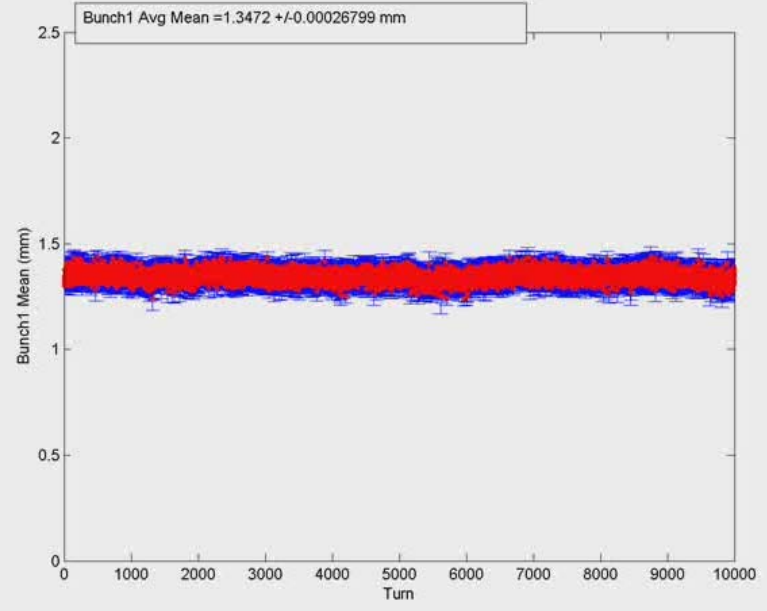
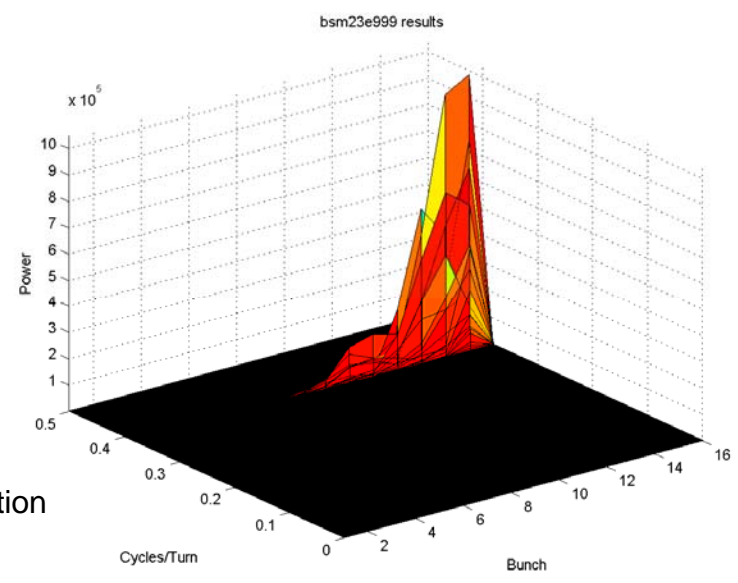


CESR-c e- Cloud Machine Studies
e+ and e- with witness bunch
1/31/2007

File:999 15 bunches + witness bunch 45
e+ I=0.75mA/bunch

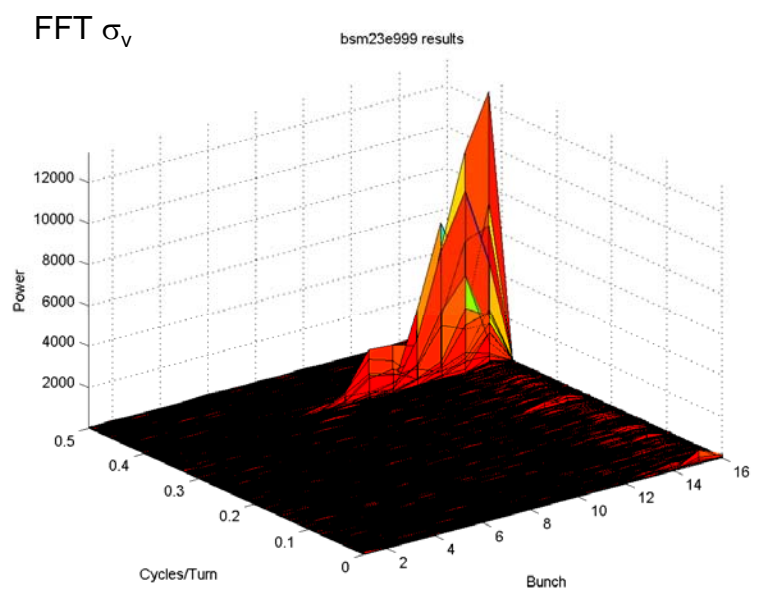
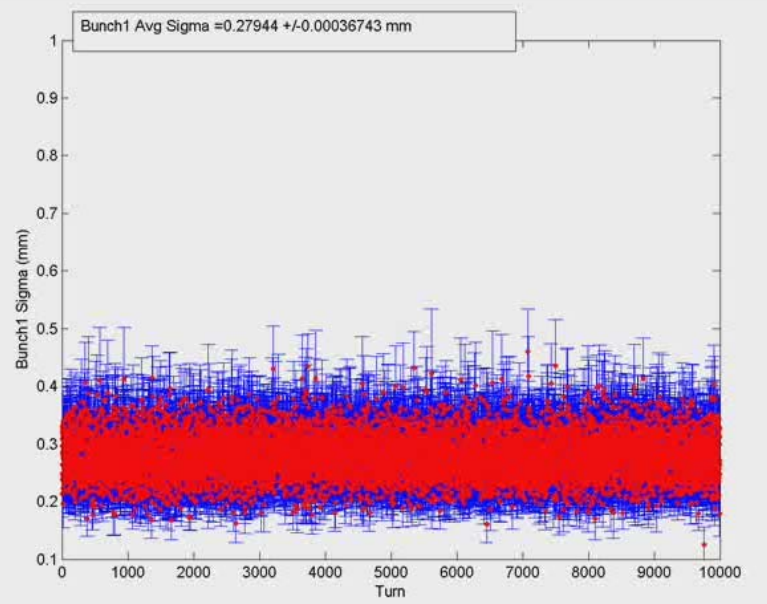


Movie (vertical position)



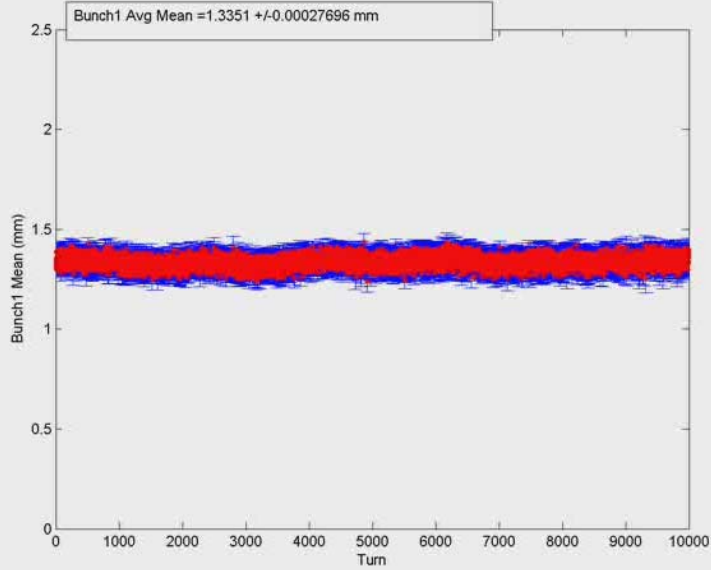
FFT vertical position

Movie (σ_v)



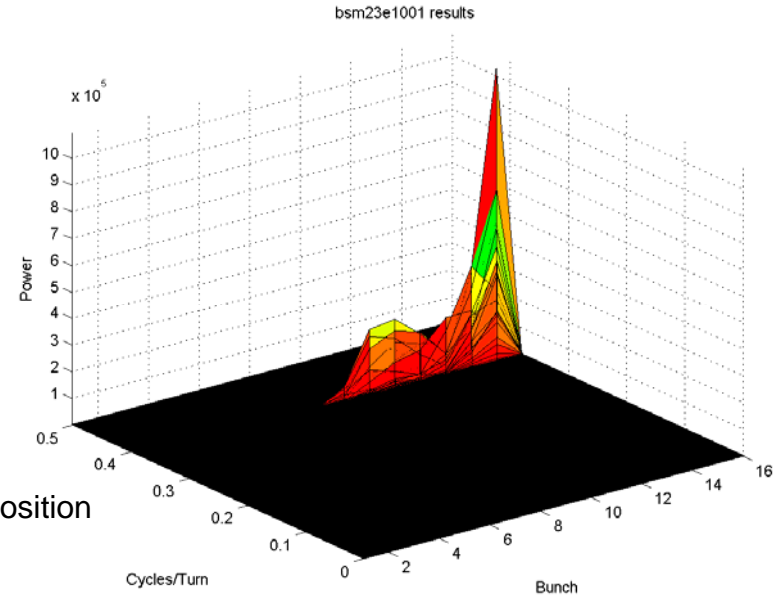
FFT σ_v

File:1001 15 bunches + witness bunch 31
e+ I=0.75mA/bunch

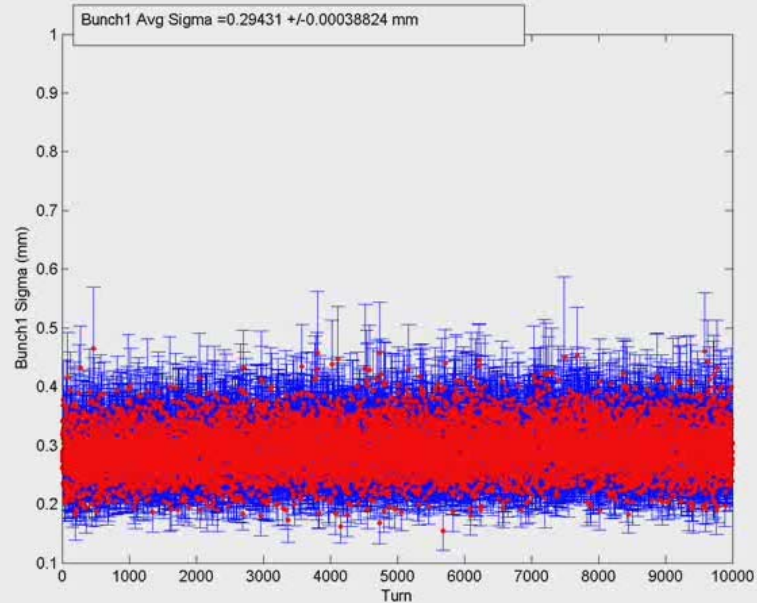


Movie (vertical position)

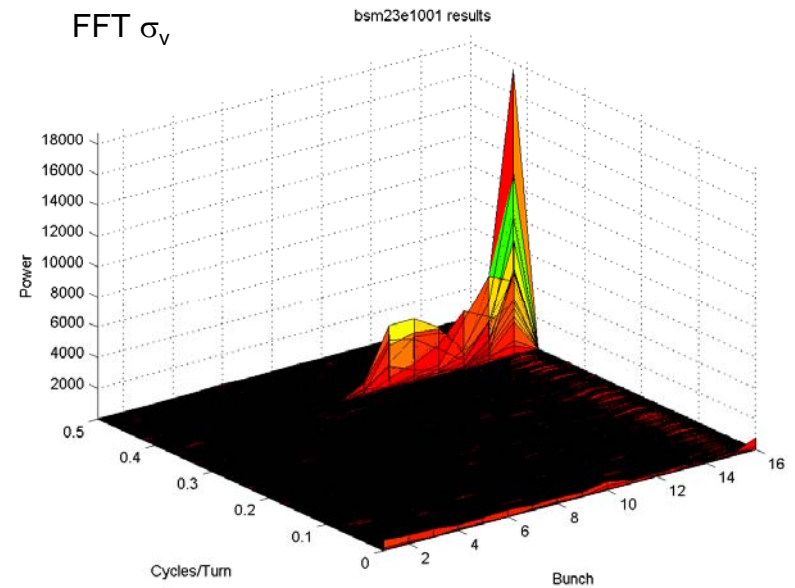
FFT vertical position



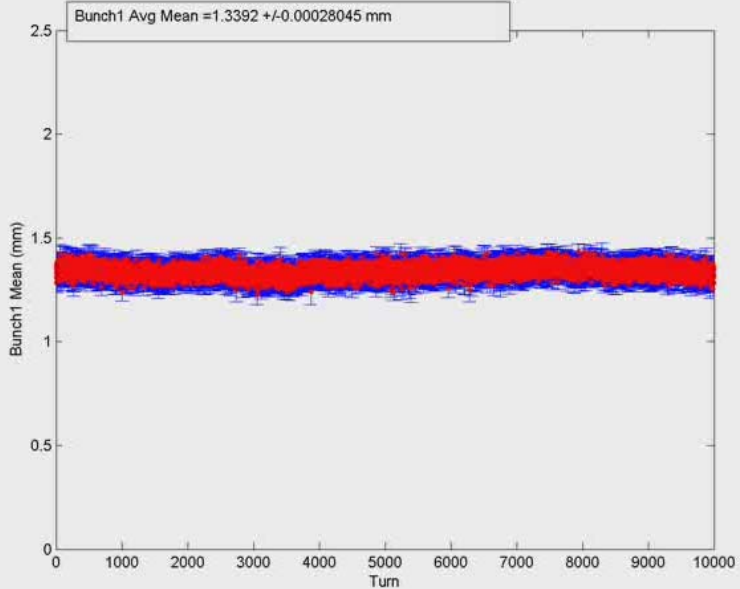
Movie (σ_v)



