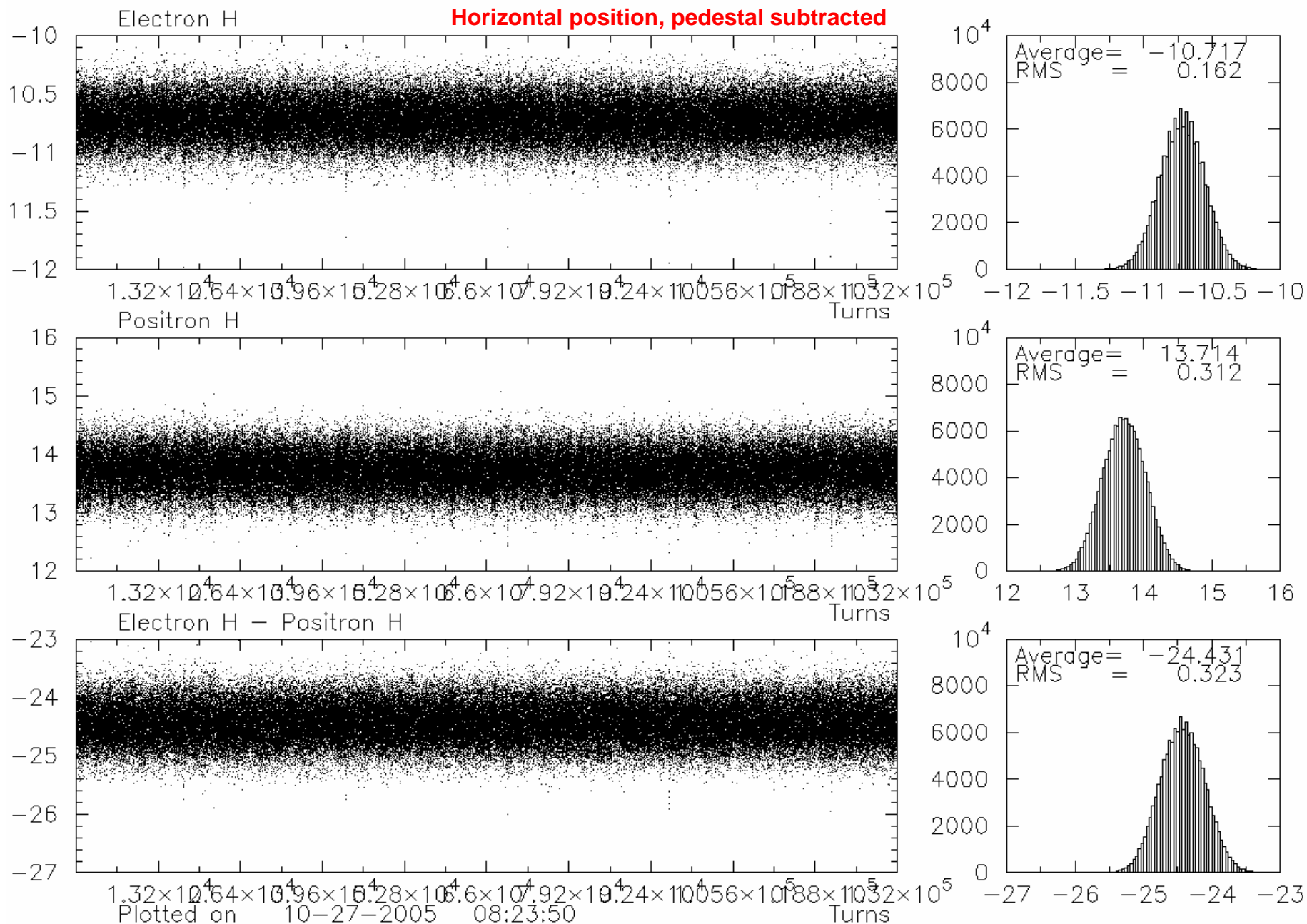


# Raw data over 132k turns taken at 17:15 on 26-Oct-2005

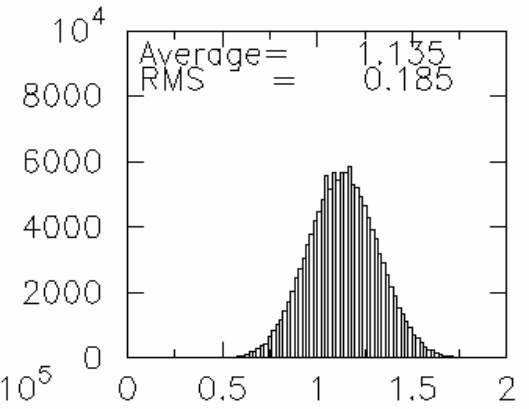
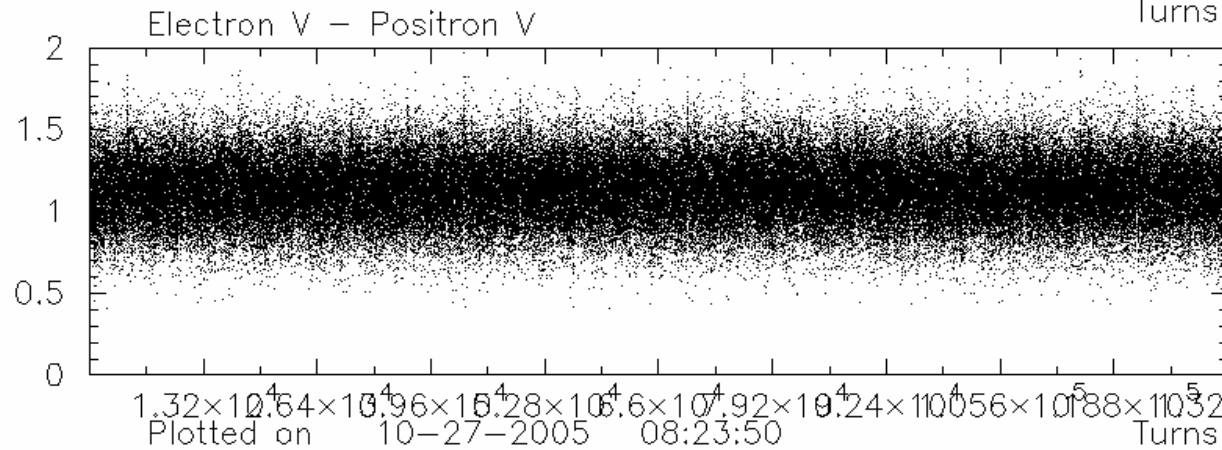
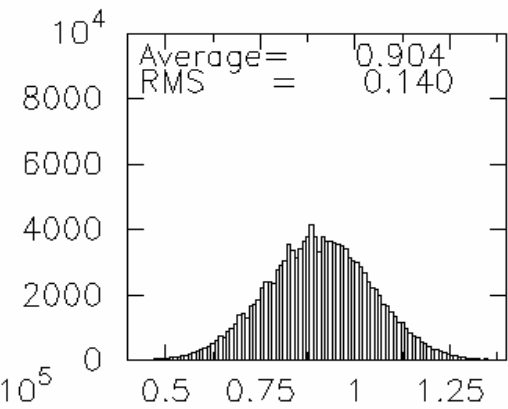
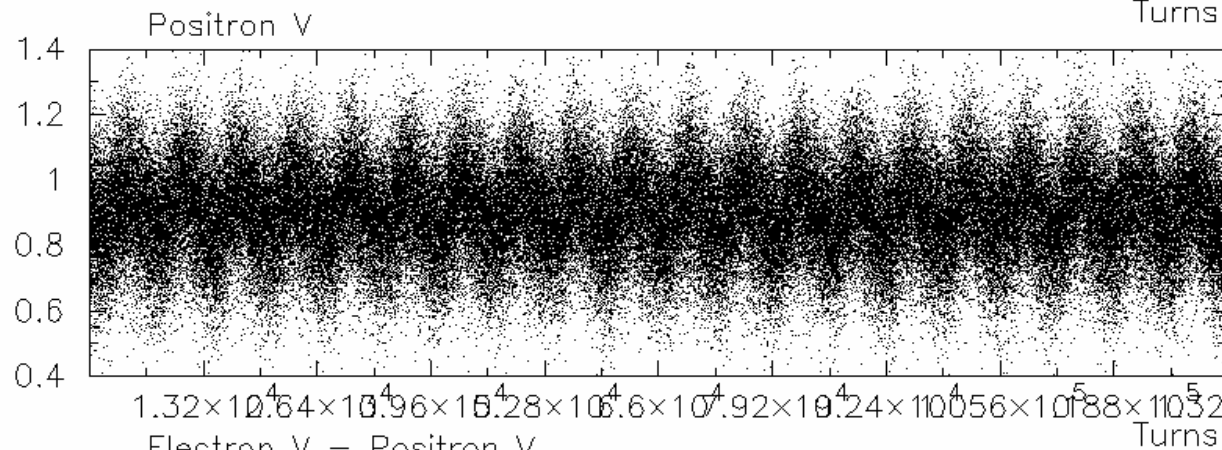
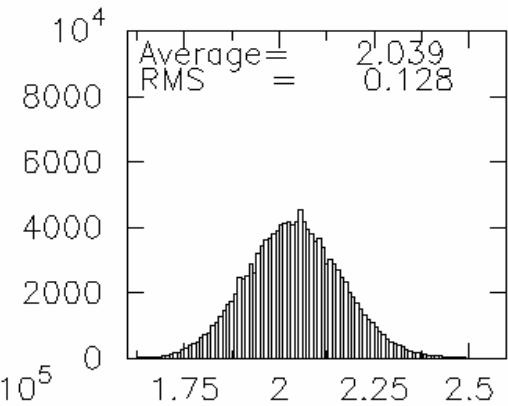
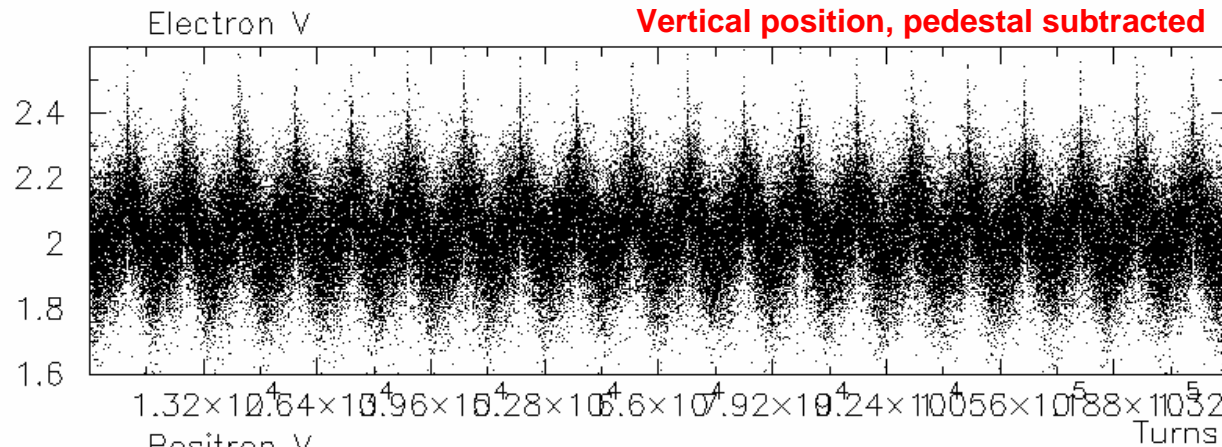
BPM 6W1



