

D0 Silicon Noise Studies

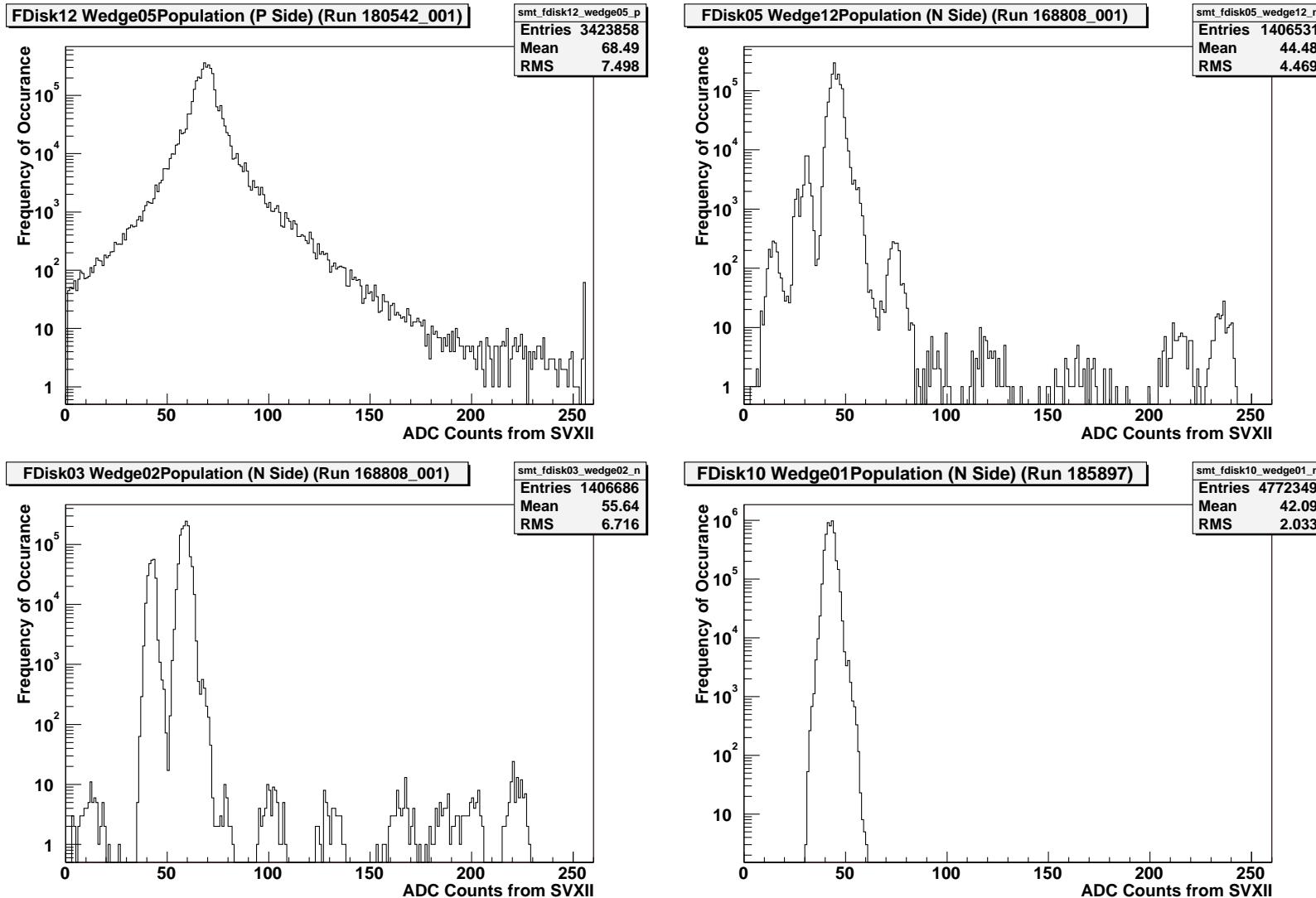
A Heuristic Approach: Overview

Justace Clutter