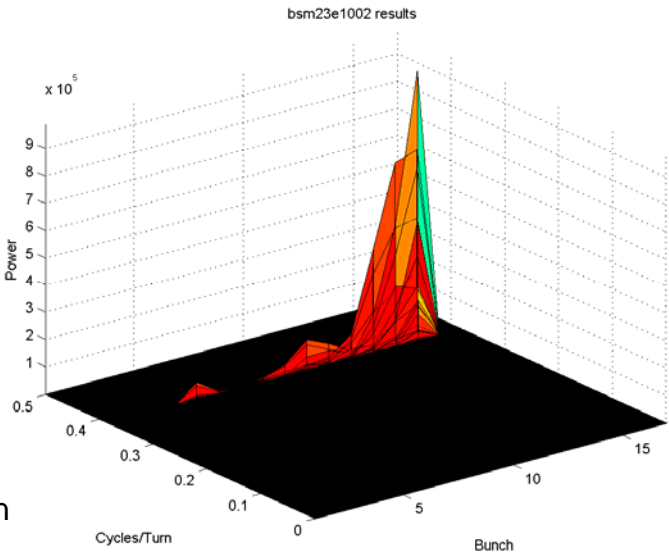
FFT σ_v



File:1002 15 bunches + witness bunches 23 & 31 e+ I=0.75mA/bunch

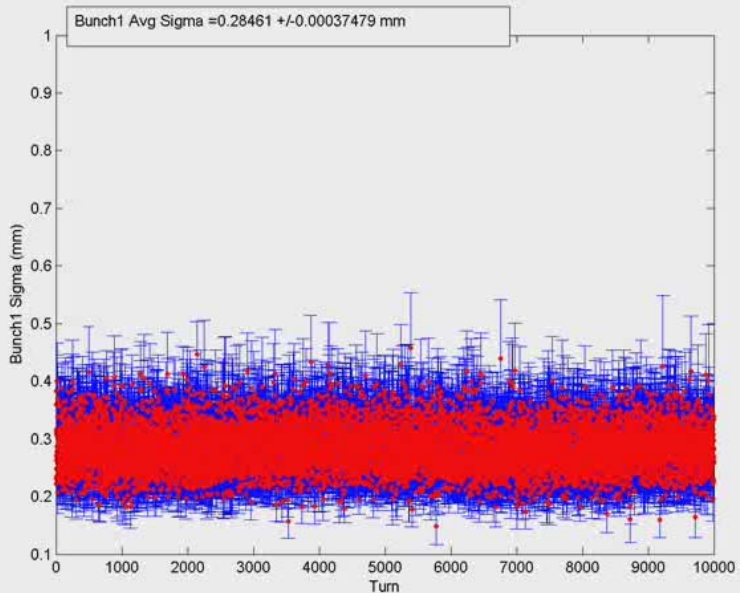


Movie (vertical position)

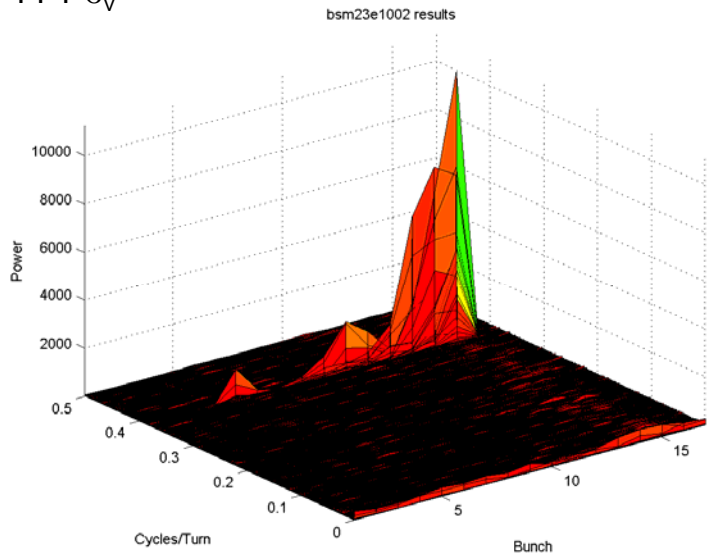


FFT vertical position

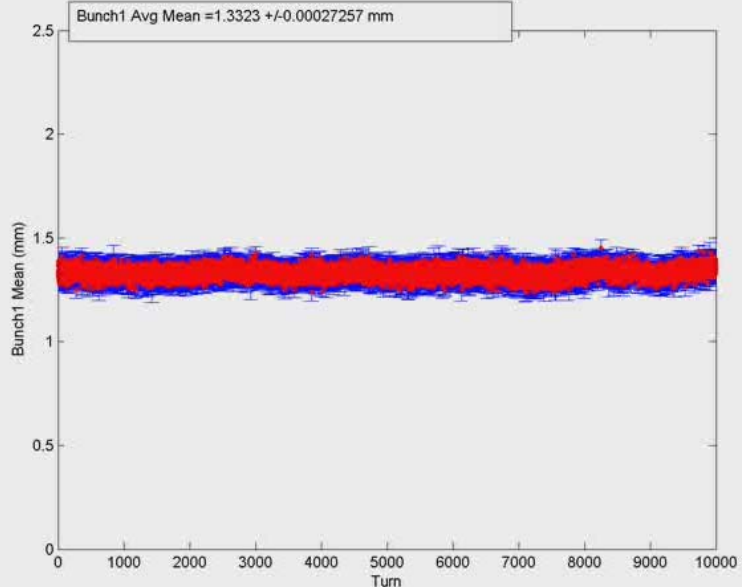
Movie (σ_v)



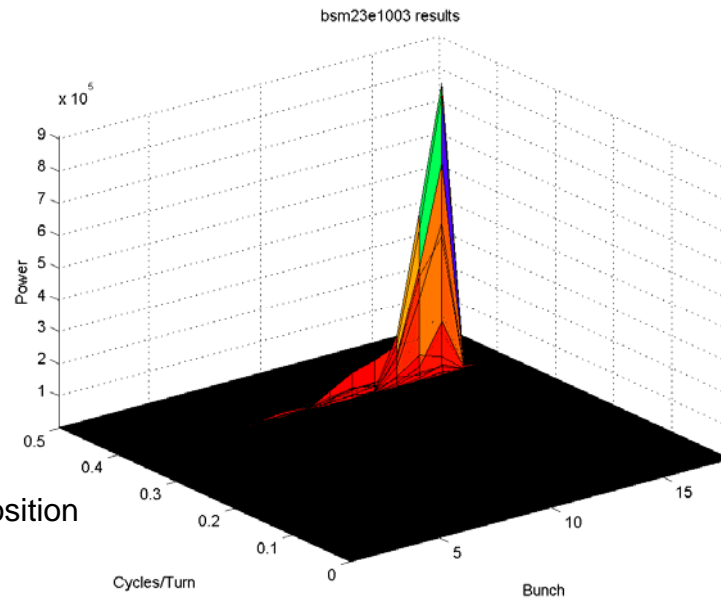
FFT σ_v



File:1003 15 bunches + witness bunches
18,23,31 e+ I=0.75mA/bunch

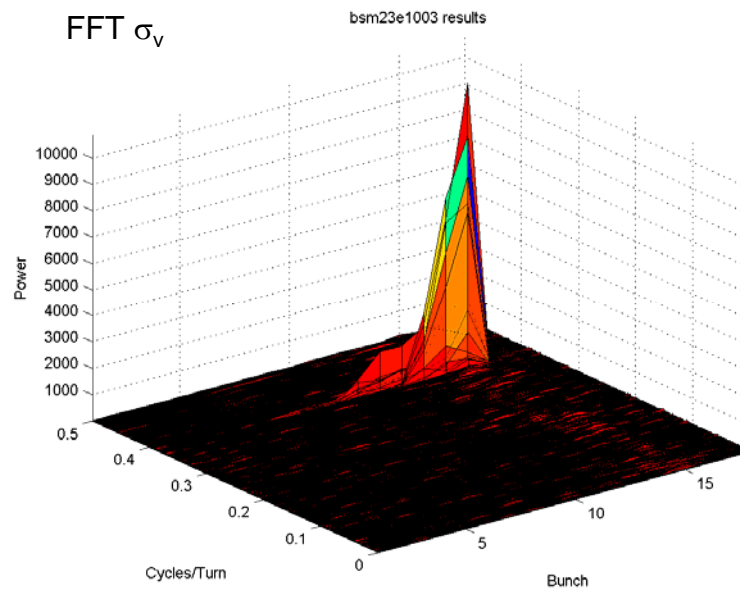
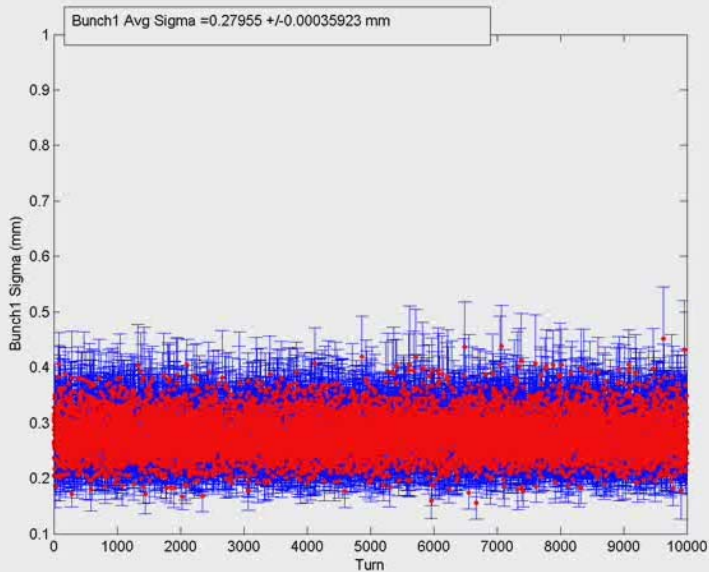


Movie (vertical position)



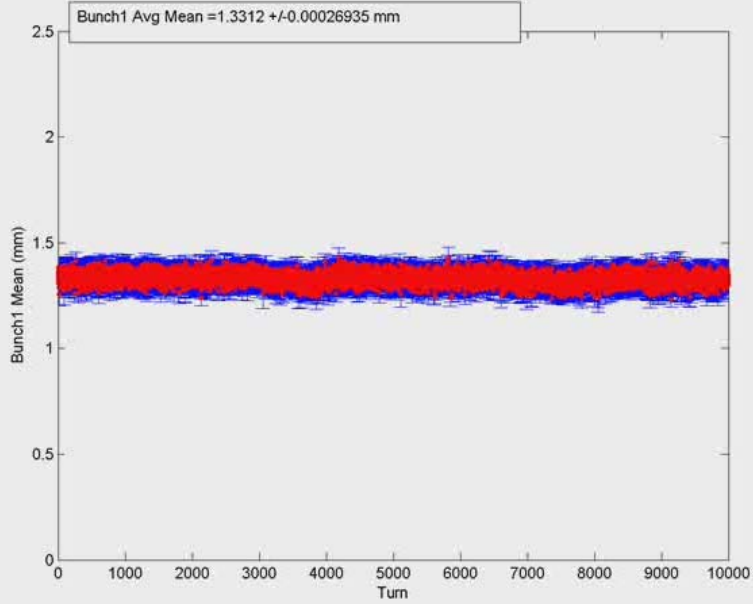
FFT vertical position

Movie (σ_v)

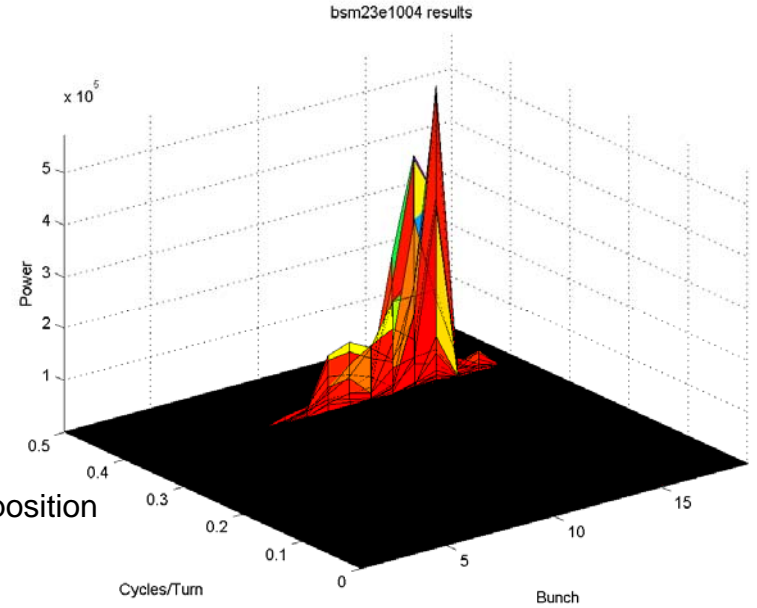


FFT σ_v

File:1004 15 bunches + witness bunches
17,18,23,31 e+ I=0.75mA/bunch

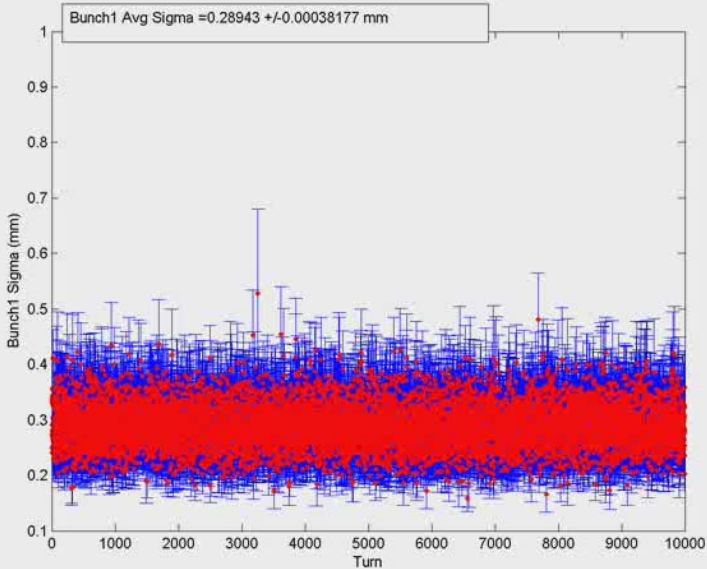


Movie (vertical position)