# Raw data over 132k turns taken at 17:15 on 26-Oct-2005

BPM 6W1

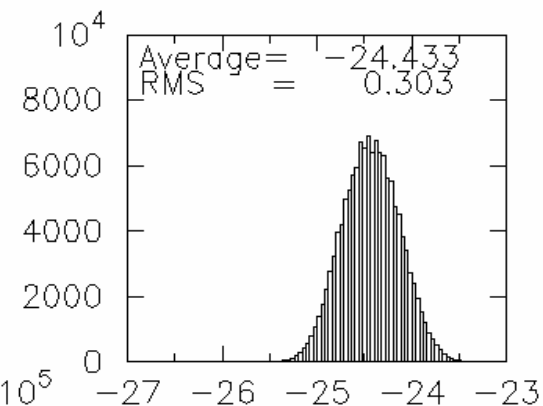
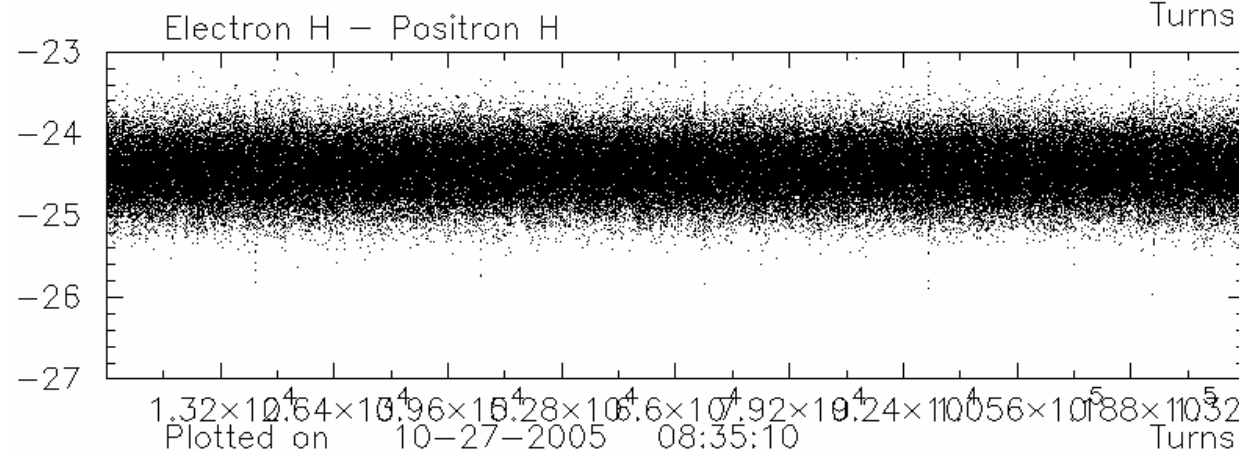
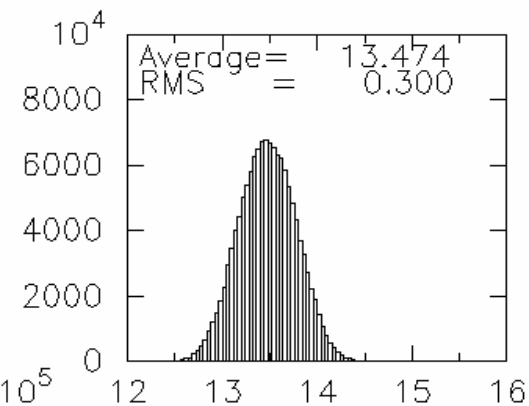
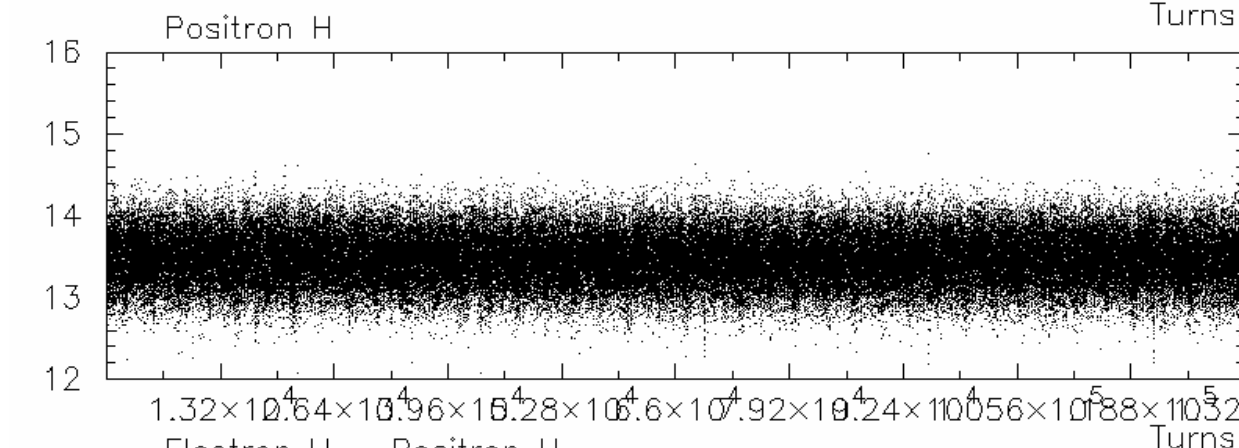
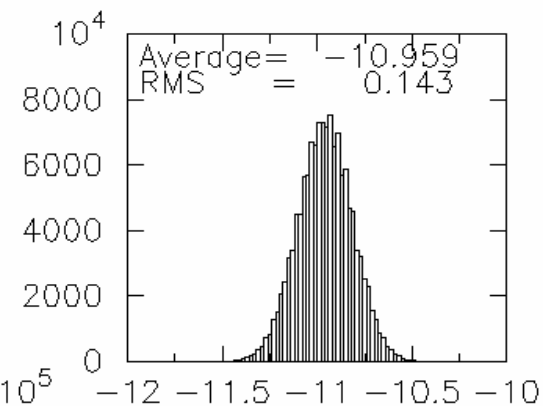
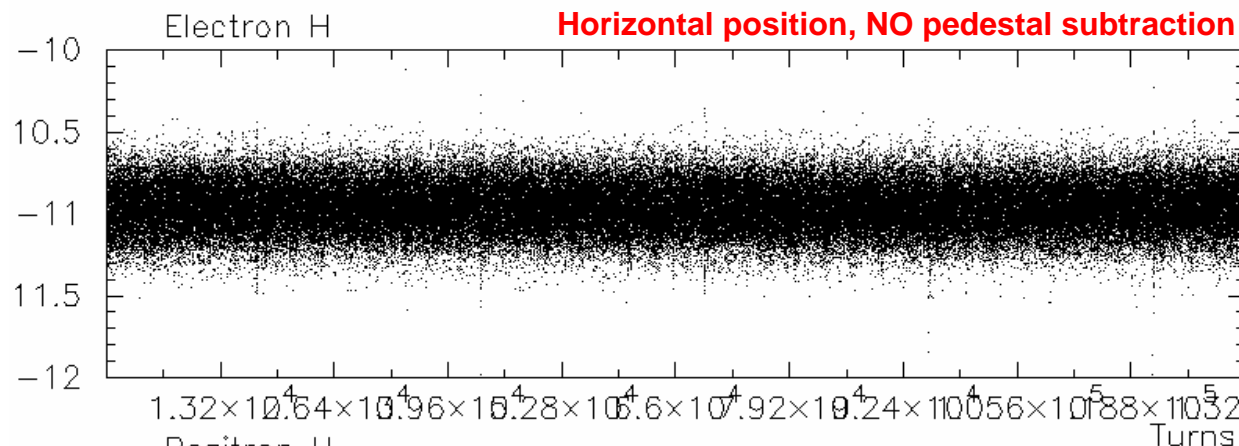
**Vertical position, pedestal subtracted**



# Raw data over 132k turns taken at 17:15 on 26-Oct-2005

BPM 6W1

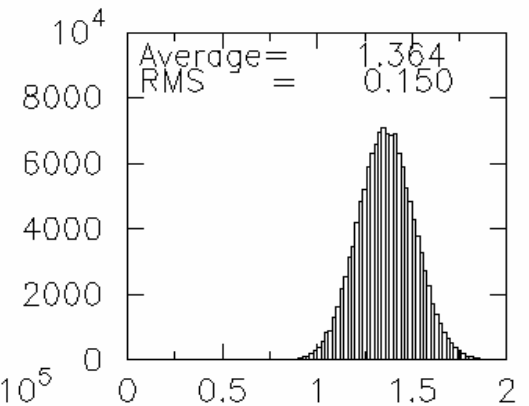
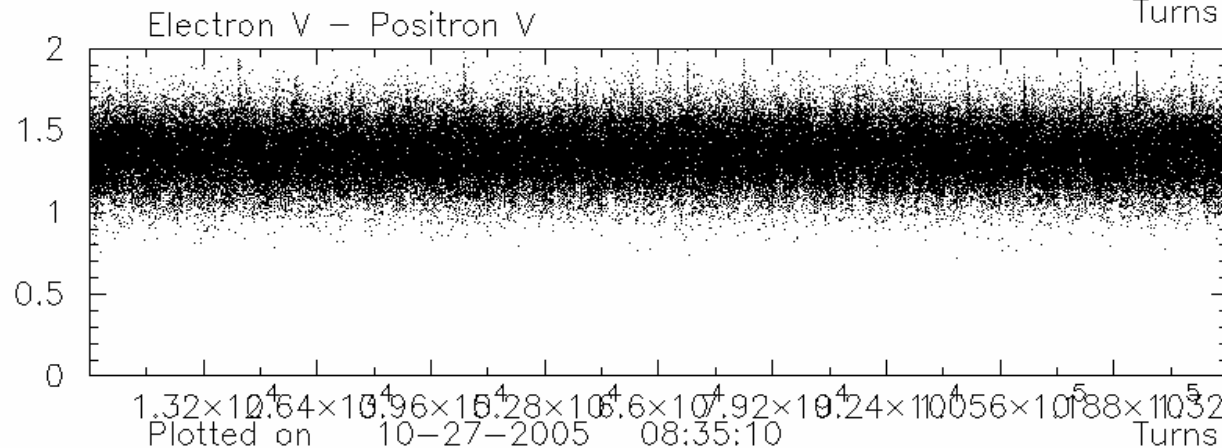
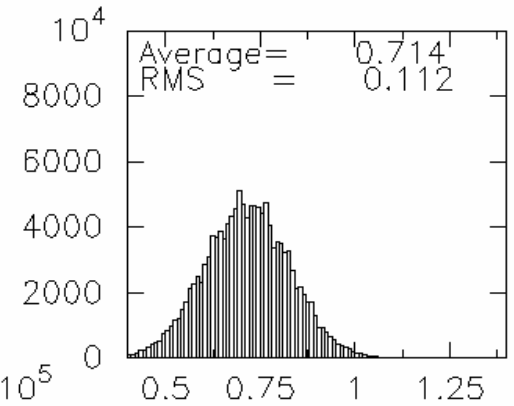
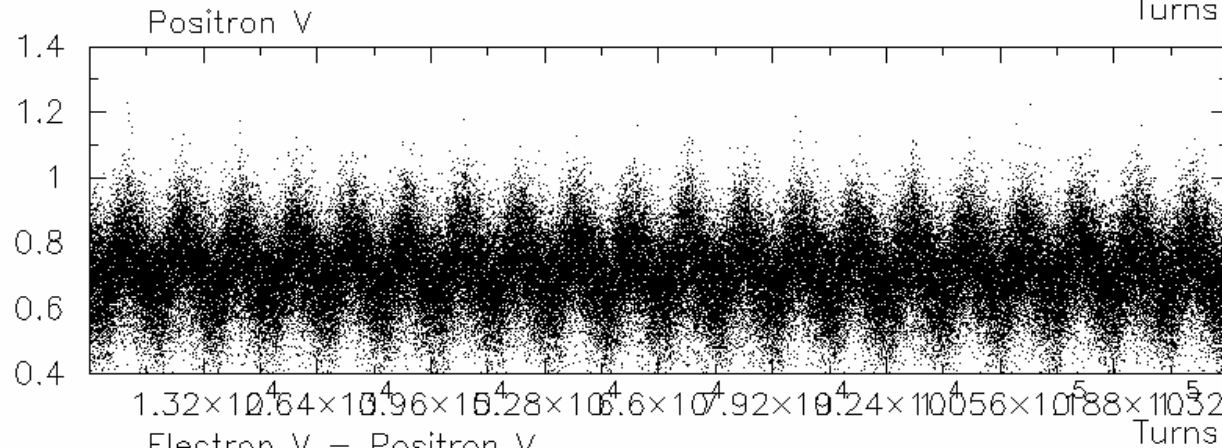
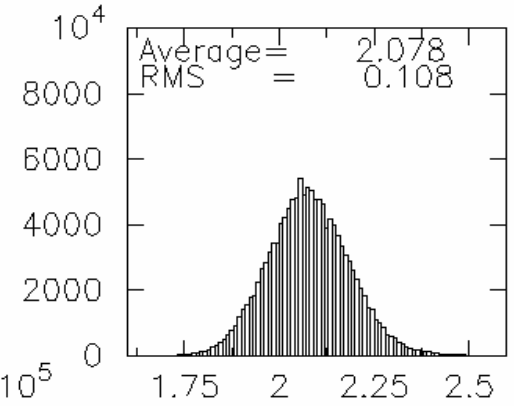
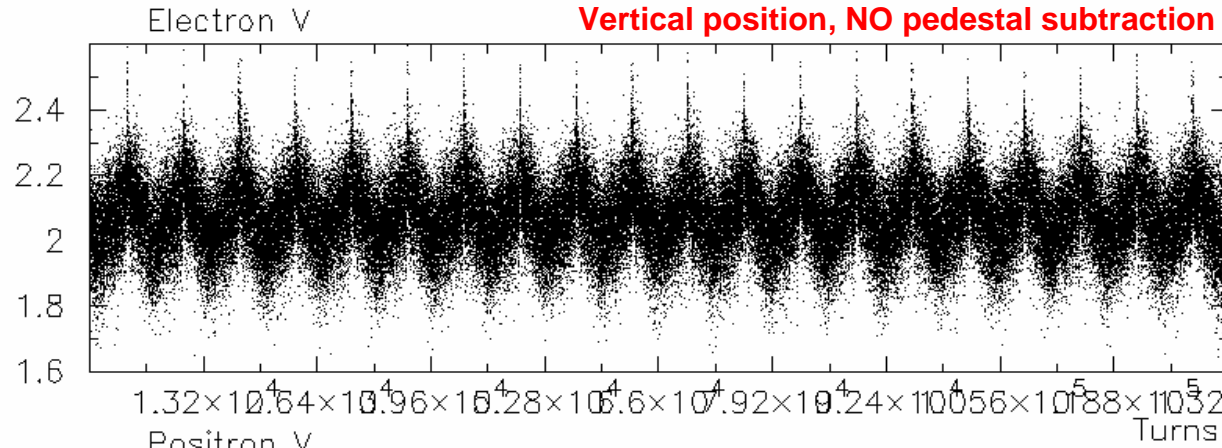
**Horizontal position, NO pedestal subtraction**