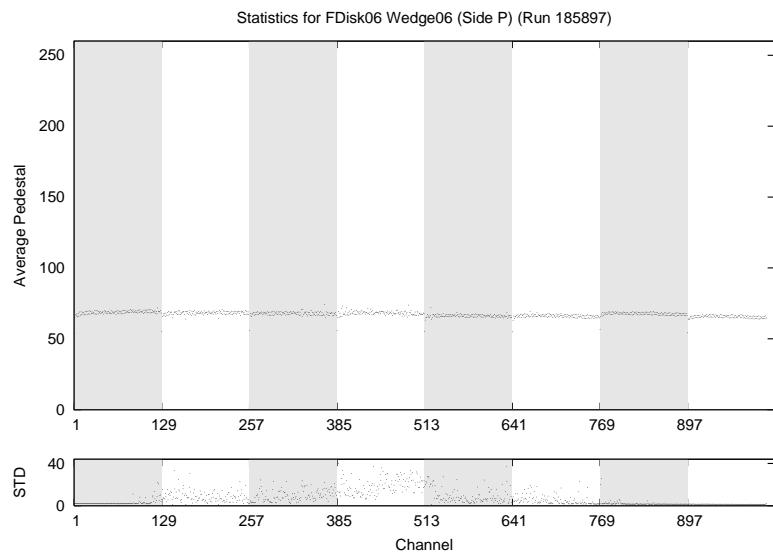
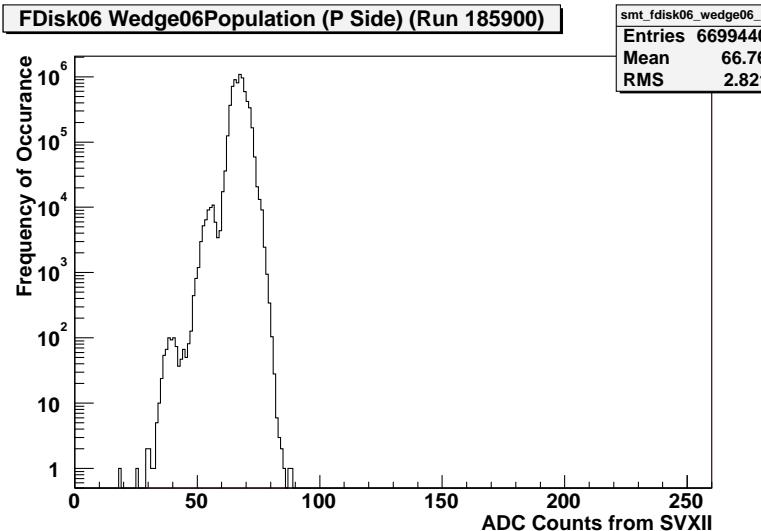
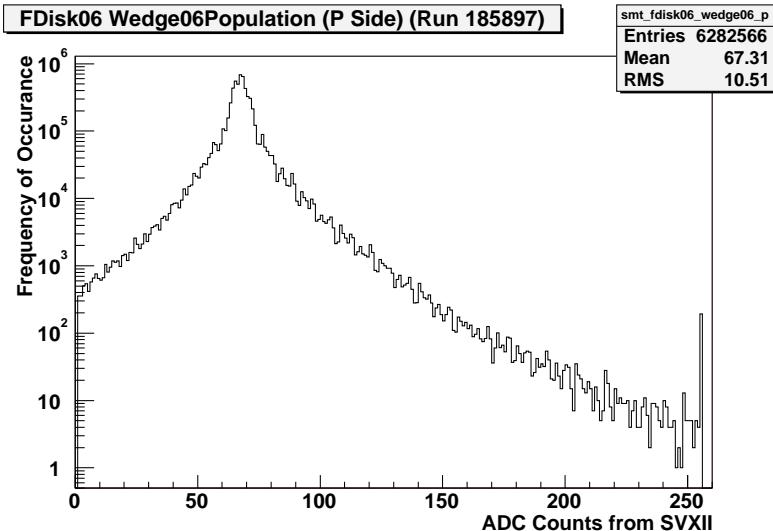
Advisor: Dr. Alice Bean