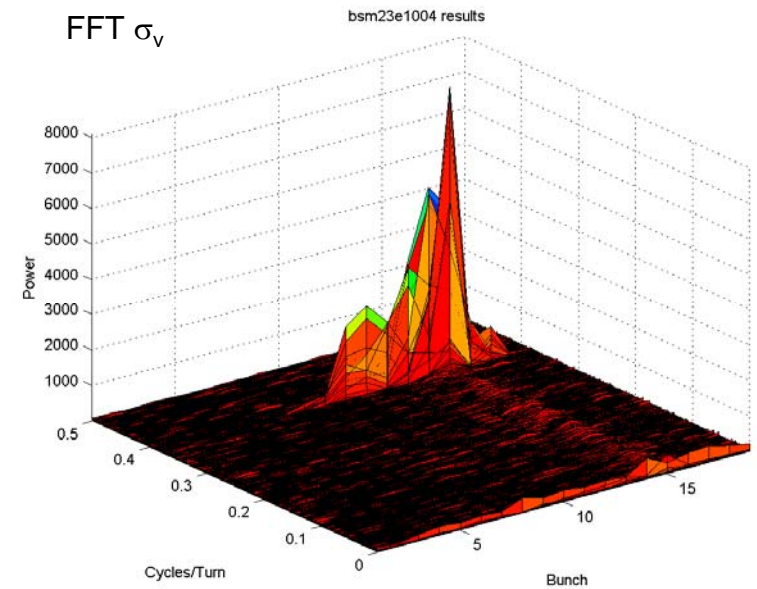


FFT vertical position

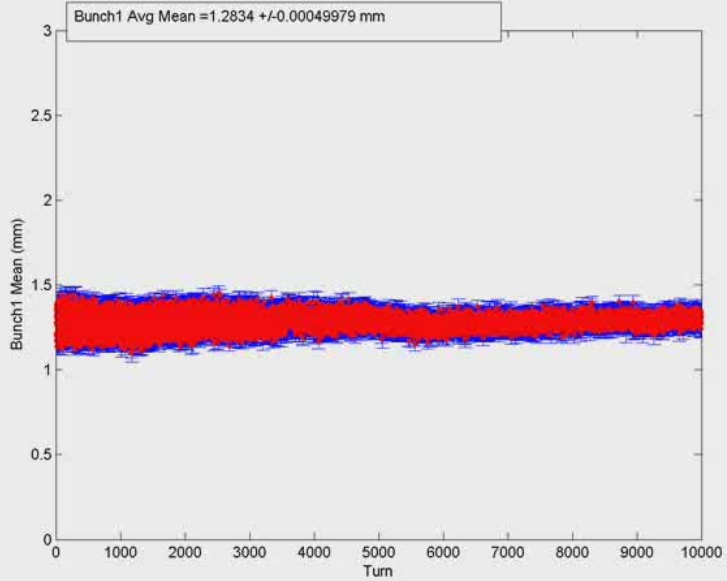
Movie (σ_v)



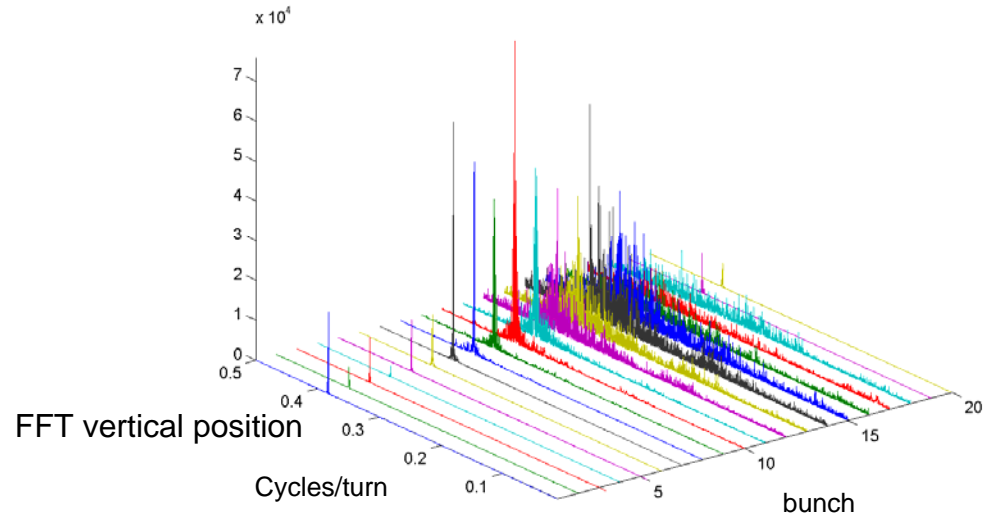
FFT σ_v



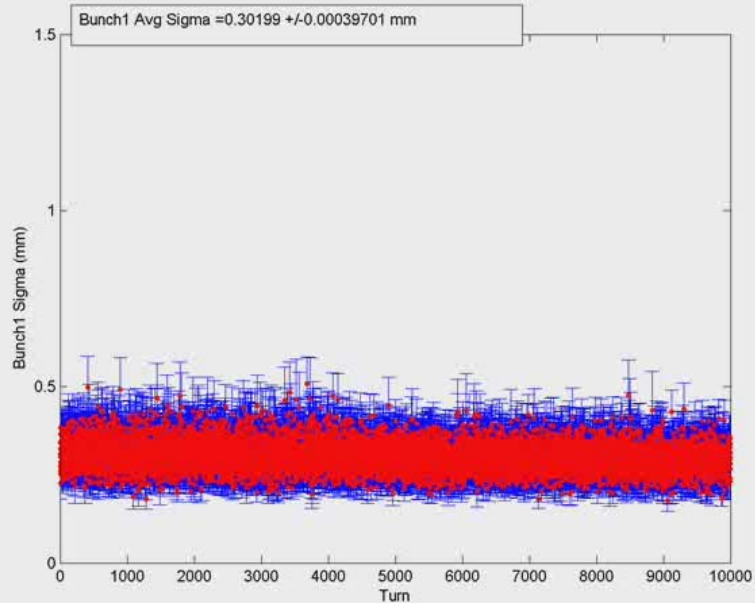
File:1005 15 bunches + witness bunches
16,17,18,23,31 e+ I=0.75mA/bunch



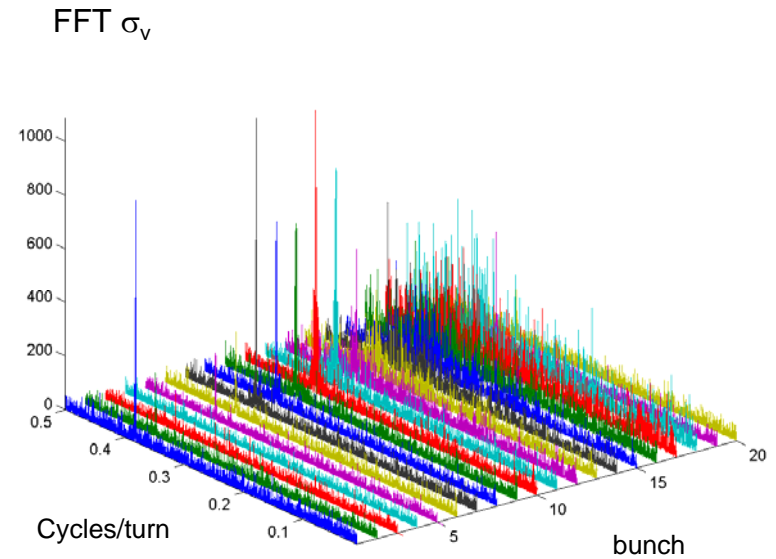
Movie (vertical position)



FFT vertical position

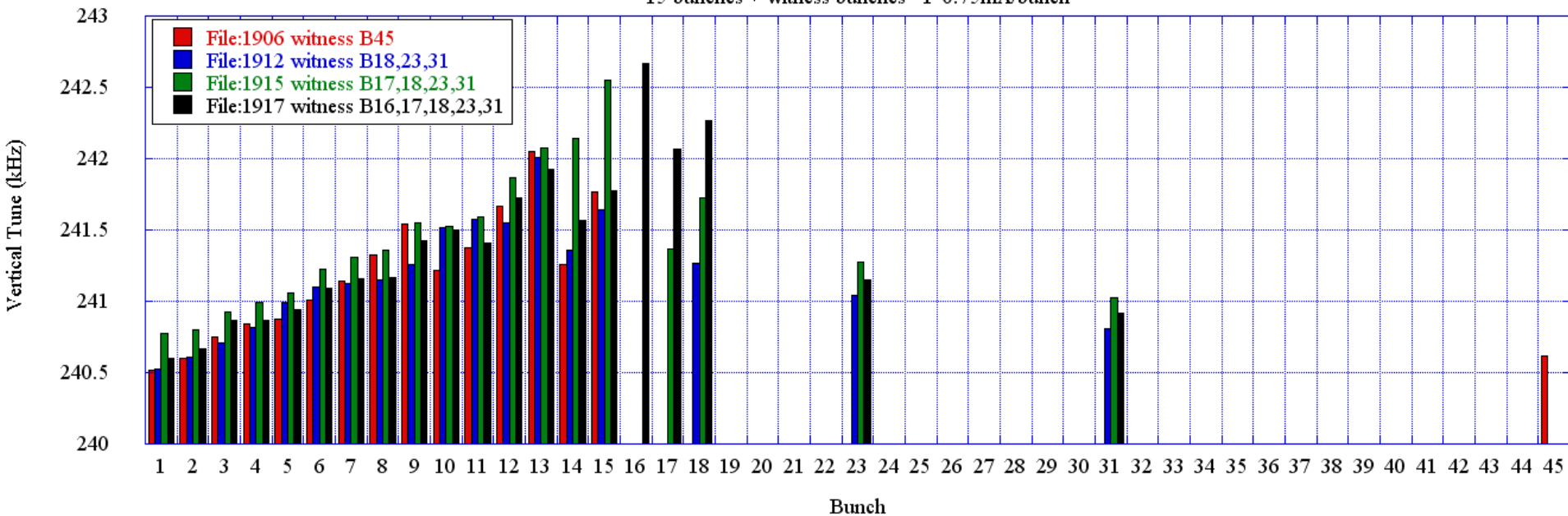


Movie (σ_v)