Plotted on 10-27-2005 08:35:10

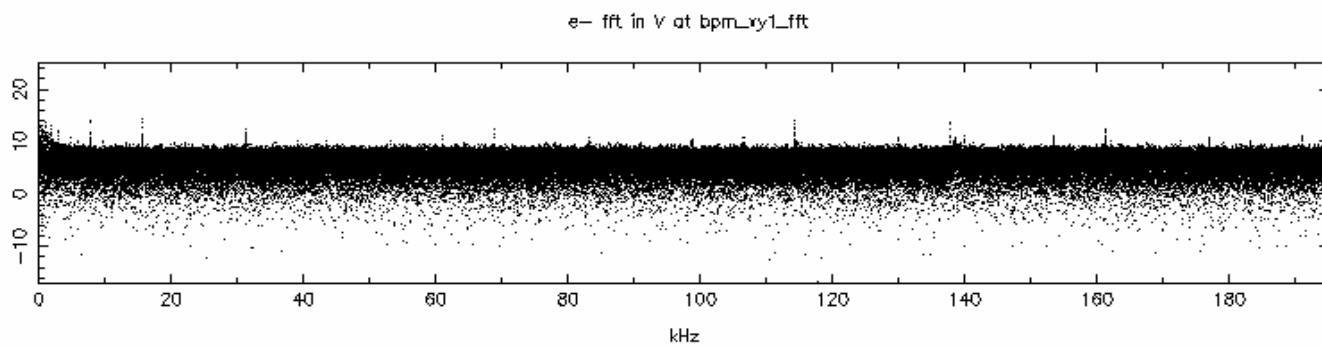
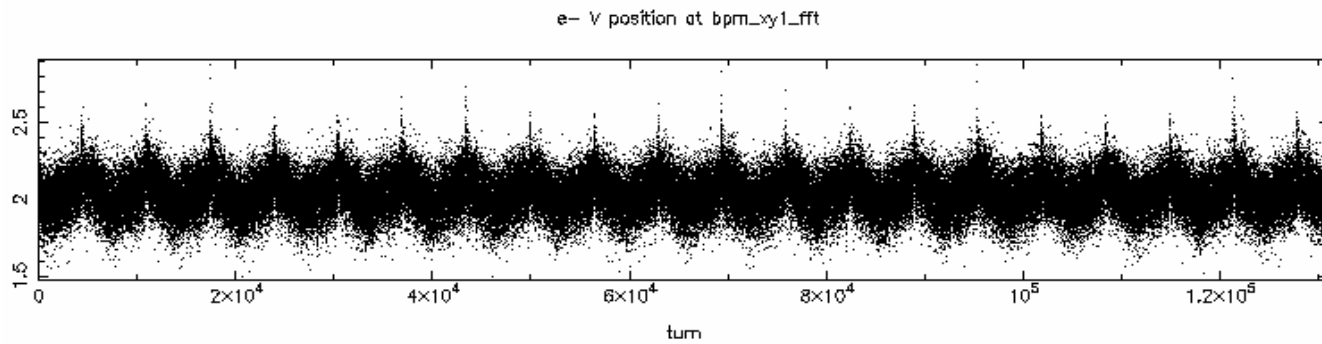
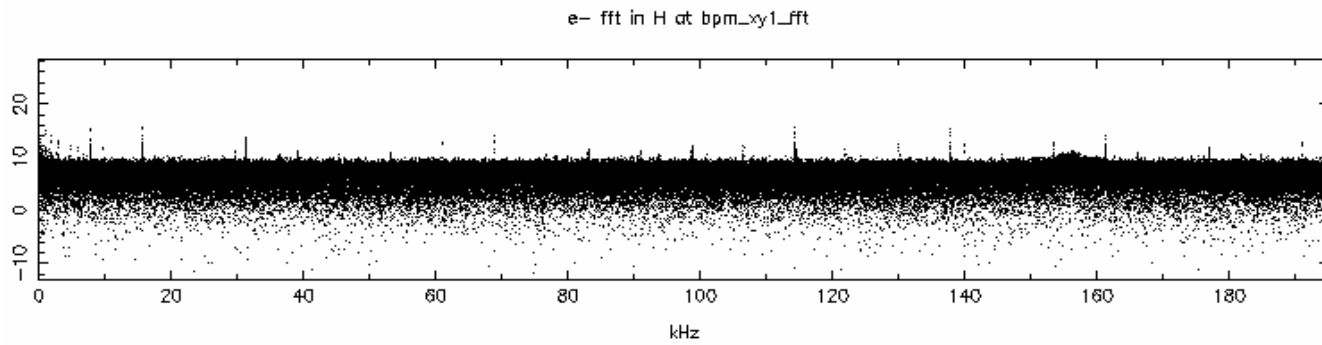
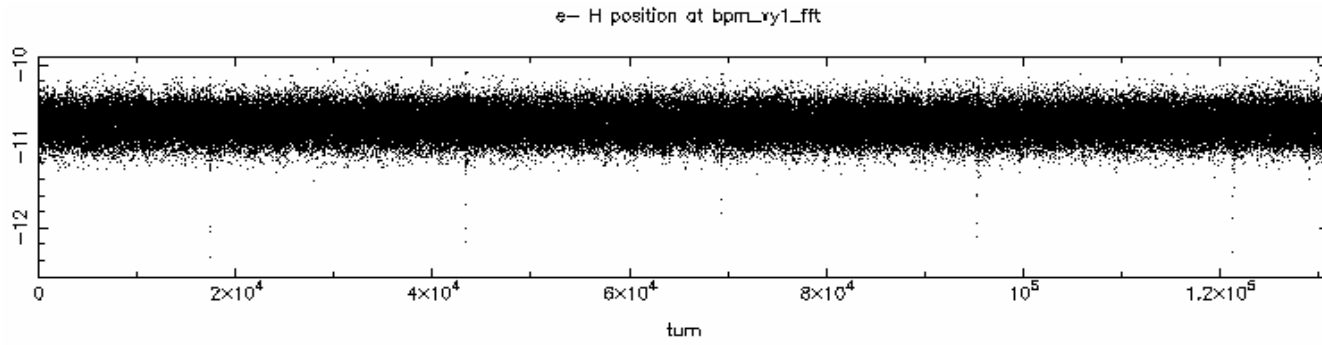
BPM 6W1