University of Kansas

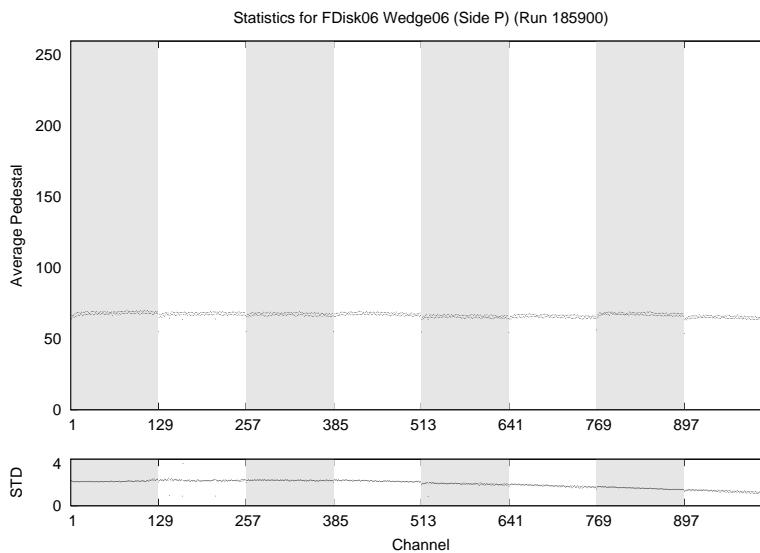
Overview



Long Tail

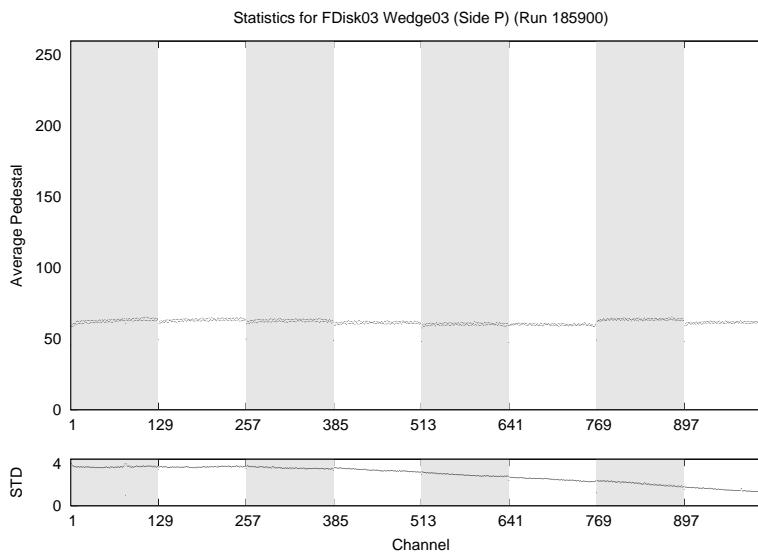