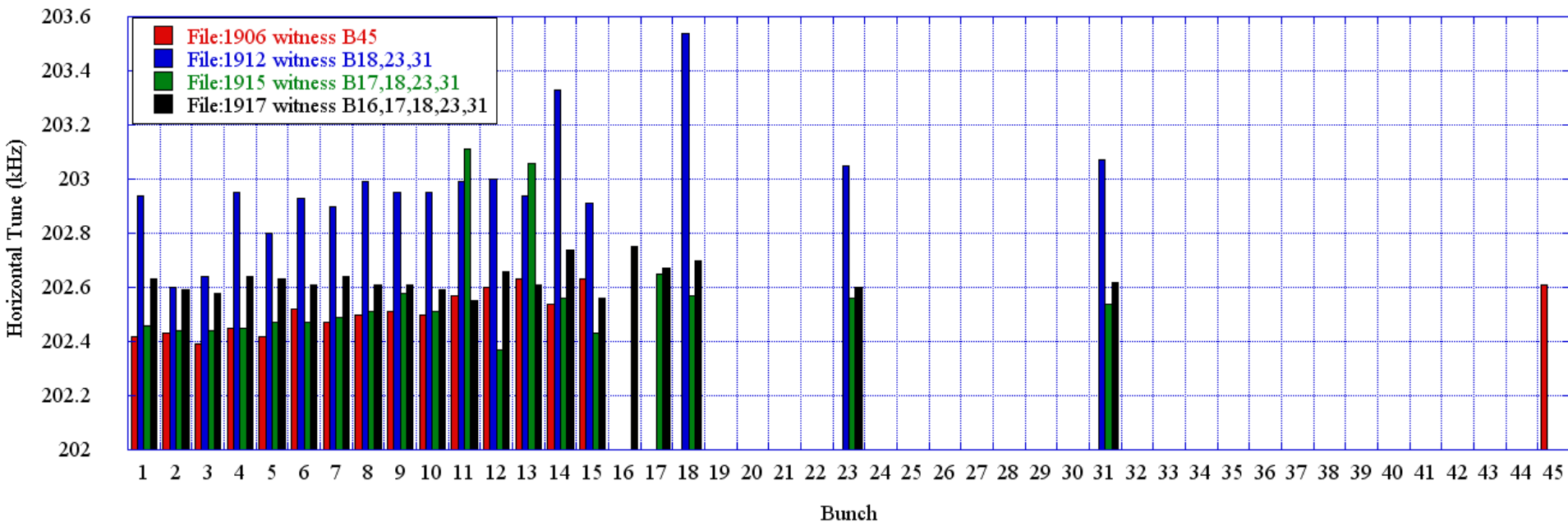


FFT σ_v

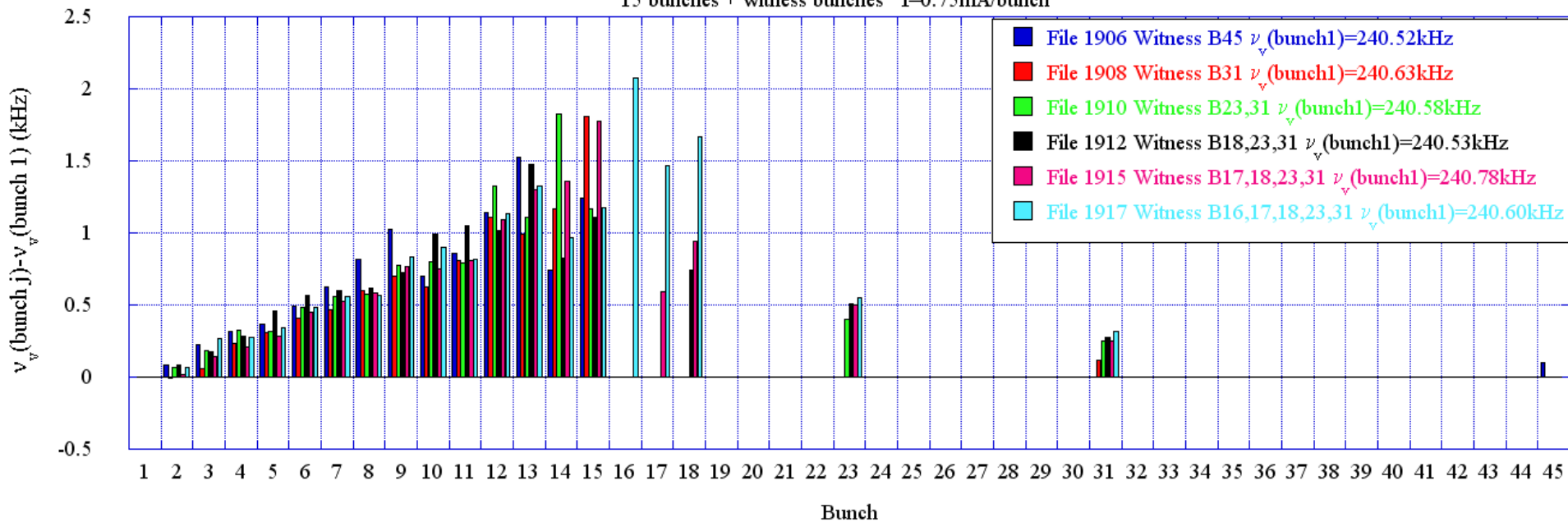
e+ Vertical Tune
15 bunches + witness bunches I=0.75mA/bunch



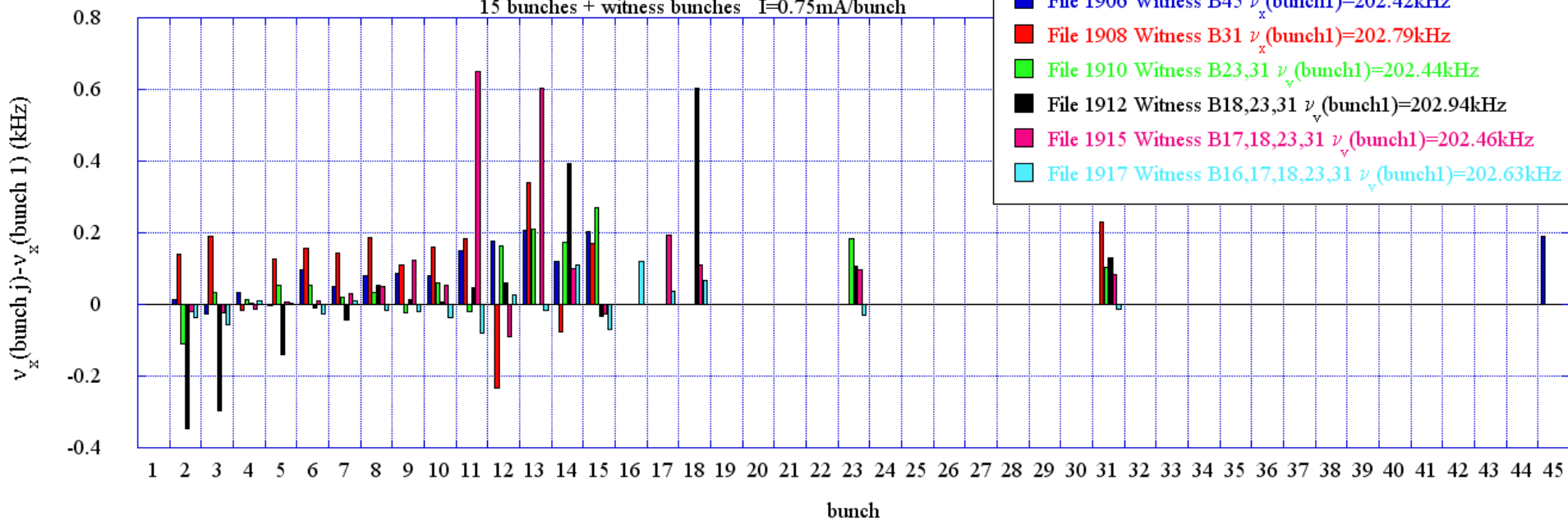
e+ Horizontal Tune
15 bunches + witness bunches I=0.75mA/bunch



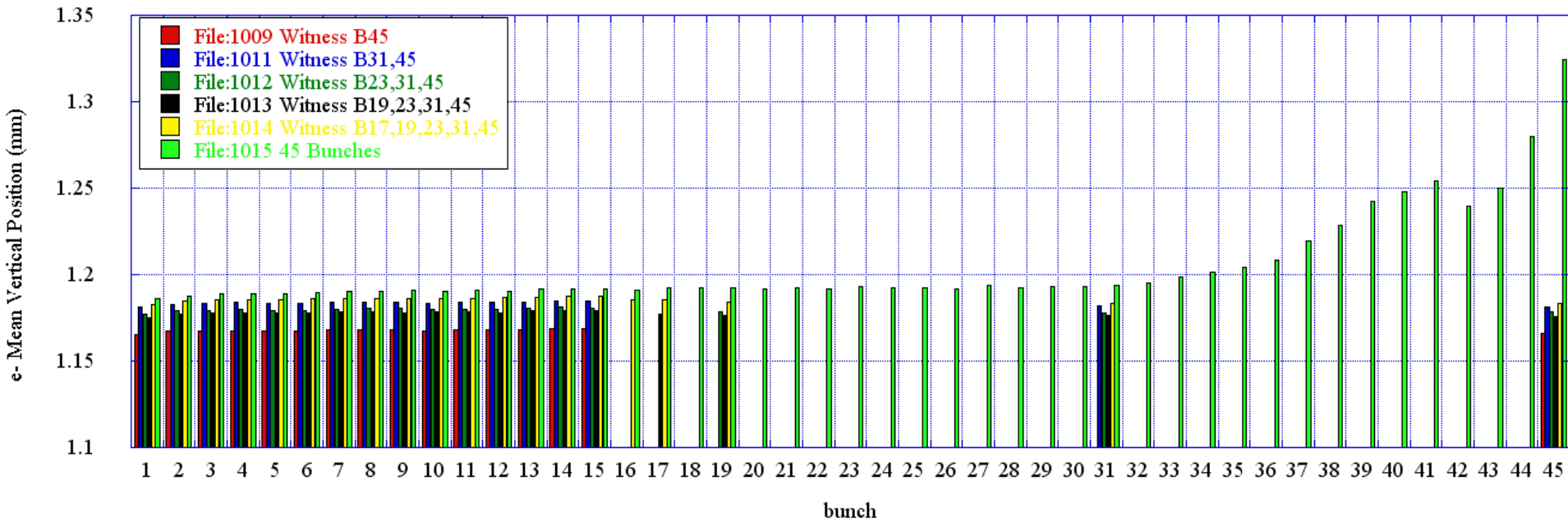
e+ Vertical Tune
15 bunches + witness bunches I=0.75mA/bunch



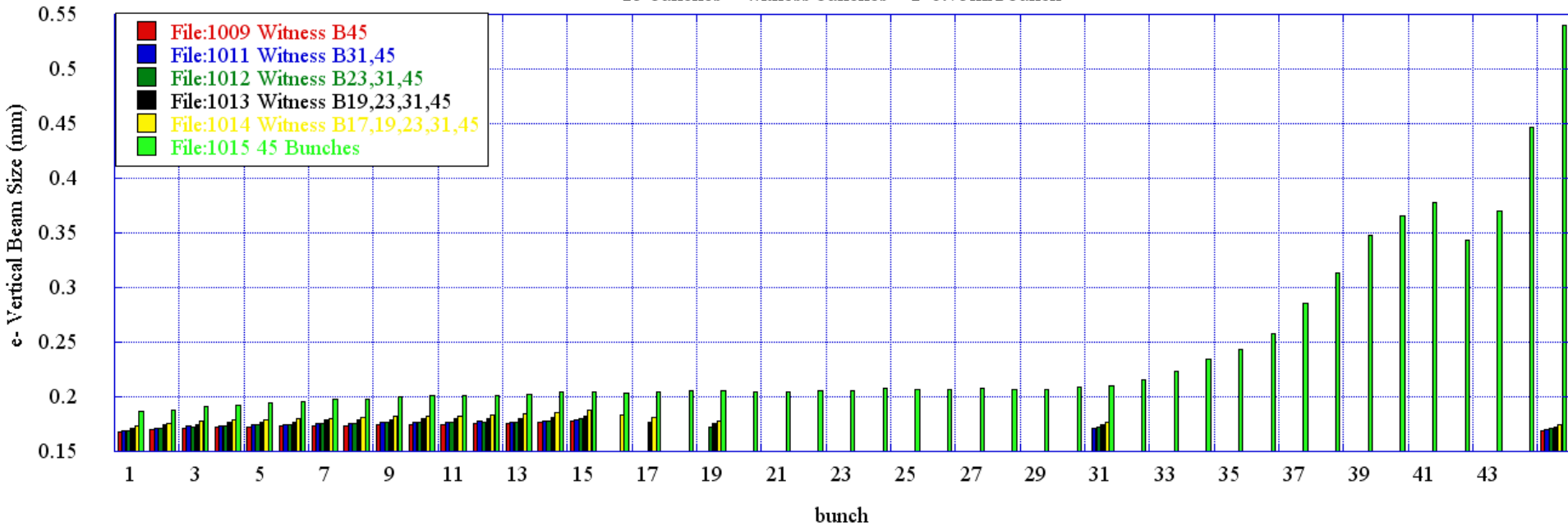
e+ Horizontal Tune
15 bunches + witness bunches I=0.75mA/bunch



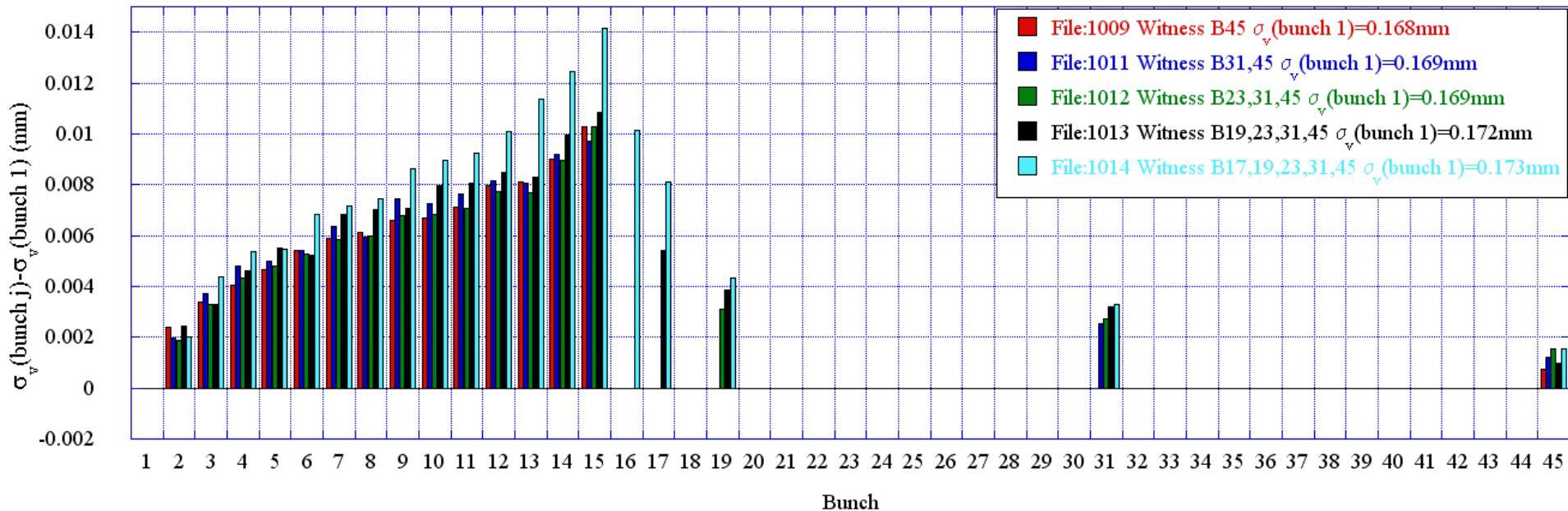
e- Mean Vertical Position
15 bunches + witness bunches I=0.75mA/bunch