Vertical position, NO pedestal subtraction



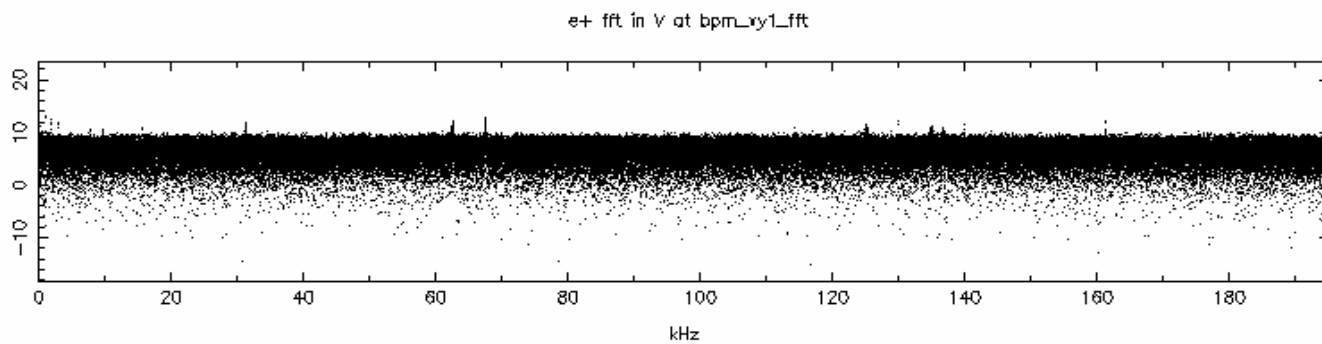
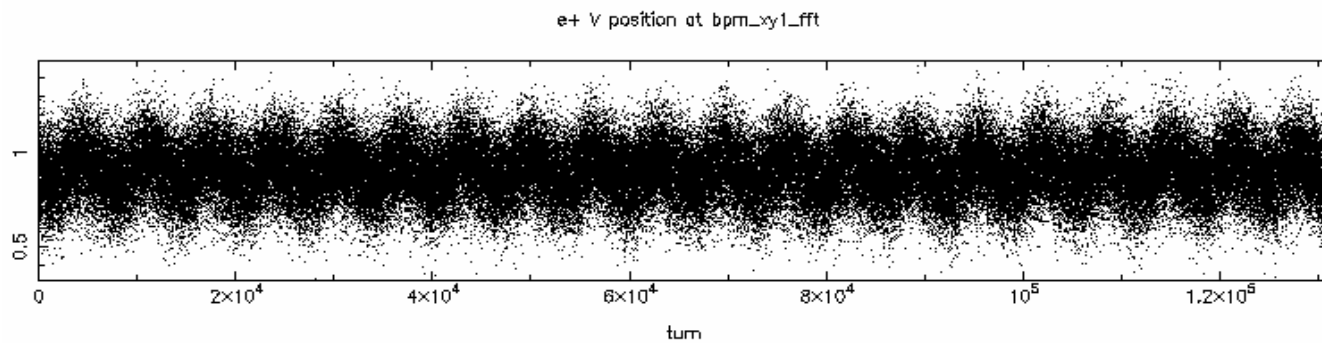
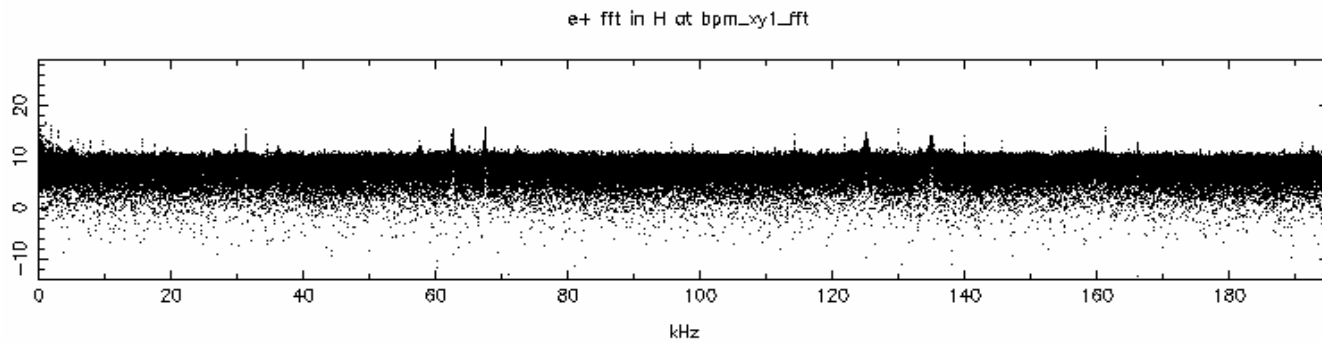
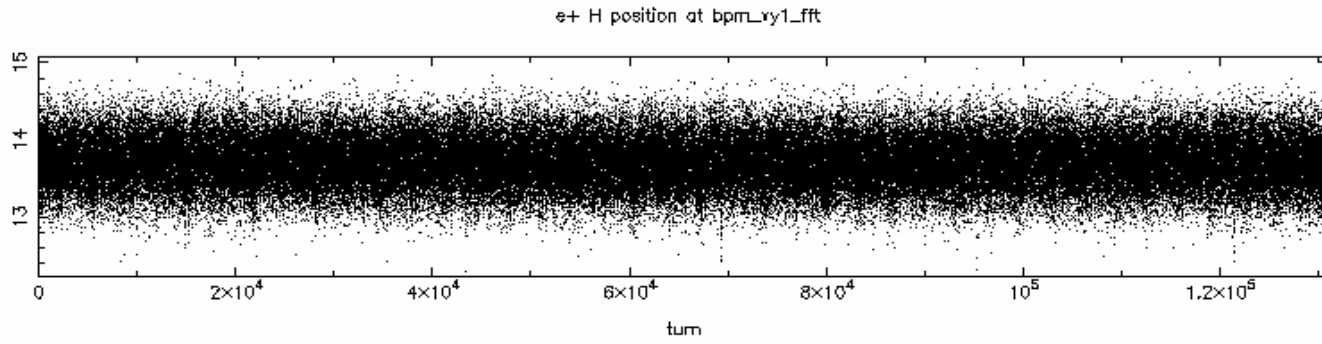
# FFT (electrons)

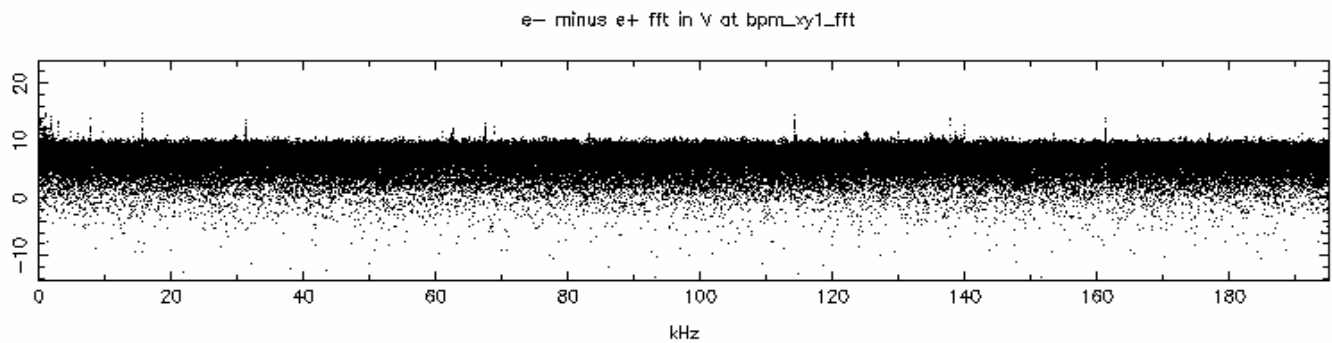
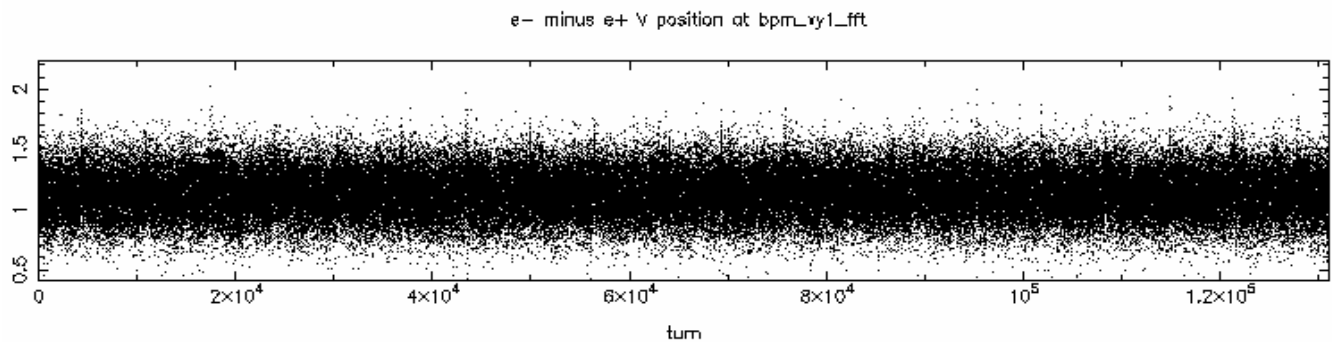
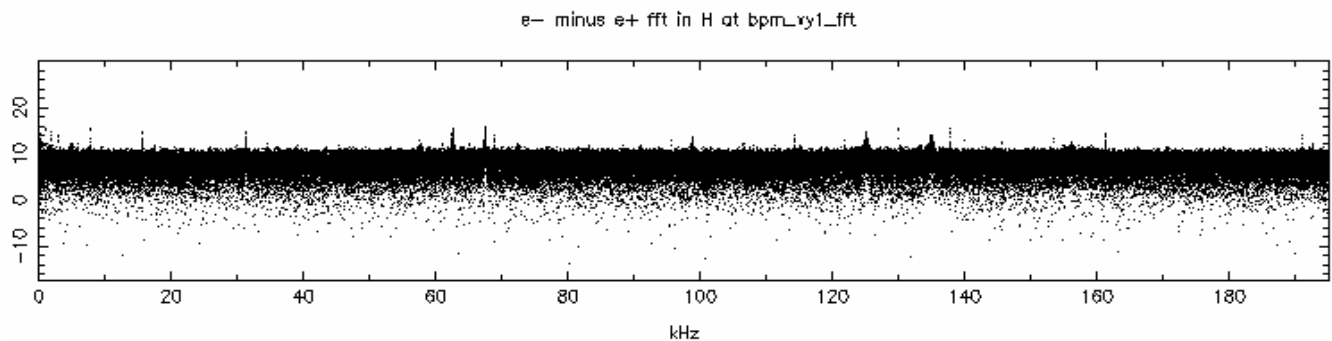
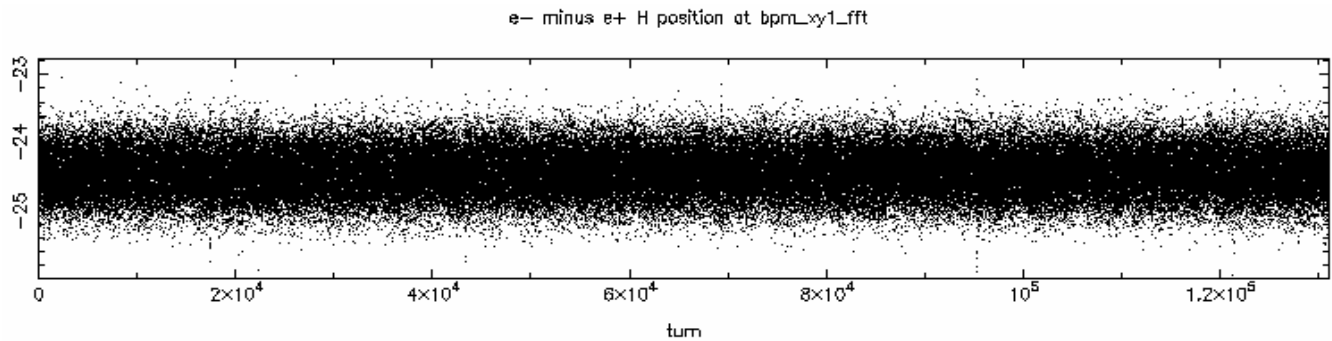
Pedestal subtracted



FFT (positrons)

