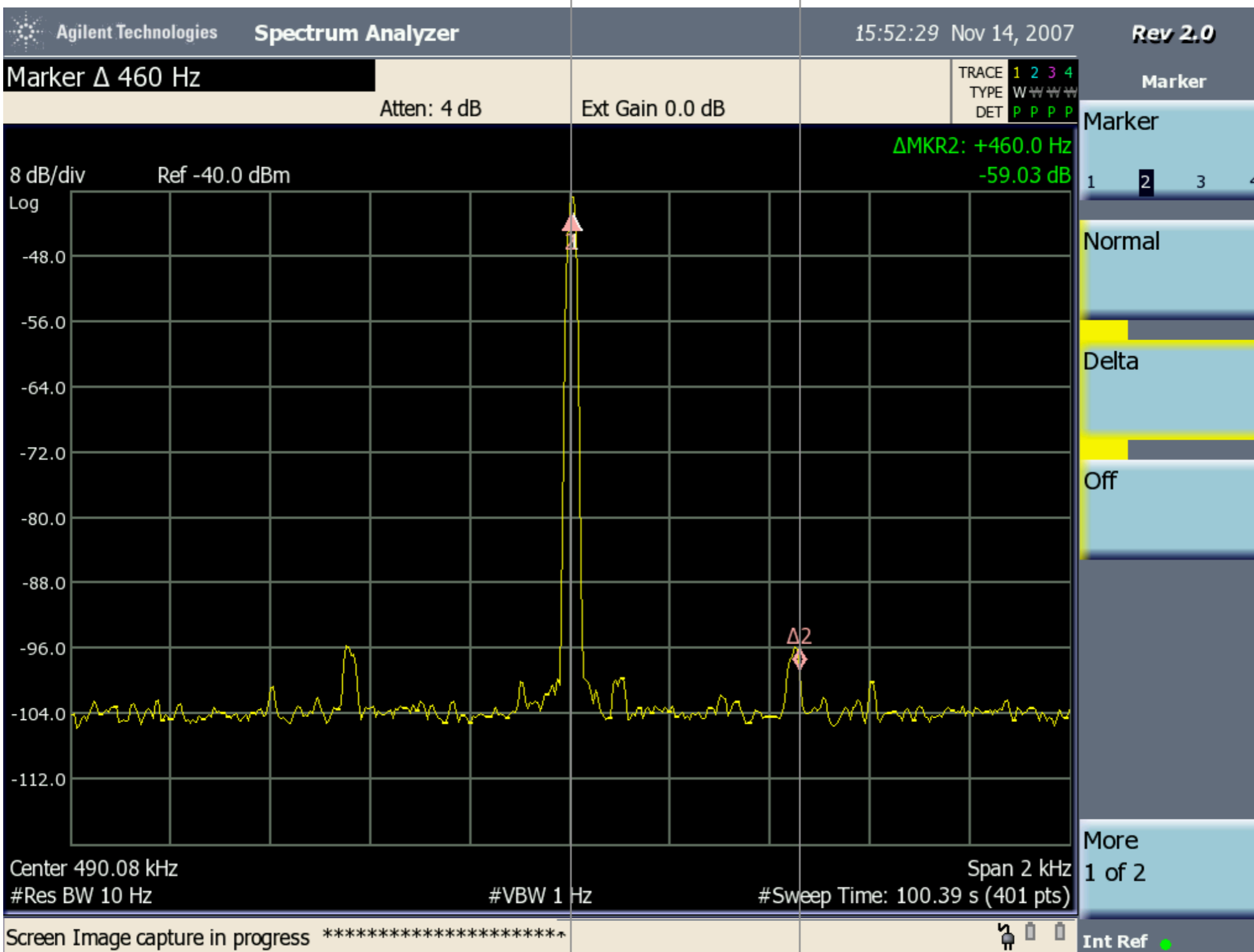
A1Q1	-.16	A2Q14	13.26	A3Q1	-.17	A4Q14	10.85	A5Q1	-.17	A6Q14	10.85
A1Q3	-.16	A2Q11	13.27	A3Q3	0	A4Q11	9.64	A5Q3	-.18	A6Q11	9.06
A1Q4	1.01	A2Q10	7.23	A3Q4	.33	A4Q10	7.23	A5Q4	.53	A6Q10	6.03
A1Q6	2.99	A2Q8	0	A3Q6	1.17	A4Q8	-.17	A5Q6	2.18	A6Q8	.16
A1Q8	.49	A2Q6	2.32	A3Q8	0	A4Q6	1.84	A5Q8	.34	A6Q6	2.01
A1Q10	9.66	A2Q4	.74	A3Q10	3.62	A4Q4	.68	A5Q10	5.42	A6Q4	.67
A1Q11	15.12	A2Q3	0	A3Q11	6.02	A4Q3	.17	A5Q11	11.48	A6Q3	0
A1Q14	15.06	A2Q1	0	A3Q14	7.22	A4Q1	0	A5Q14	10.84	A6Q1	0