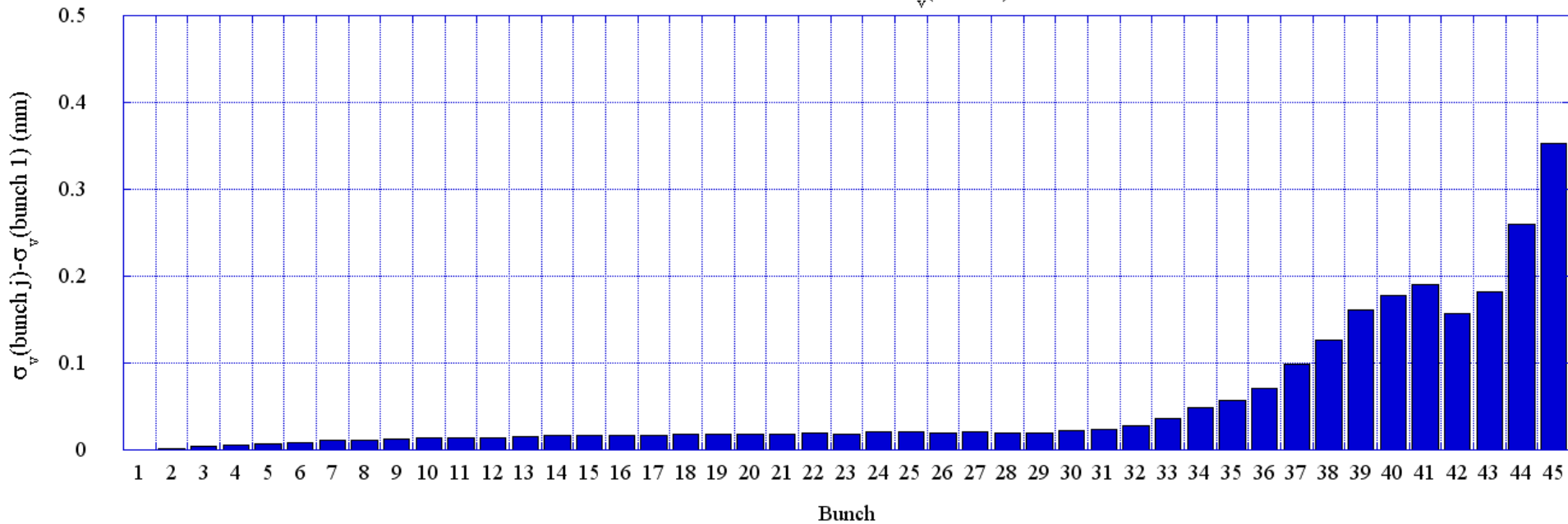
e- Mean Vertical Beam Size
15 bunches + witness bunches I=0.75mA/bunch



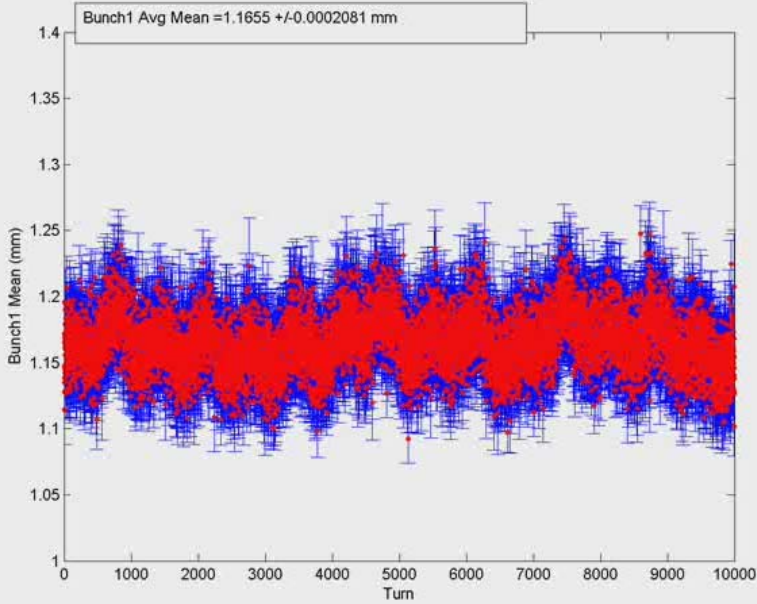
e- Vertical Beam Size
15 bunches + witness bunches I=0.75mA/bunch



e- Vertical Beam Size
45 bunch Train I=0.75mA/bunch $\sigma_v(\text{bunch 1})=0.187\text{mm}$

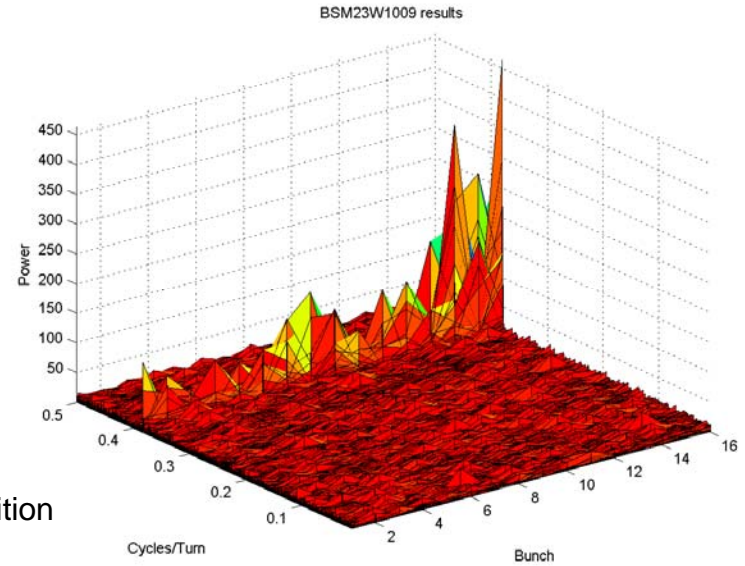


File:1009 15 bunches + witness bunch 45
e- I=0.75mA/bunch

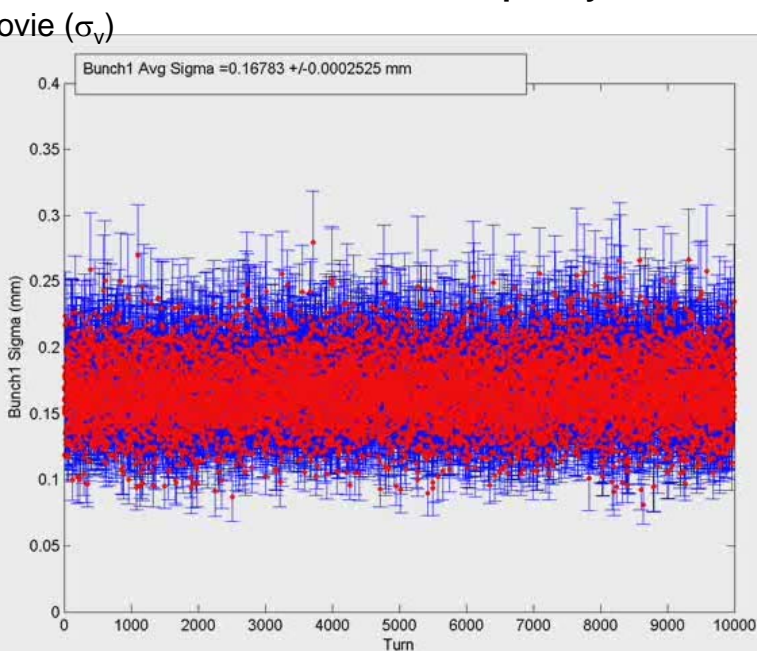


Movie (vertical position)

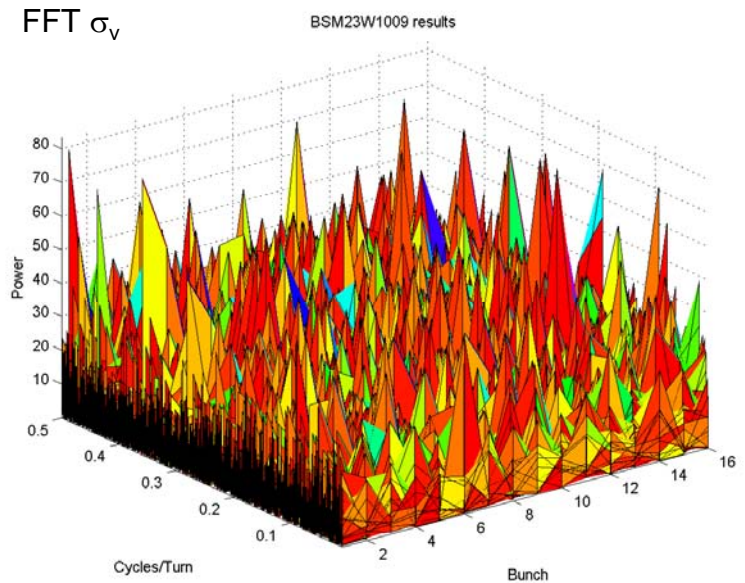
FFT vertical position



Note: Low frequency cut was made on all e- FFT results

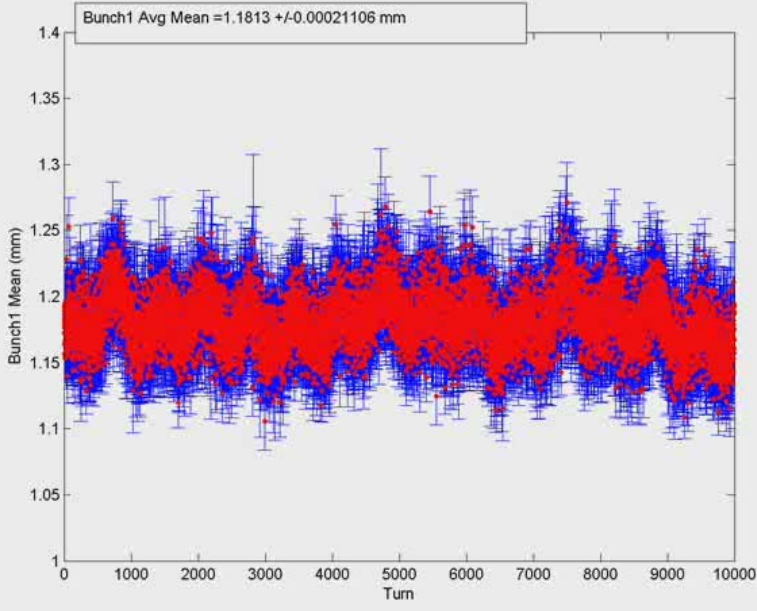


Movie (σ_v)

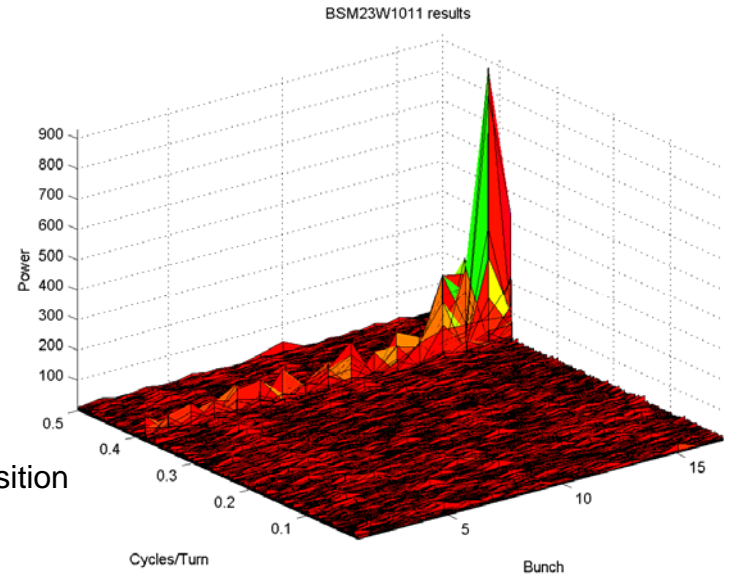


FFT σ_v

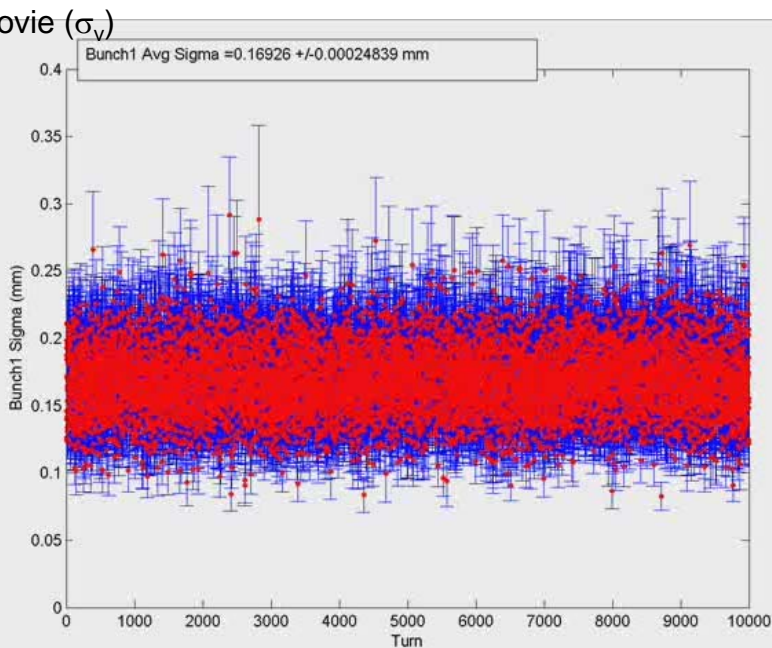
File:1011 15 bunches + witness bunches
31,45 e- I=0.75mA/bunch