Pedestal subtracted



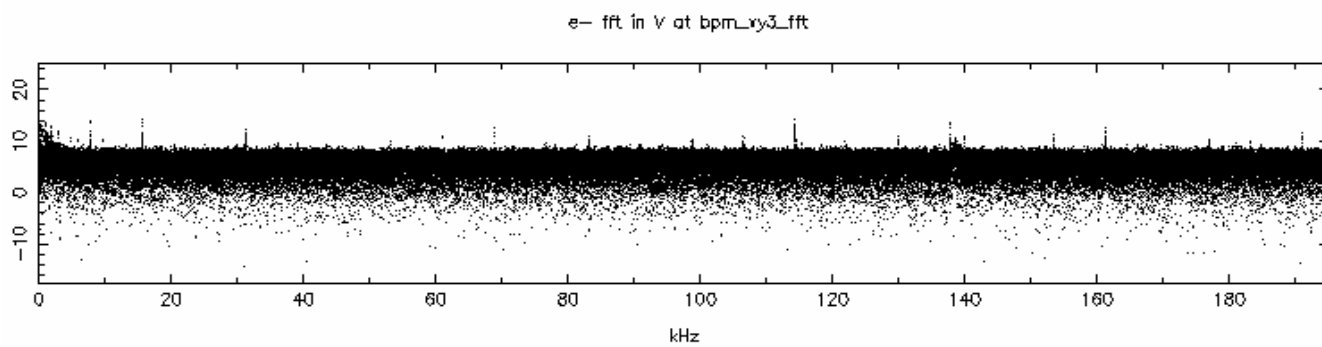
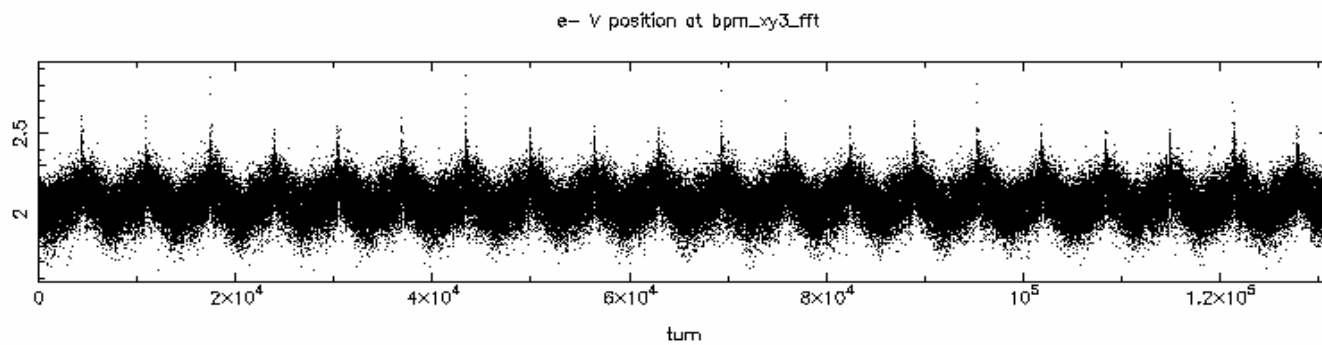
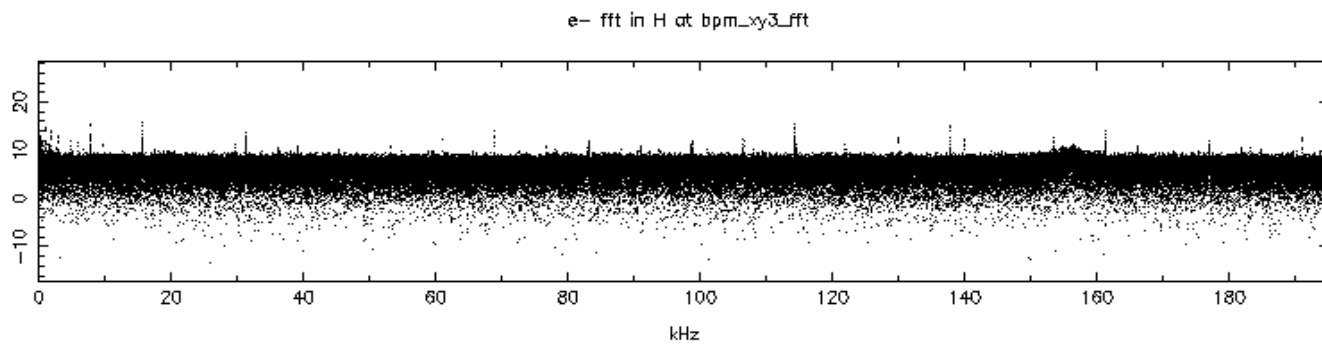
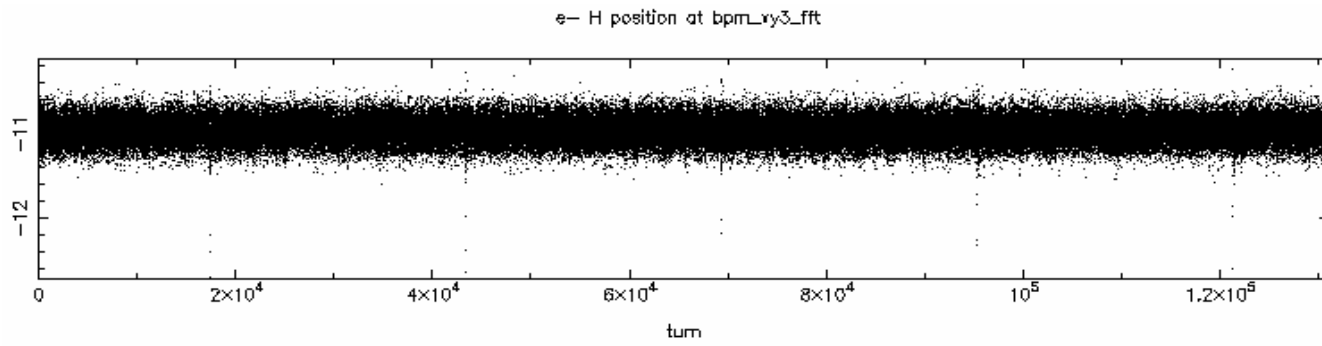


FFT (difference  
electrons and  
positrons)

**Pedestal subtracted**

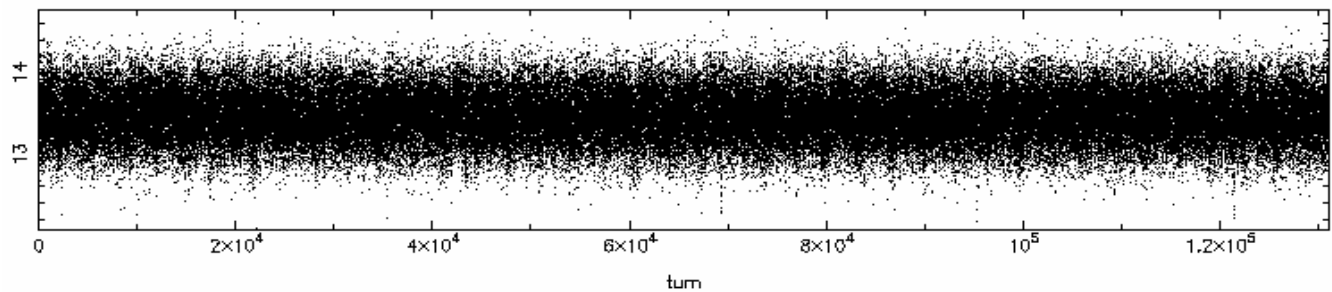
# FFT (electrons)

**NO pedestal subtraction**

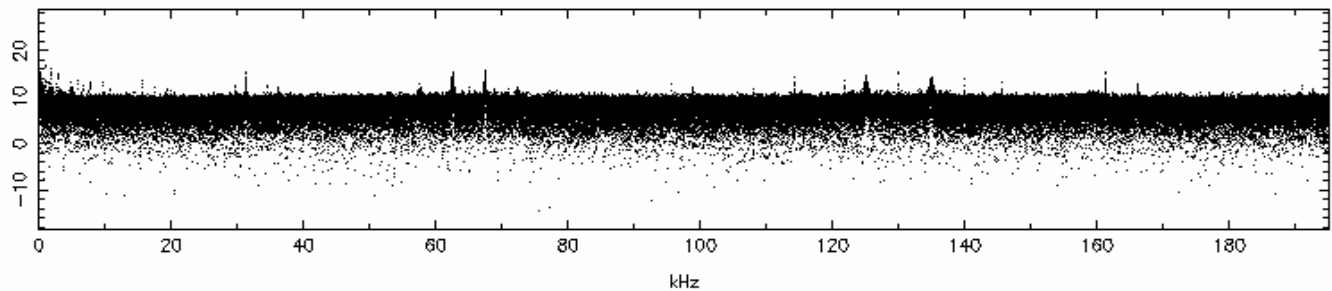




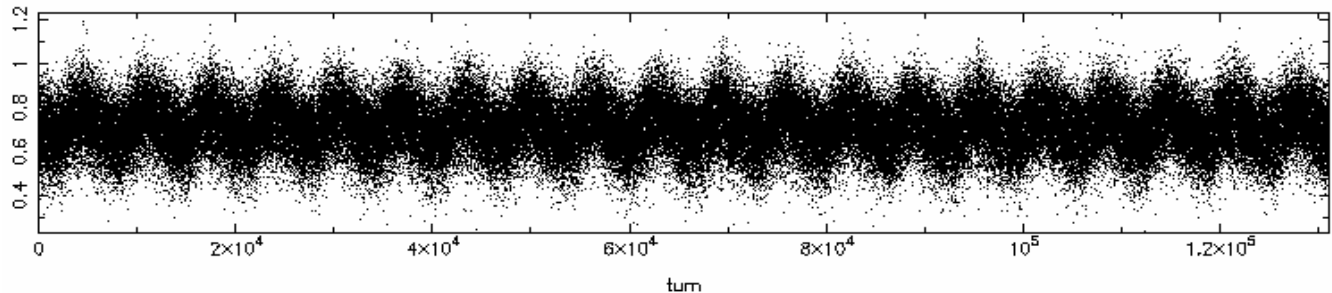
e+ H position at bpm\_ly3\_fft



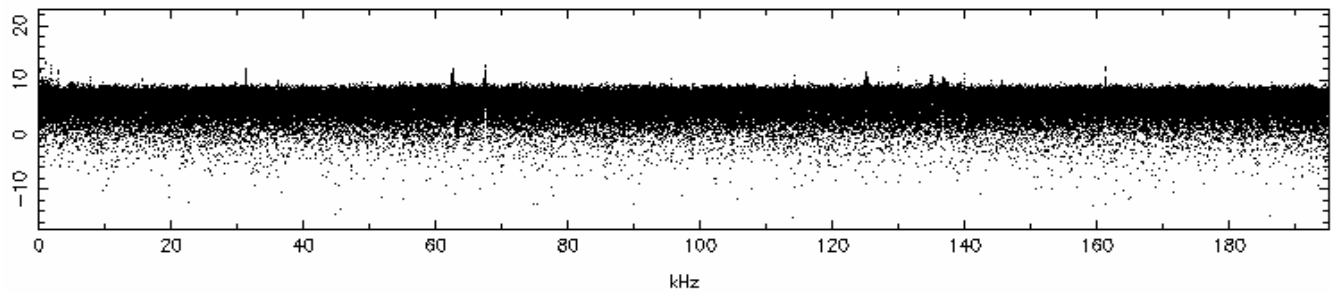
e+ fft in H at bpm\_ly3\_fft



e+ V position at bpm\_ly3\_fft



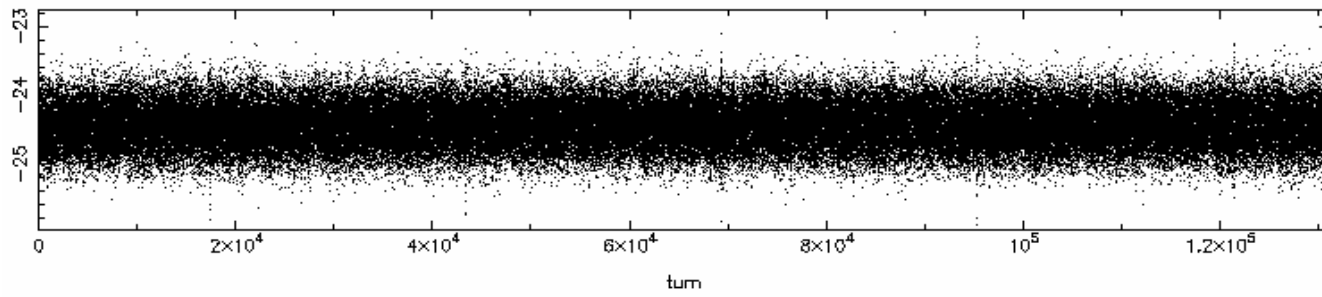
e+ fft in V at bpm\_ly3\_fft



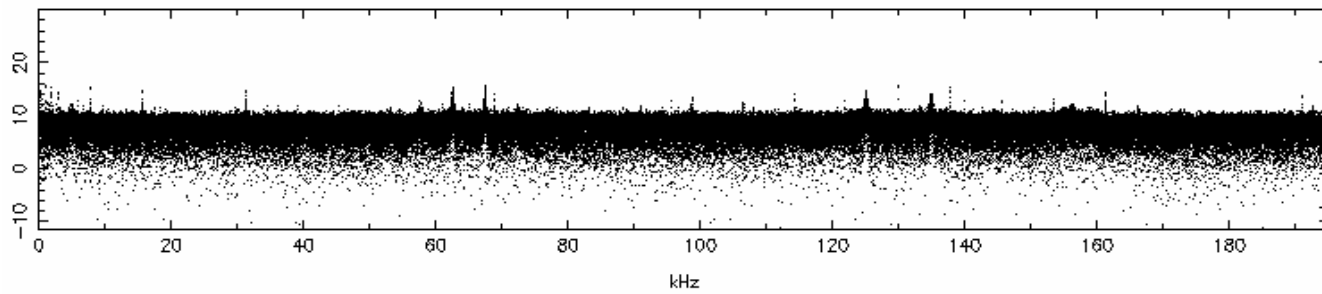
FFT (positrons)