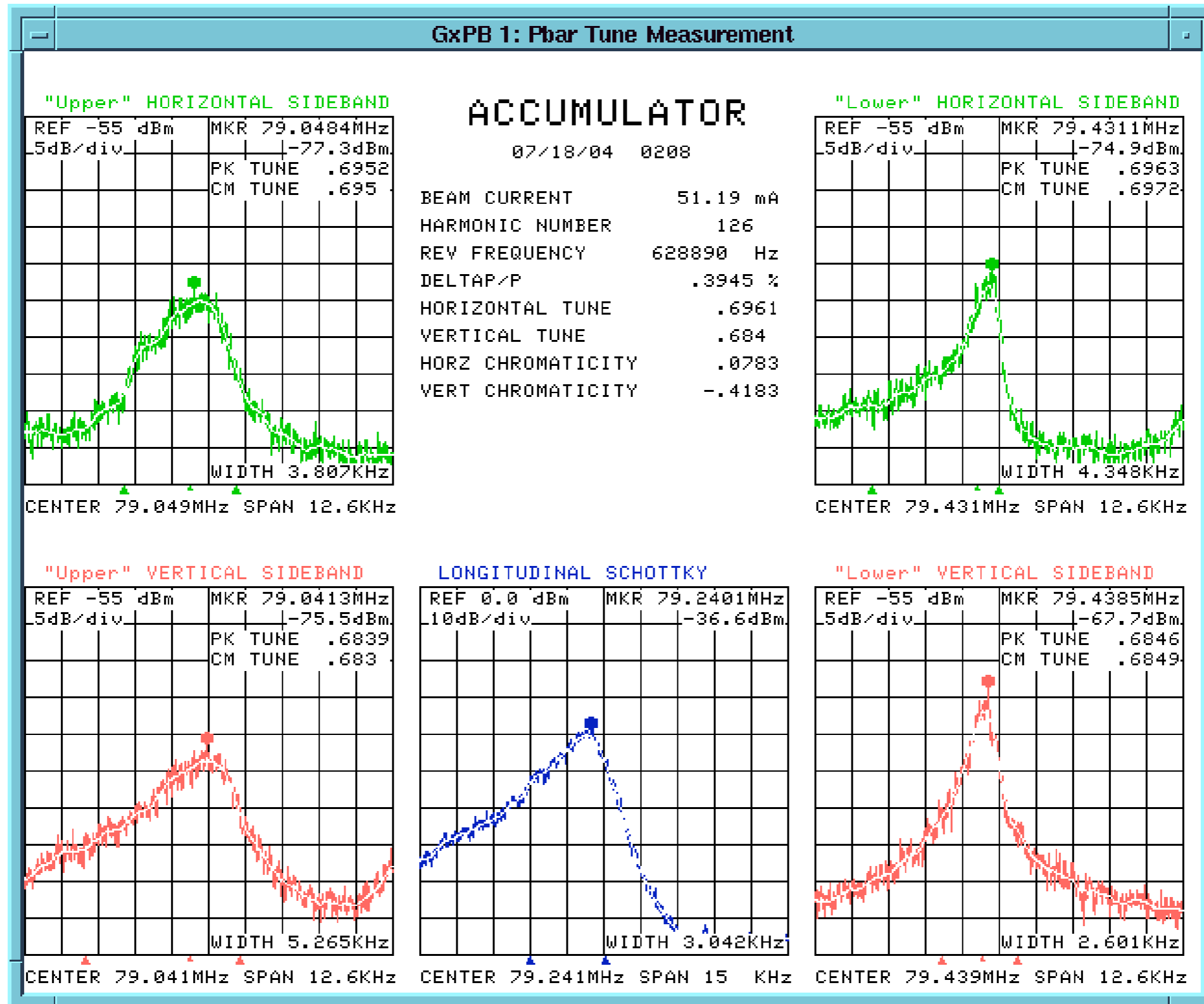
# Sensore Schottky verticale nell'Antiproton Accumulator a Fermilab



# Misura del fattore di avanzamento di fase $\eta$ dalla frequenza di sincrotrone in COSY a Jülich



# Misura di numeri di betatrone e cromaticità dalle bande Schottky laterali



# Variazione di $v_x$ e $v_y$ durante una decelerazione nell'Antiproton Accumulator a Fermilab