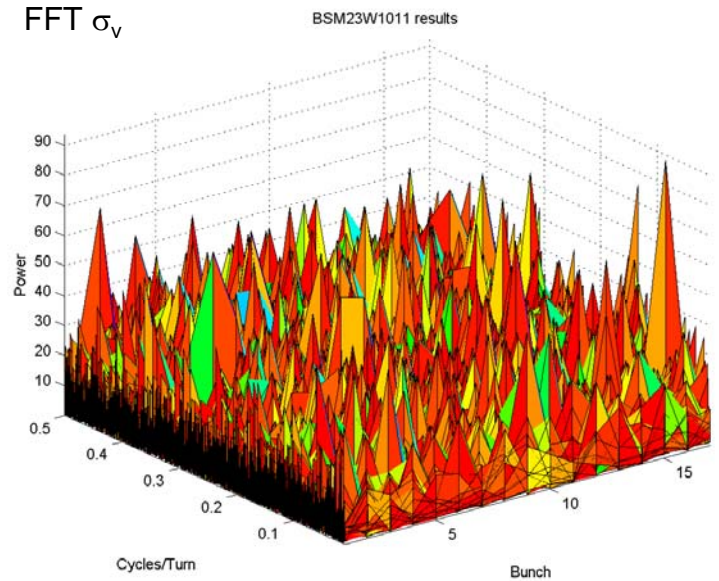
Movie (vertical position)



FFT vertical position

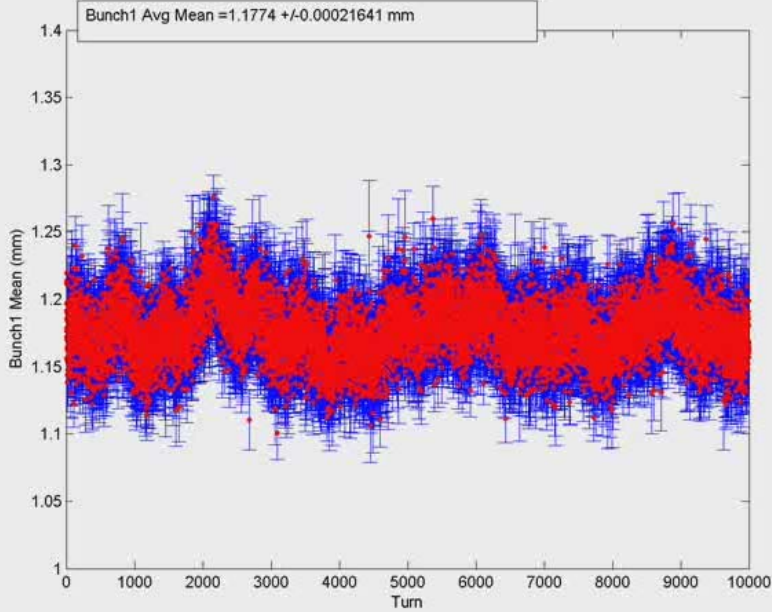


Movie (σ_v)

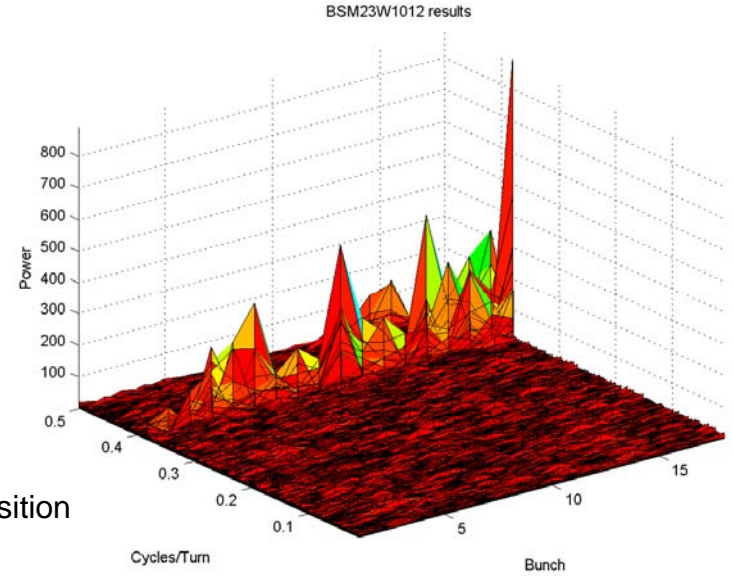


FFT σ_v

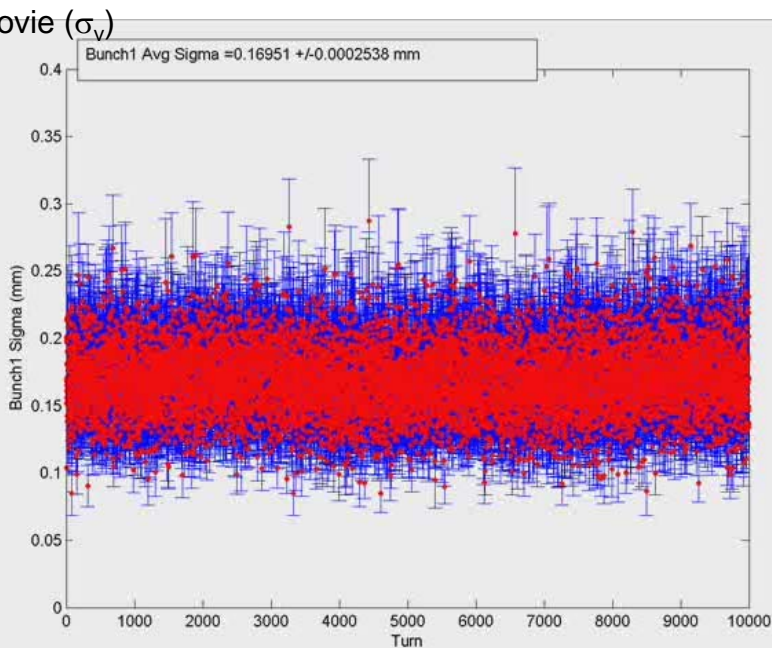
File:1012 15 bunches + witness bunches
23,31,45 e- I=0.75mA/bunch



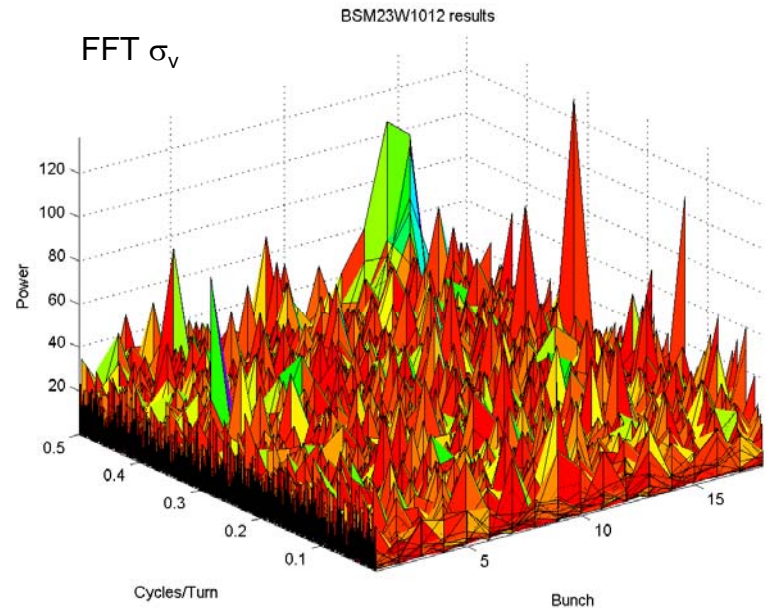
Movie (vertical position)



FFT vertical position

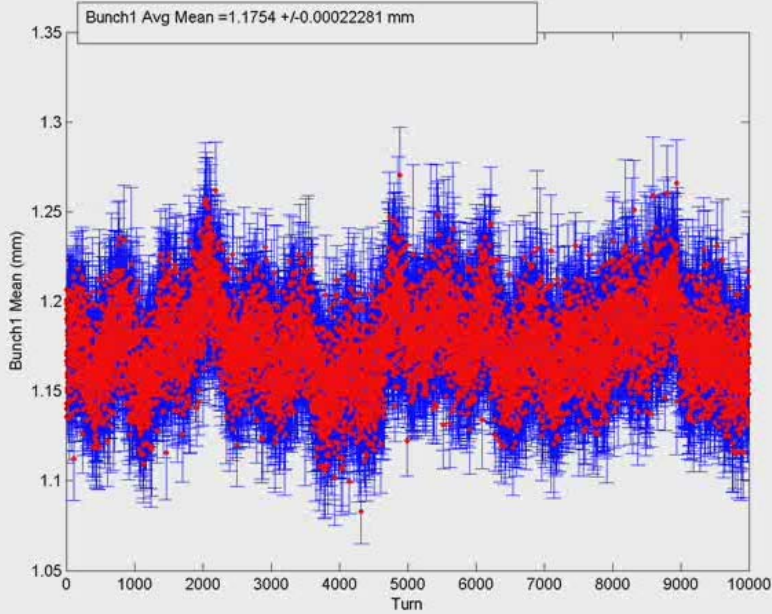


Movie (σ_v)

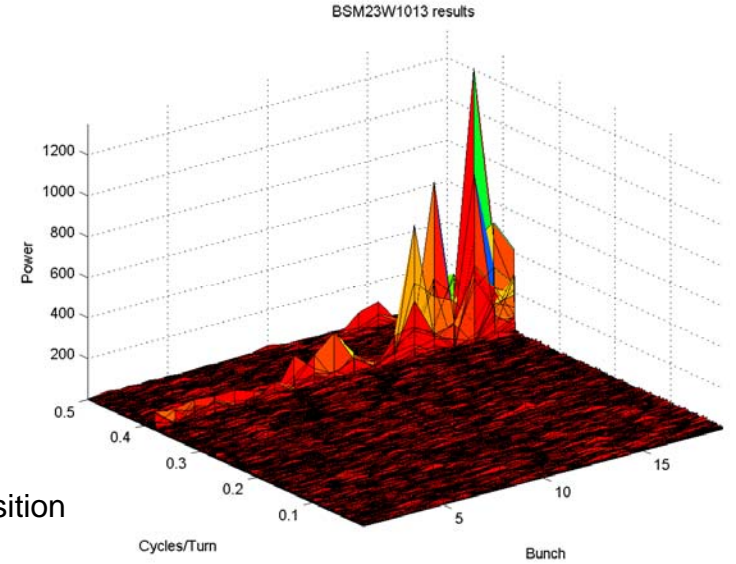


FFT σ_v

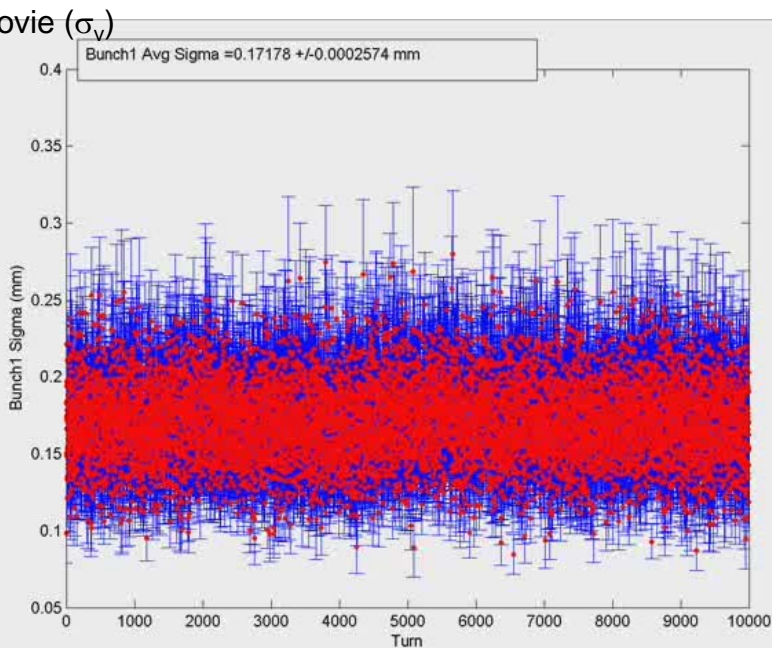
File:1013 15 bunches + witness bunches
19,23,31,45 e- I=0.75mA/bunch



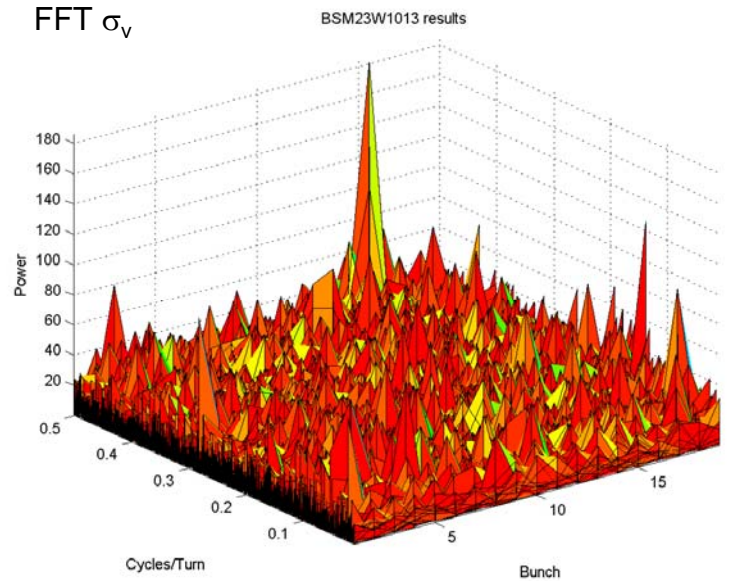
Movie (vertical position)