**NO pedestal subtraction**

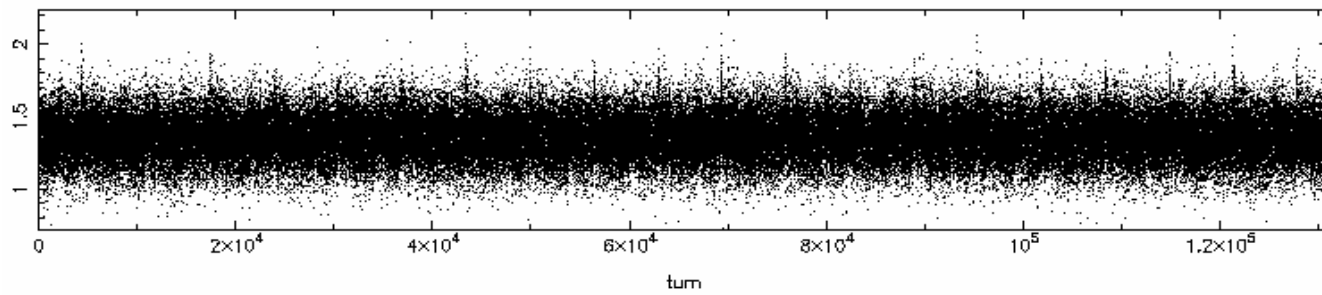
e- minus e+ H position at bpm\_ly3\_fft



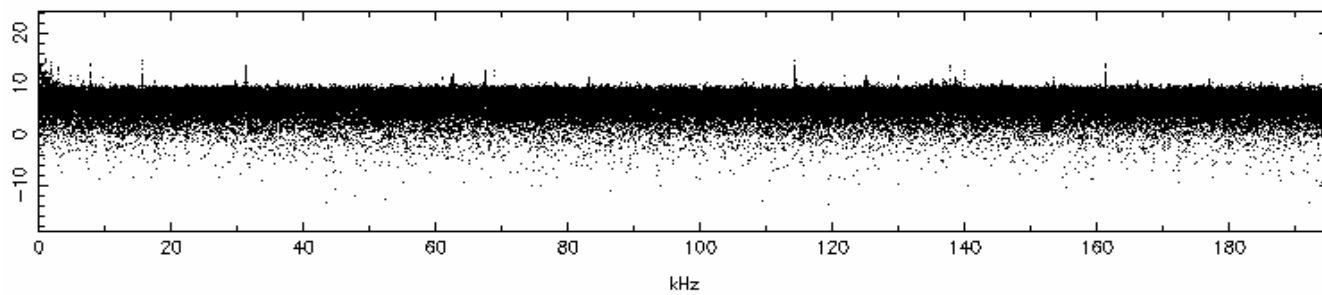
e- minus e+ fft in H at bpm\_ly3\_fft



e- minus e+ V position at bpm\_ly3\_fft

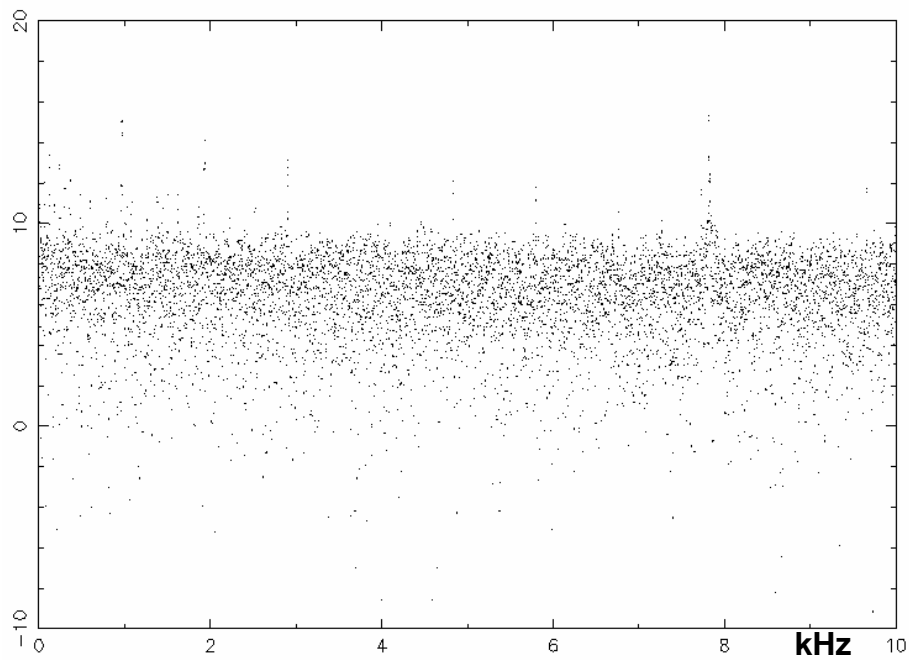


e- minus e+ fft in V at bpm\_ly3\_fft



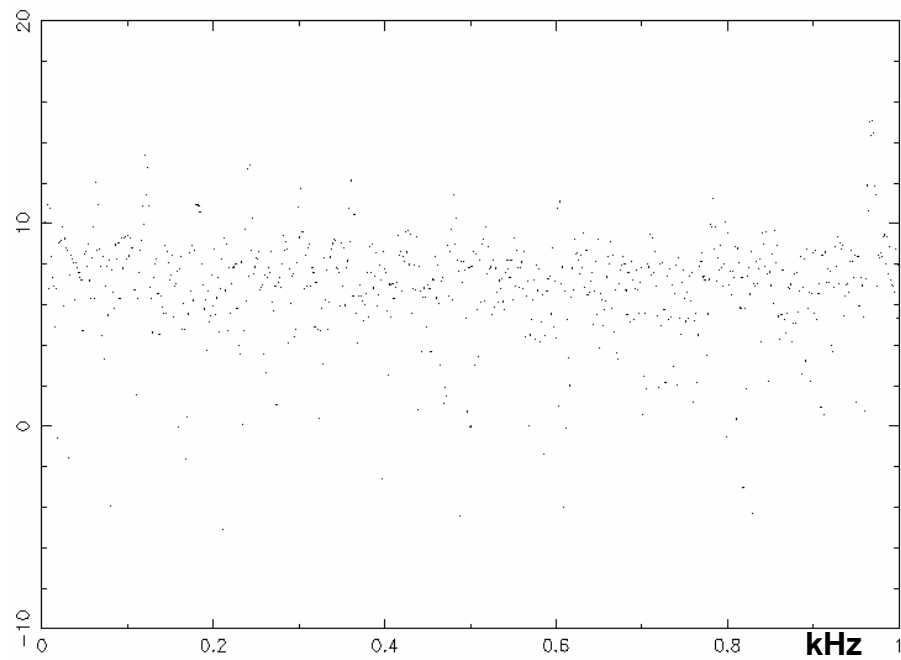
FFT (difference electrons and positrons)

**NO pedestal subtraction**

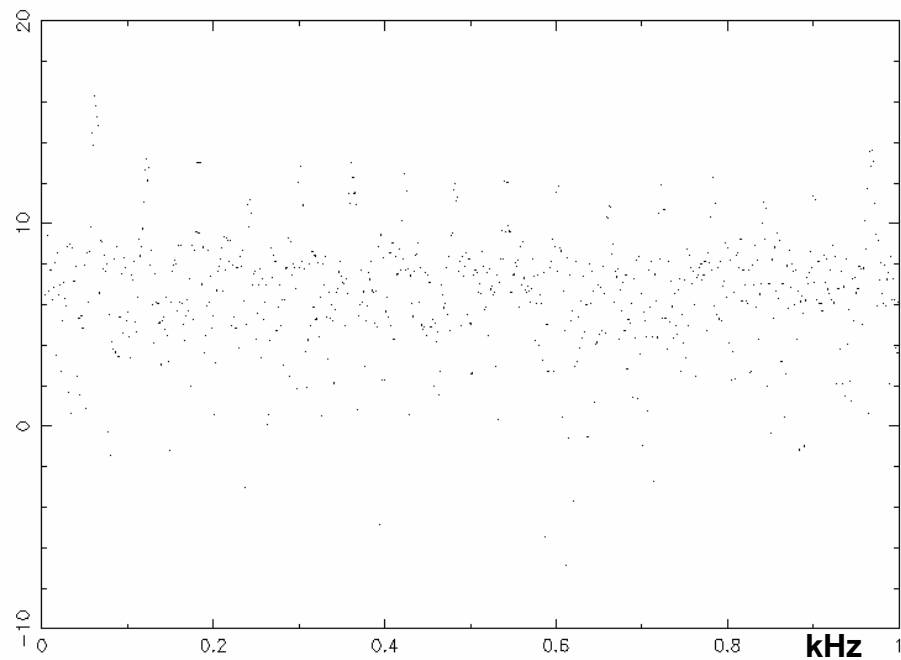
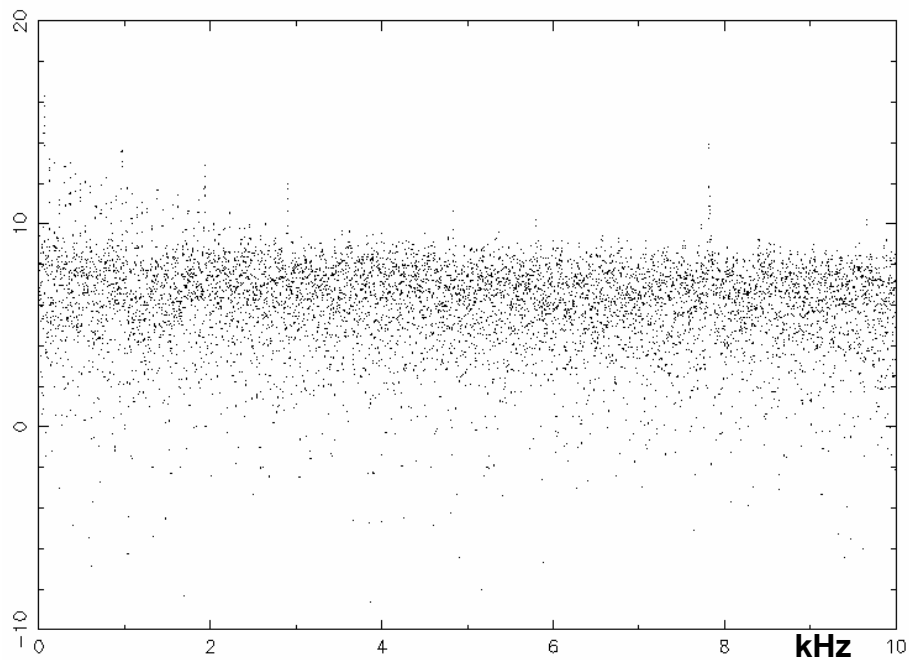