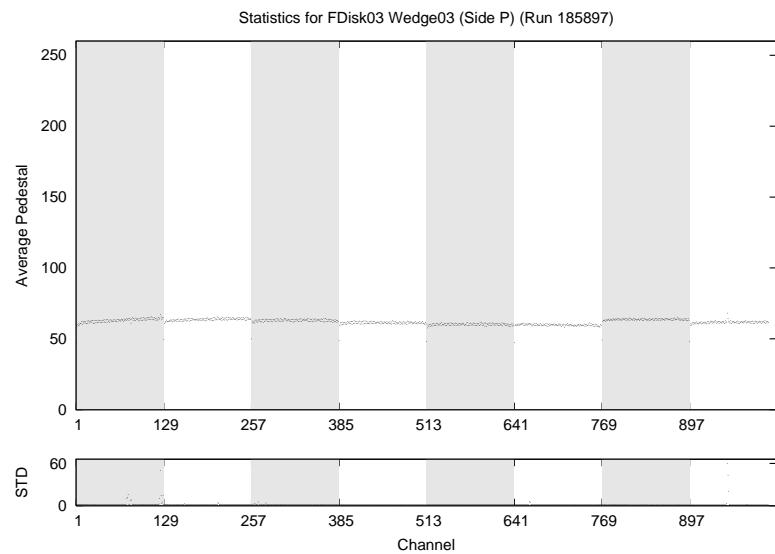
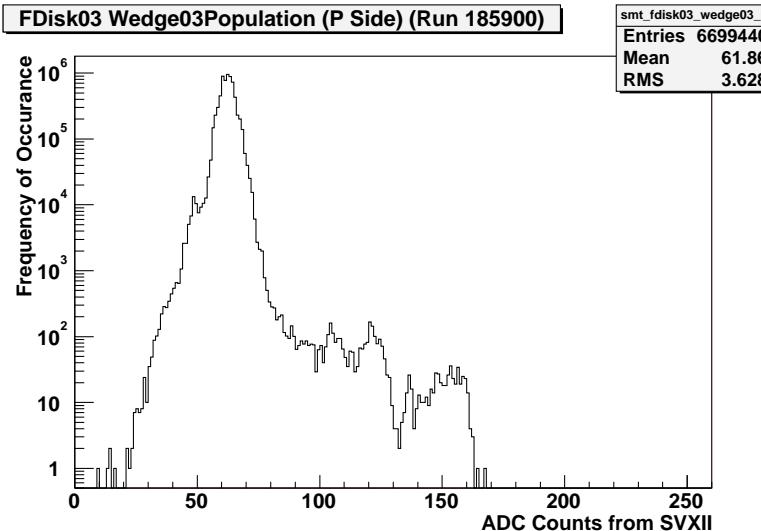
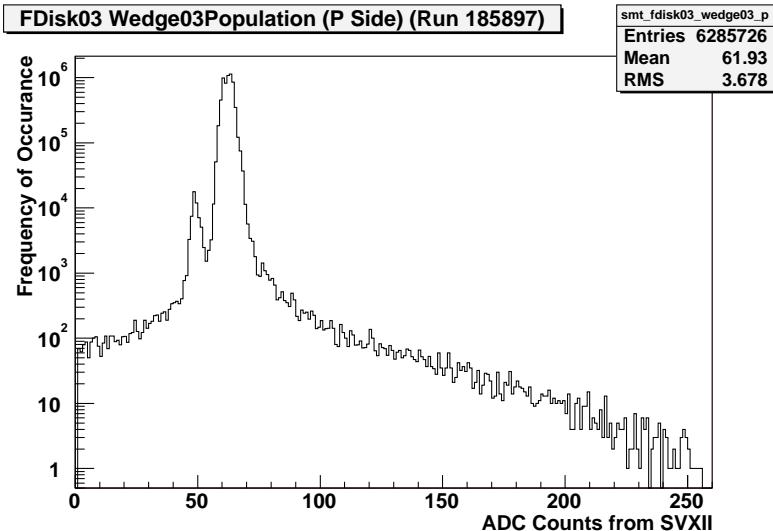