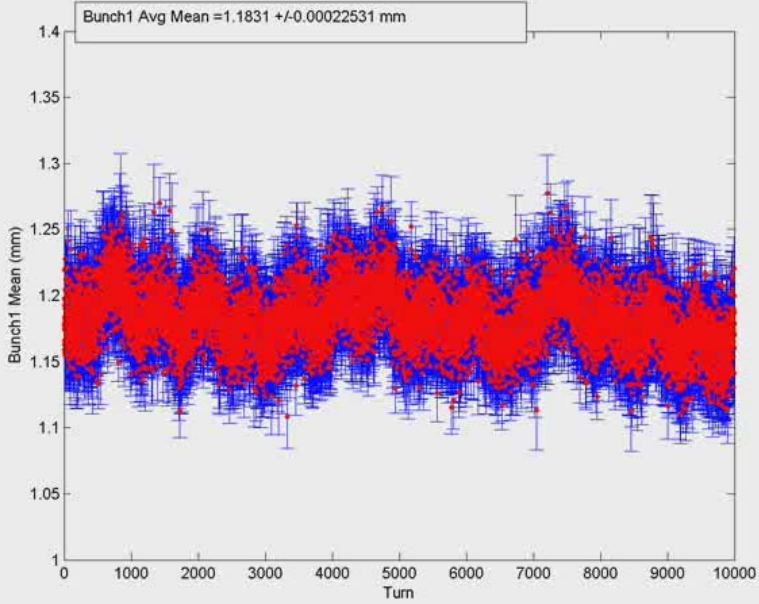
FFT vertical position



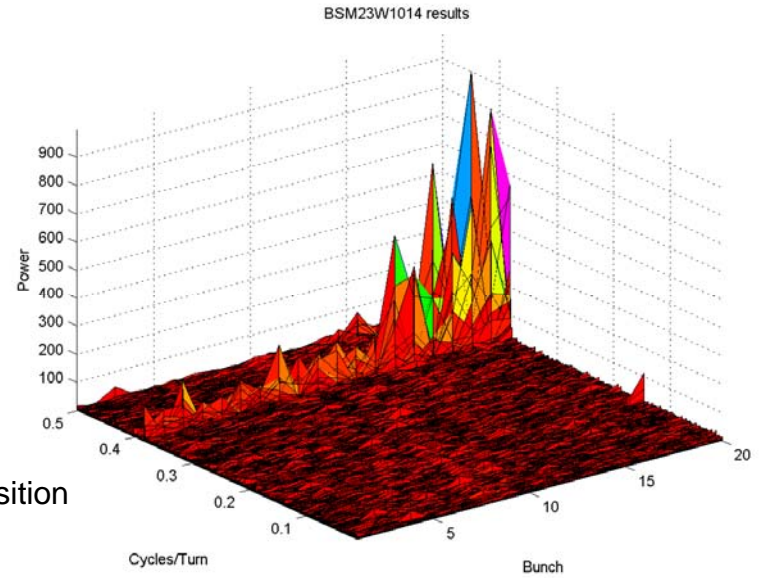
Movie (σ_v)



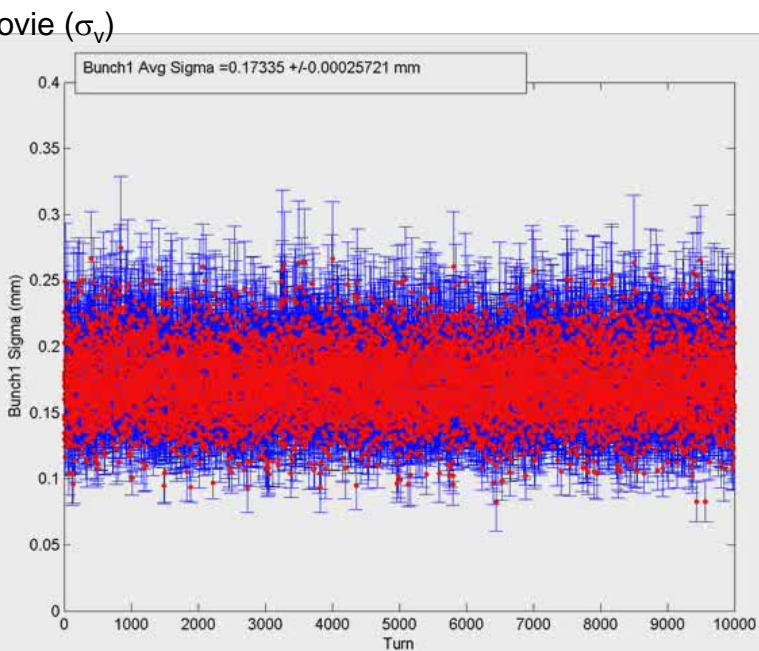
File:1014 15 bunches + witness bunches
17,19,23,31,45 e- I=0.75mA/bunch



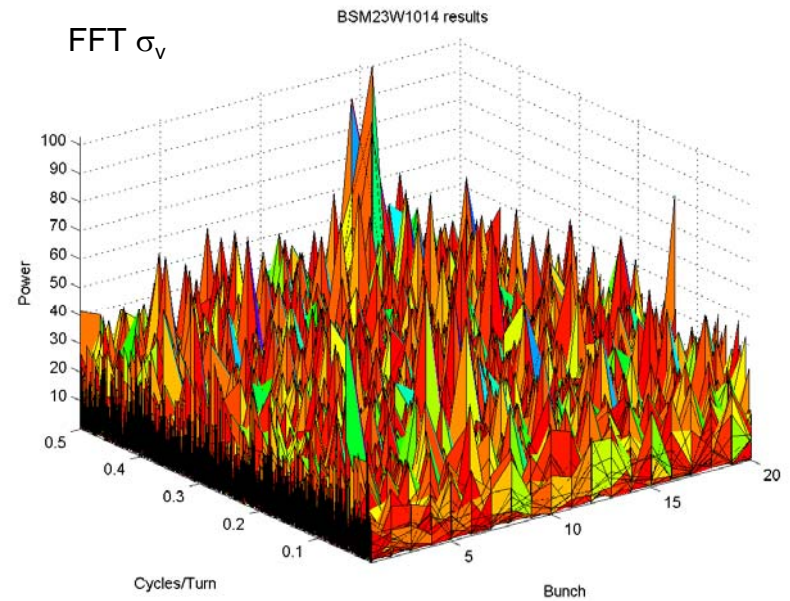
Movie (vertical position)



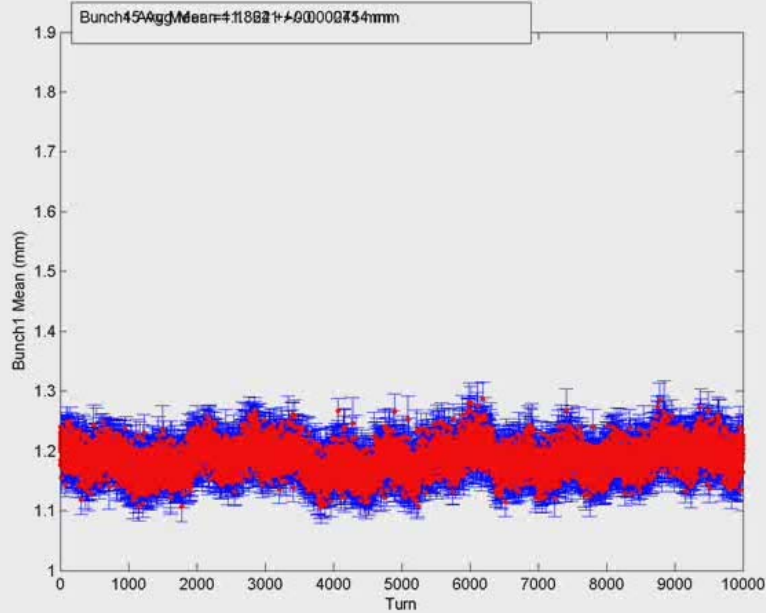
FFT vertical position



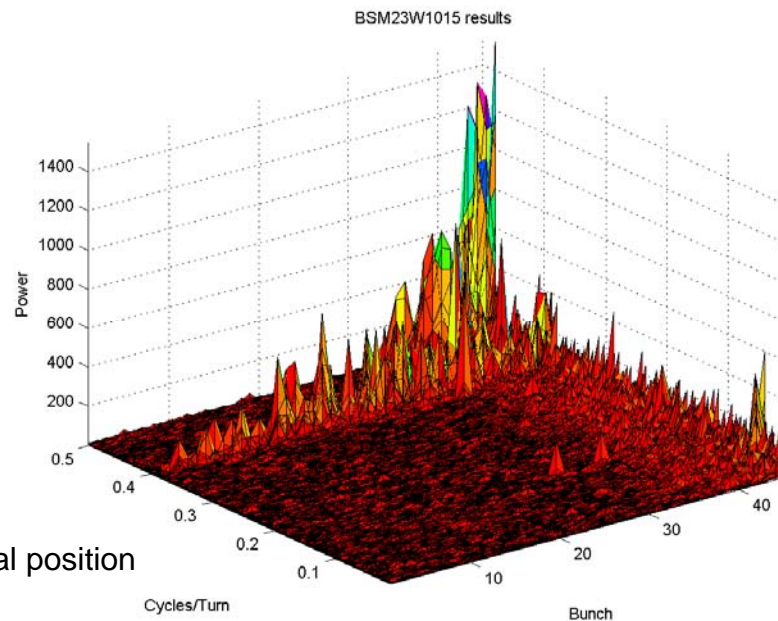
Movie (σ_v)



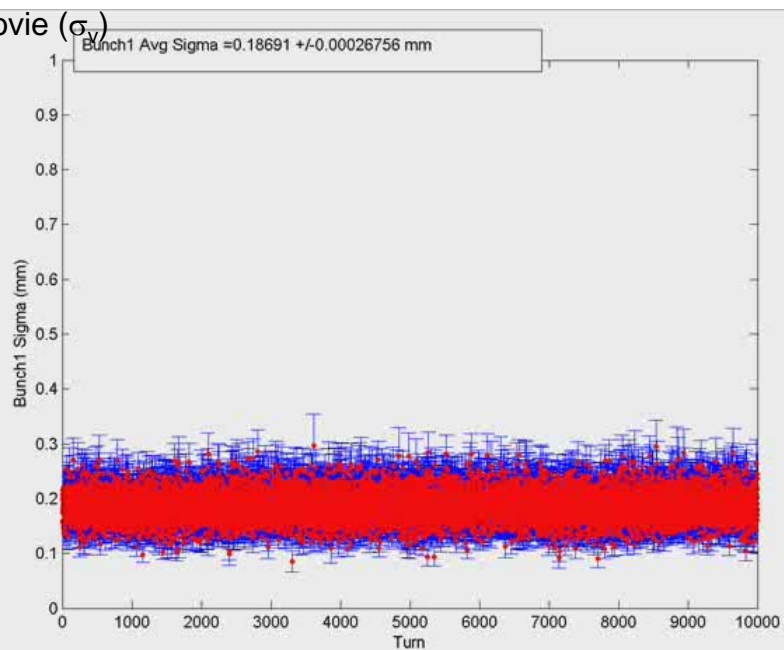
FFT σ_v



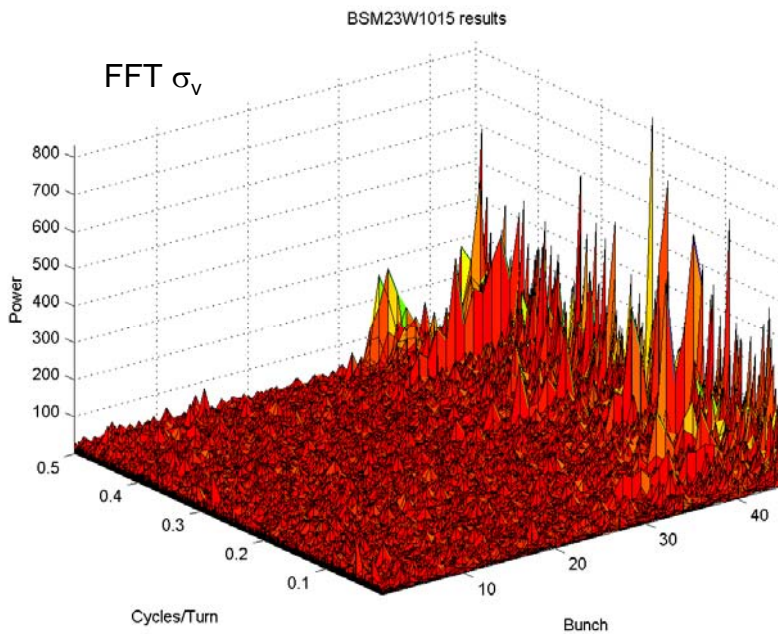
Movie (vertical position)