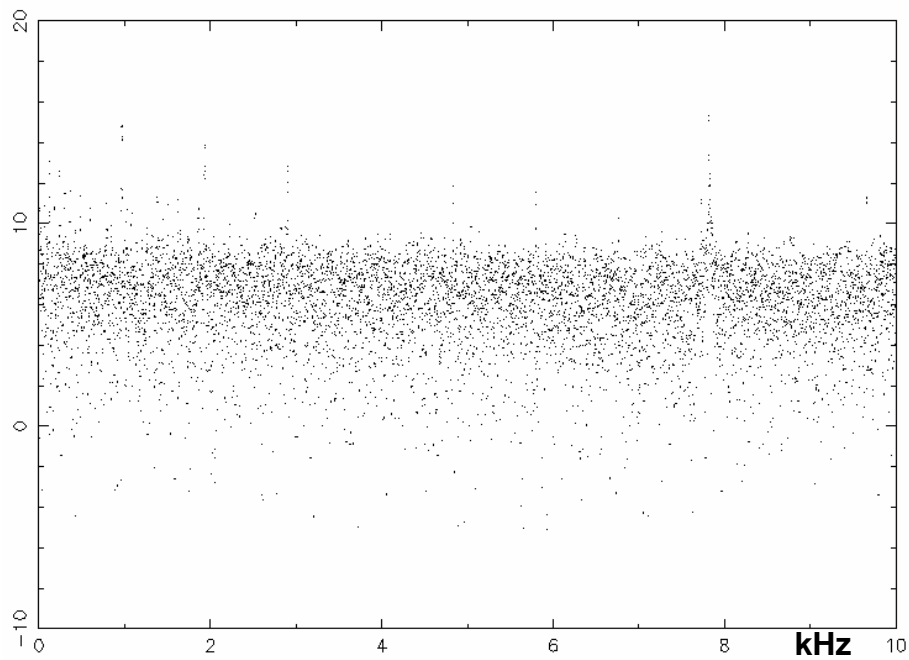
Electrons (H above, V Below)

FFT (pedestal subtracted)



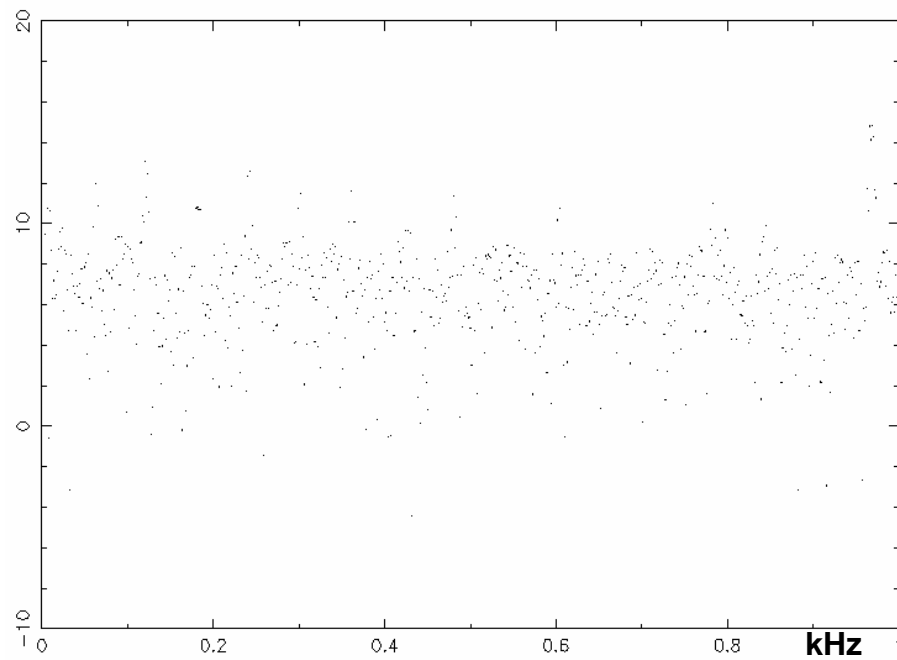
Electrons (H above, V Below)



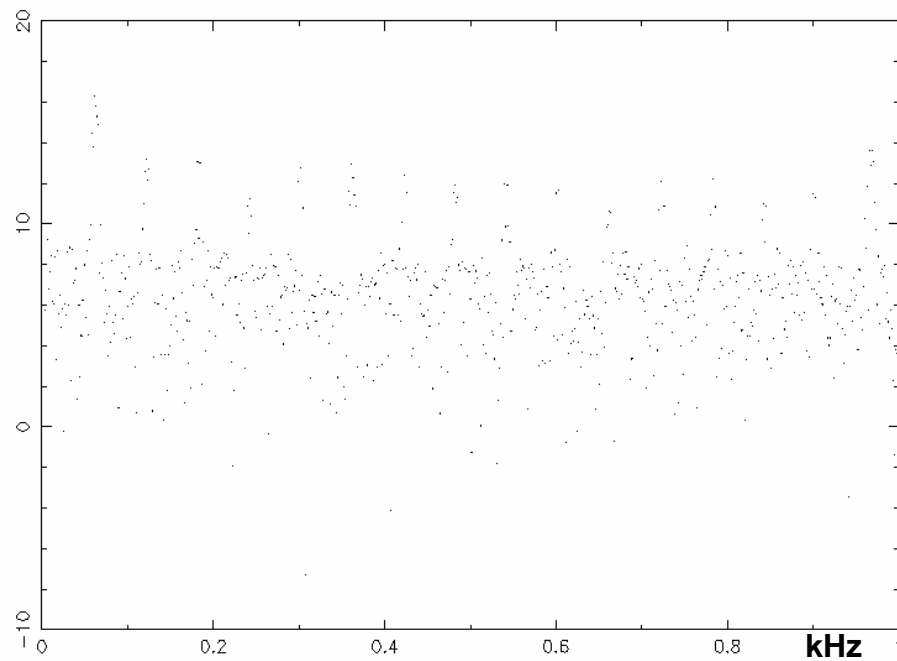
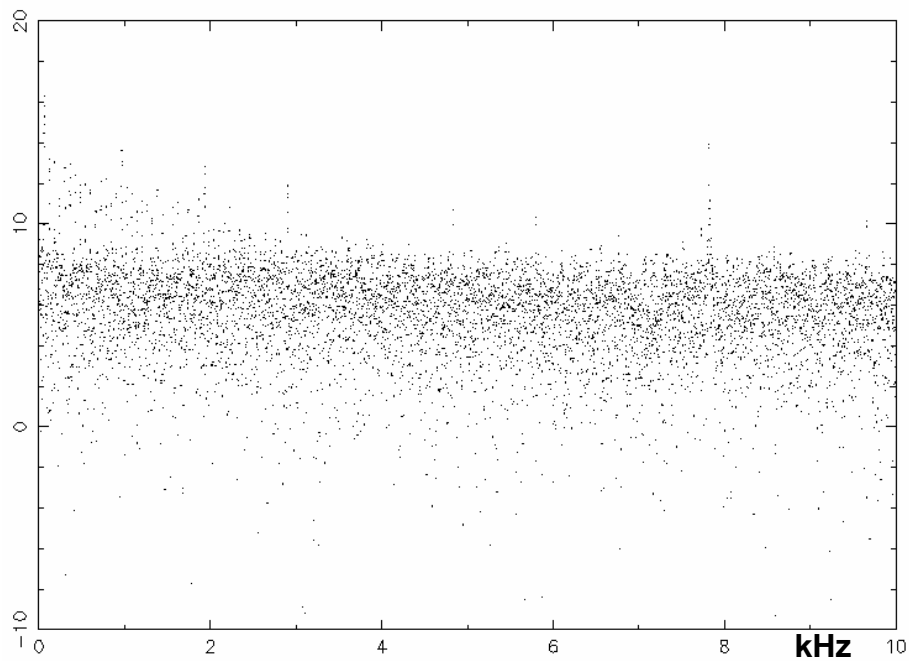