HV: 100%



HV: 0%

Long Tail

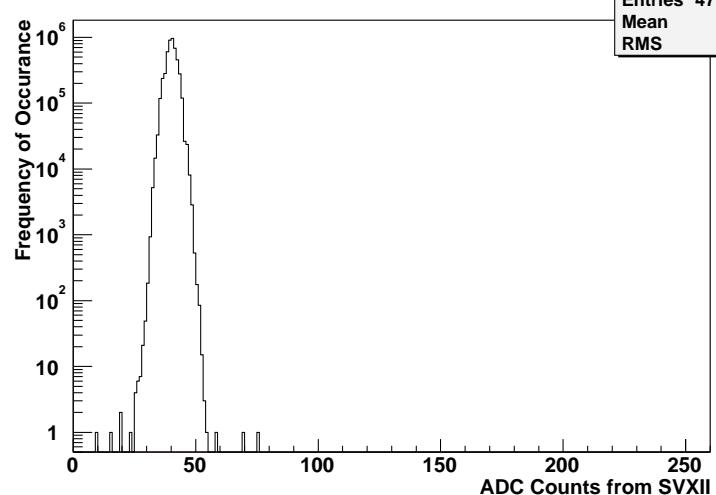


HV: 100%

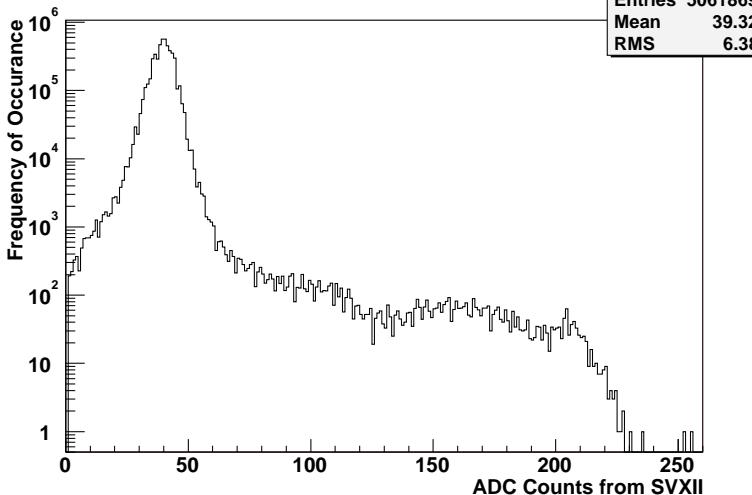
HV: 0%

Long Tail

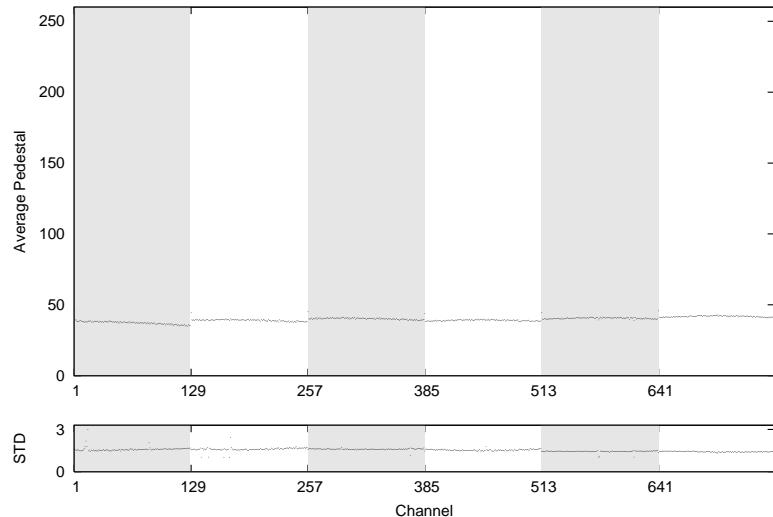
FDisk06 Wedge11Population (N Side) (Run 185897)



FDisk06 Wedge11Population (N Side) (Run 185900)