FFT vertical position

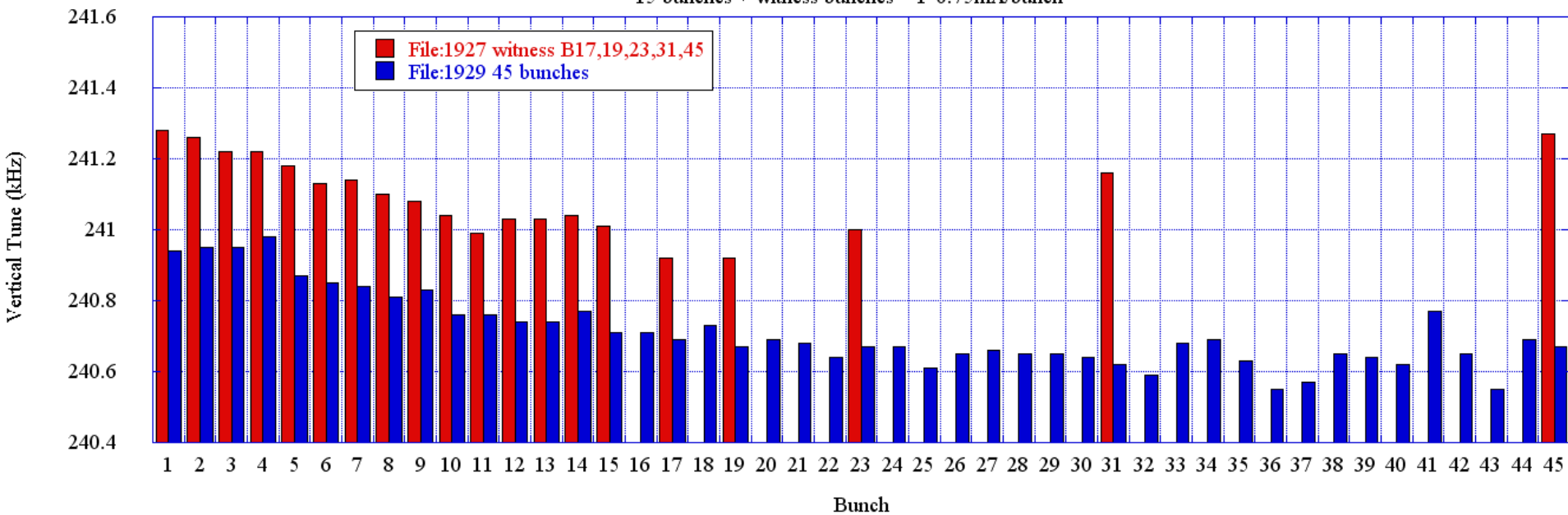


Movie (σ_v)

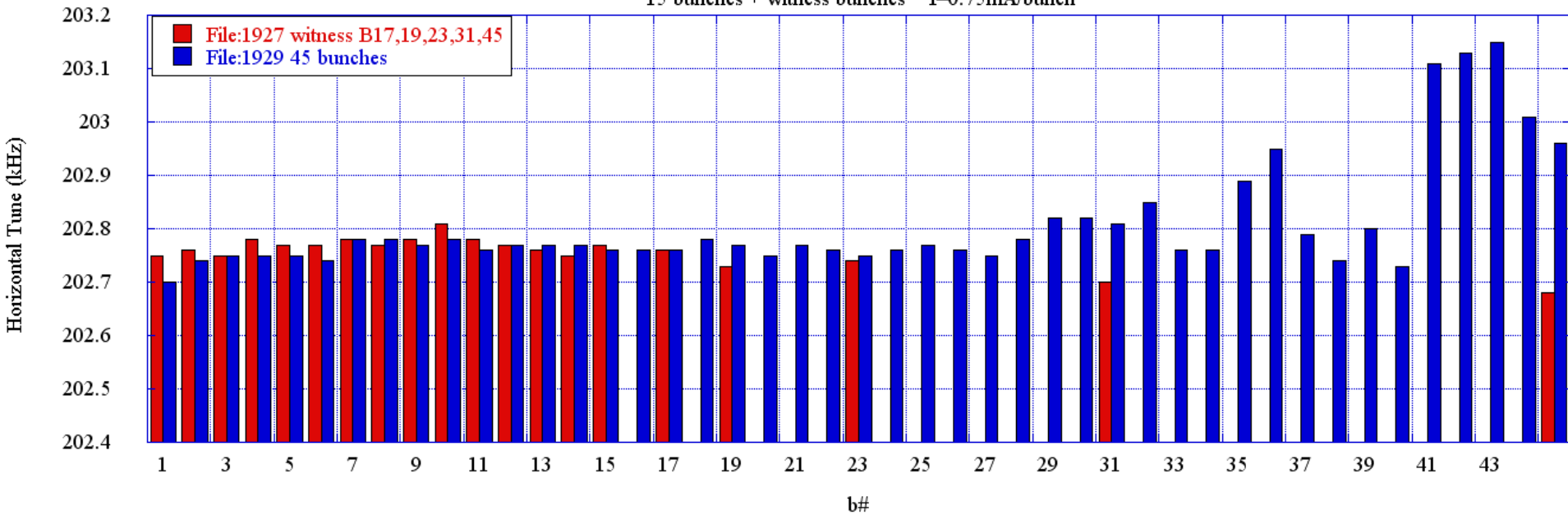


FFT σ_v

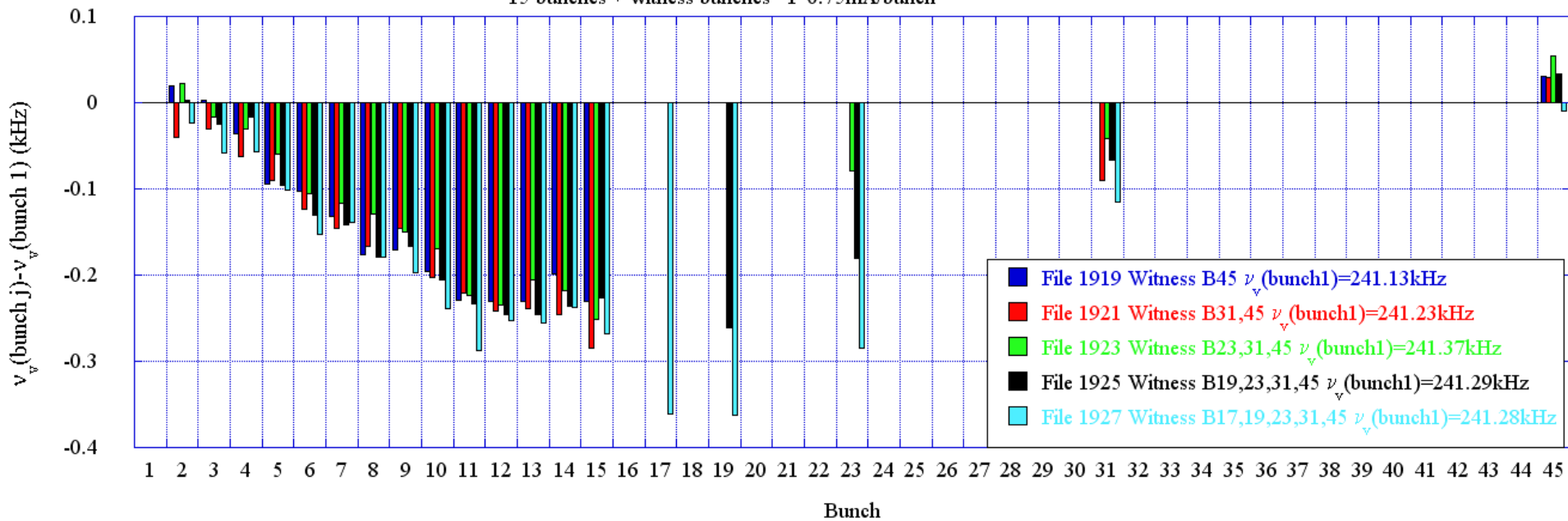
e- Vertical Tune
15 bunches + witness bunches I=0.75mA/bunch



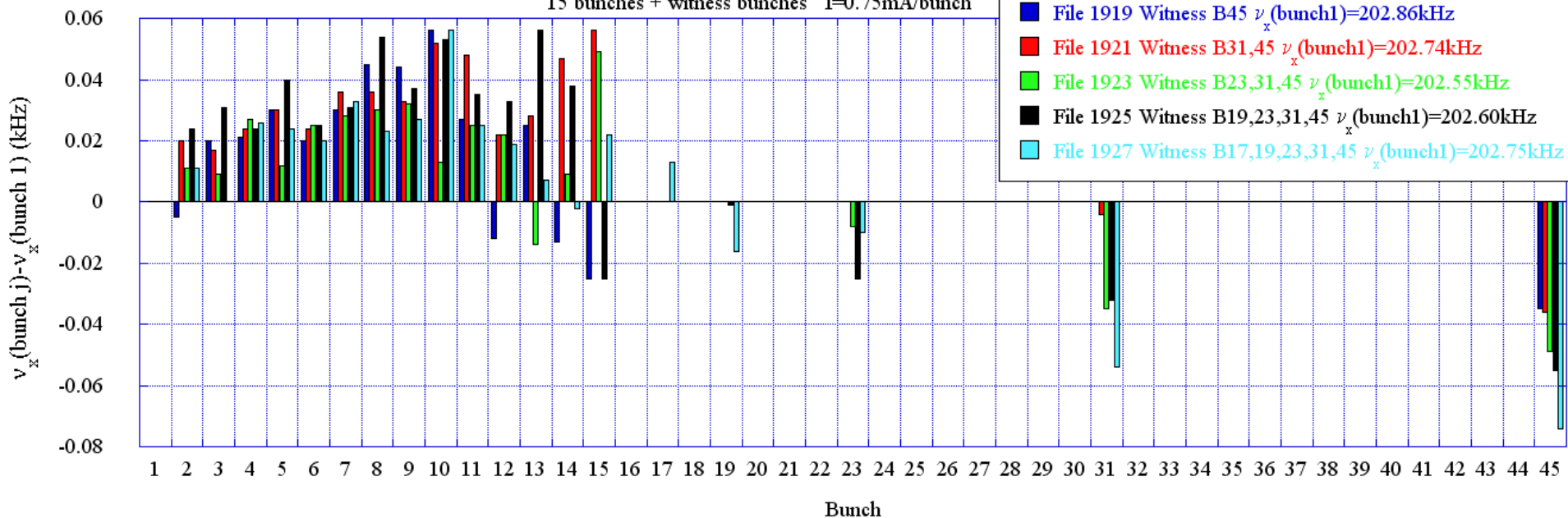
e- Horizontal Tune
15 bunches + witness bunches I=0.75mA/bunch



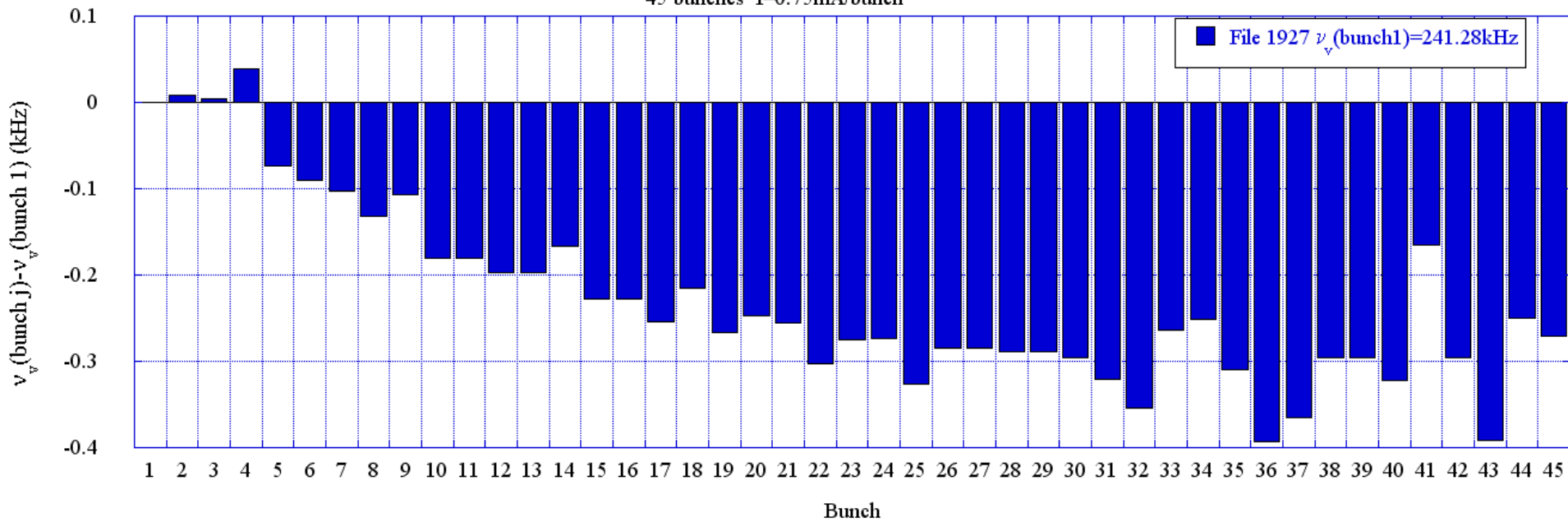
e- Vertical Tune
15 bunches + witness bunches I=0.75mA/bunch



e- Horizontal Tune
15 bunches + witness bunches I=0.75mA/bunch



e- Vertical Tune
45 bunches I=0.75mA/bunch



e- Horizontal Tune
45 bunches I=0.75mA/bunch