**Electrons (H above, V Below)**

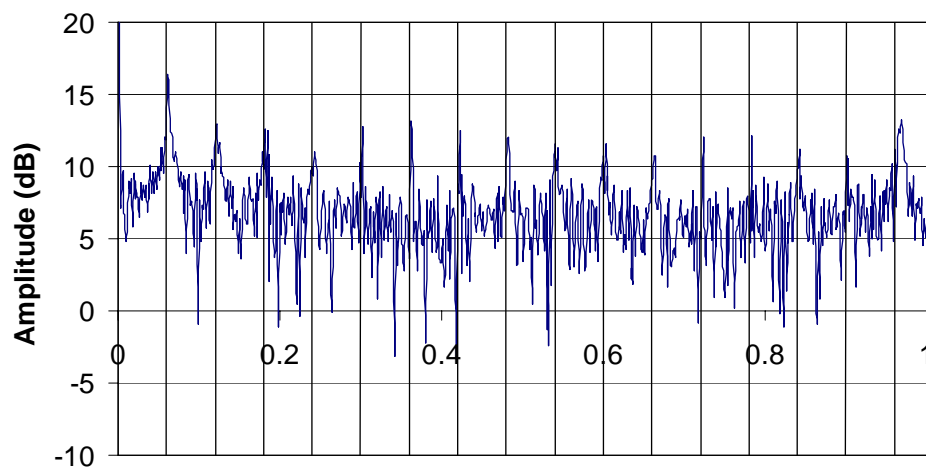
**FFT (NO pedestal subtraction)**



**Electrons (H above, V Below)**

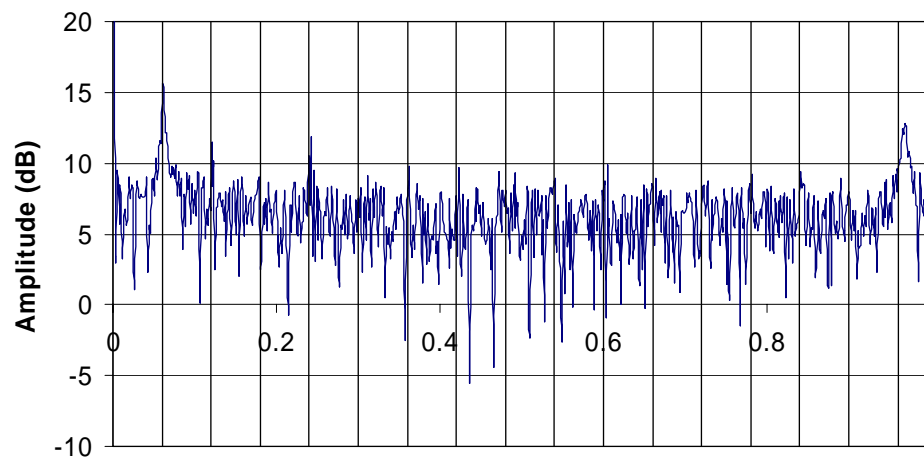


**electrons (vertical)**



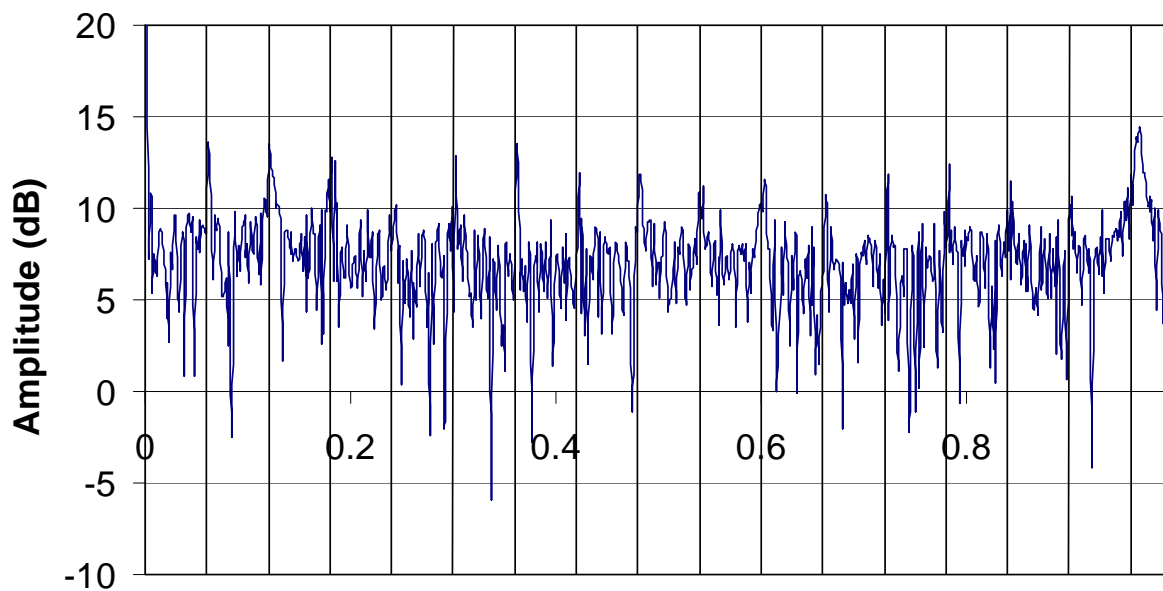
**frequency (kHz)**

**positrons (vertical)**



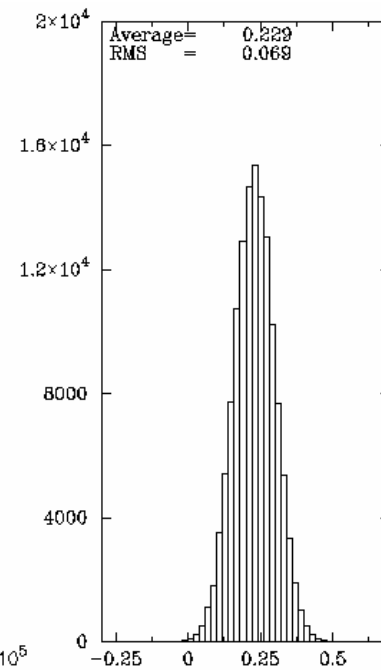
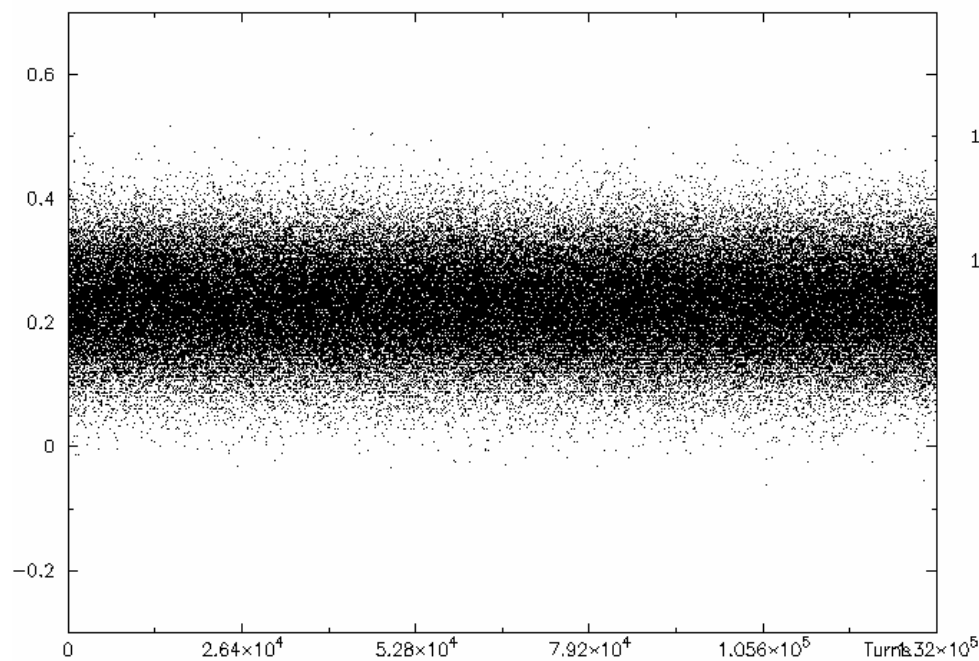
**frequency (kHz)**

**difference e-, e+ (vertical)**



**frequency (kHz)**

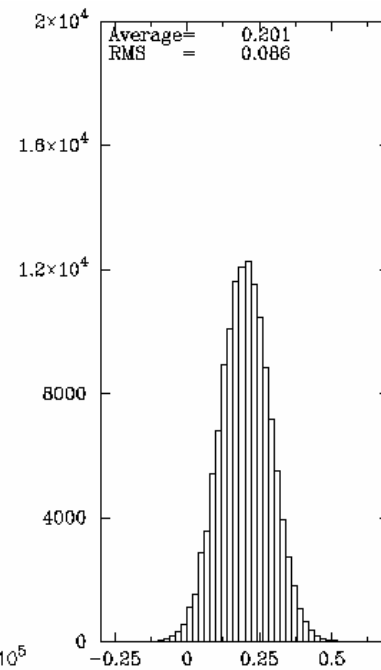
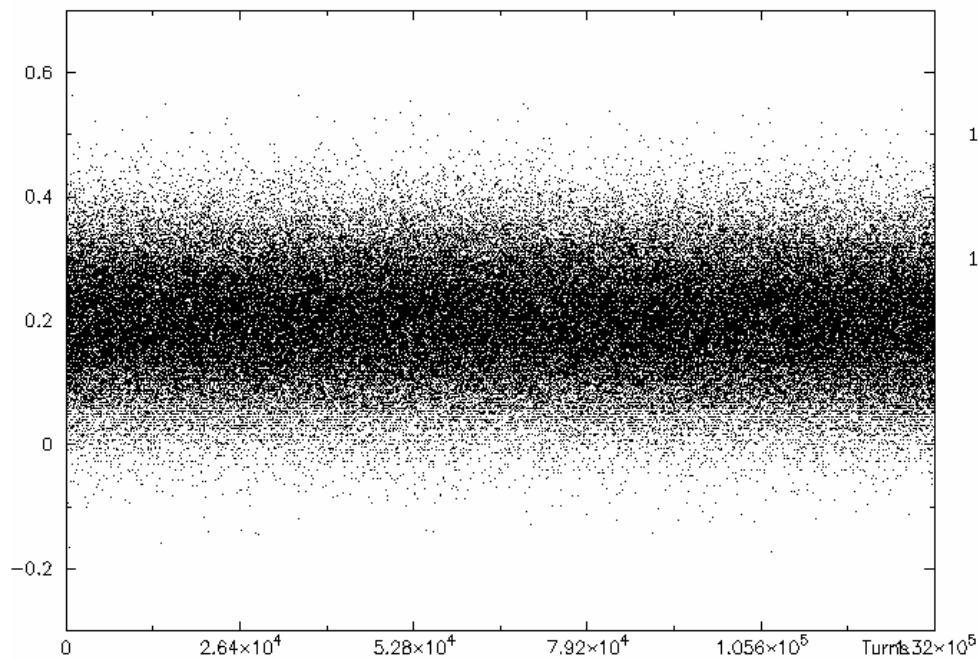
electron  
pedestal  
"position"



P1+P2-P3-P4

(A1-P1)+(A2-P2)+(A3-P3)+(A4-P4)

positron  
pedestal  
"position"



# Data overview

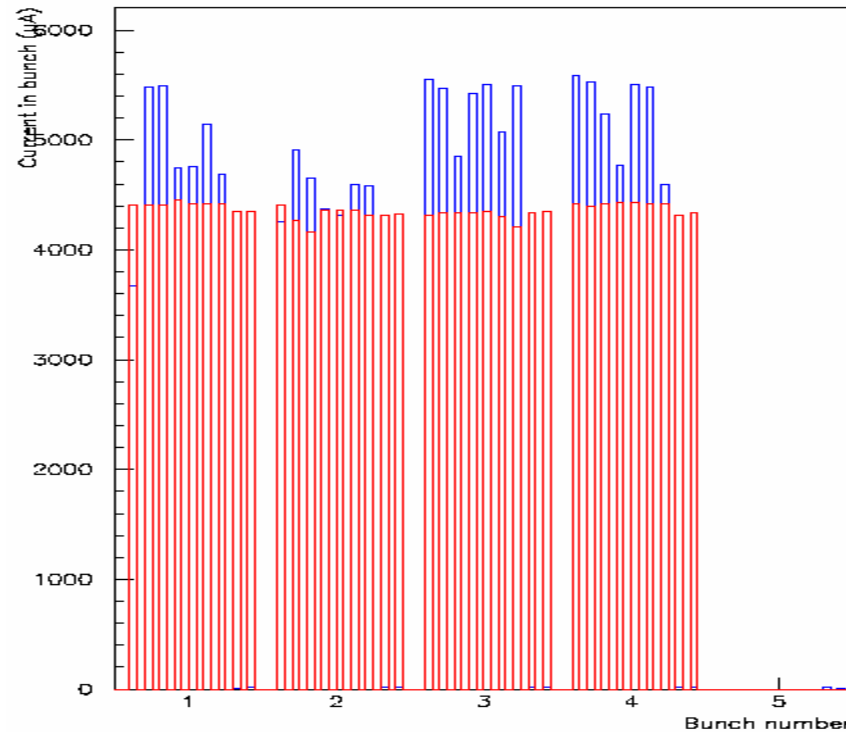
Data was taken on T4B1

Beam current    electrons    positrons  
 Totals (mA)    139.9060    156.9840

ADC\_CLOCK    GAIN    TglobA    TglobB  
                  79            6            820        817

bpm\_ped.dat contains pedestal data:

Channel	pedestal	RMS
0	31	39
1	-63	37
2	57	38
3	-79	37
4	-89	37
5	-31	37
6	-39	38
7	99	38



Pedestal subtracted			NO pedestal subtraction		
HORIZONTAL	mean position	RMS	HORIZONTAL	mean position	RMS
electrons	-10.717	0.162	electrons	-10.959	0.143
positrons	13.714	0.312	positrons	13.474	0.3
difference	-24.431	0.323	difference	-24.433	0.303
Pedestal subtracted			NO pedestal subtraction		
VERTICAL	mean position	RMS	VERTICAL	mean position	RMS
electrons	2.039	0.128	electrons	2.078	0.1078
positrons	0.904	0.14	positrons	0.714	0.112
difference	1.135	0.185	difference	1.364	0.15