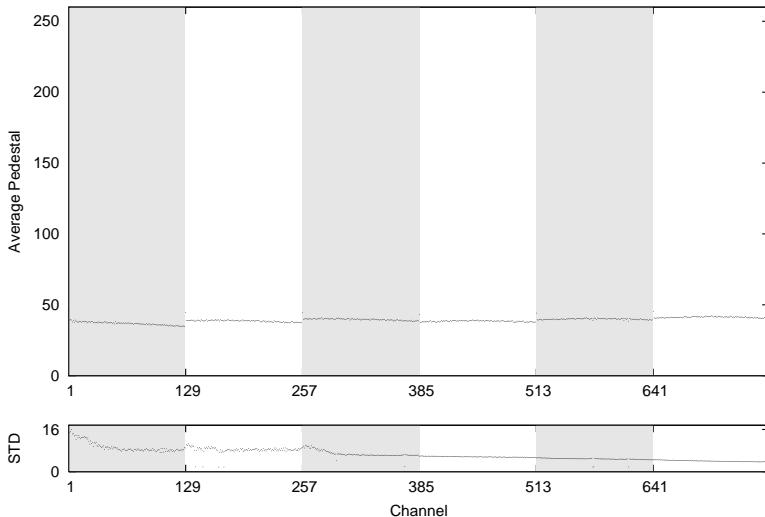


Statistics for FDisk06 Wedge11 (Side N) (Run 185897)



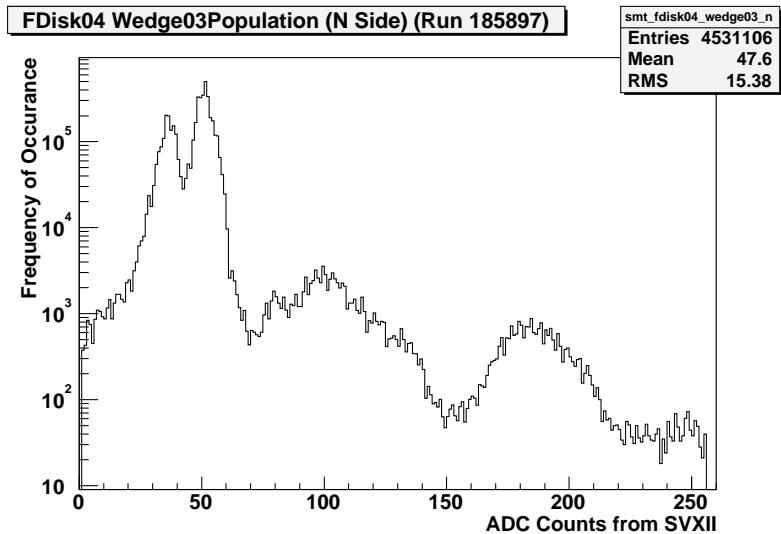
HV: 100%

Statistics for FDisk06 Wedge11 (Side N) (Run 185900)



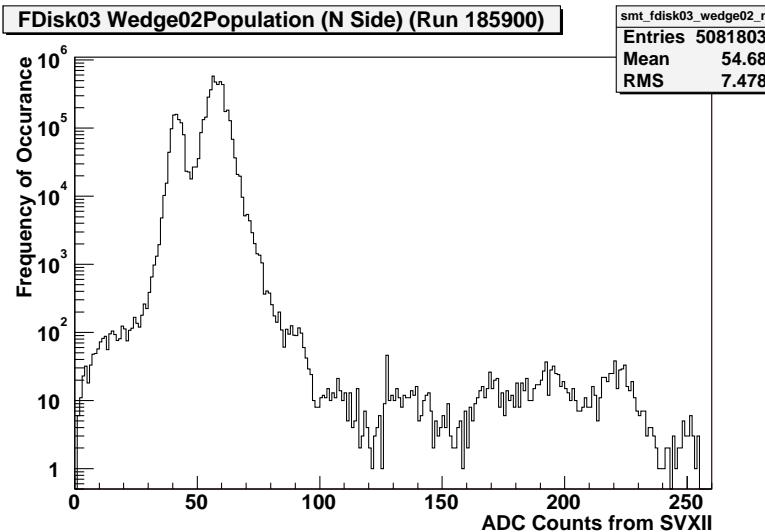
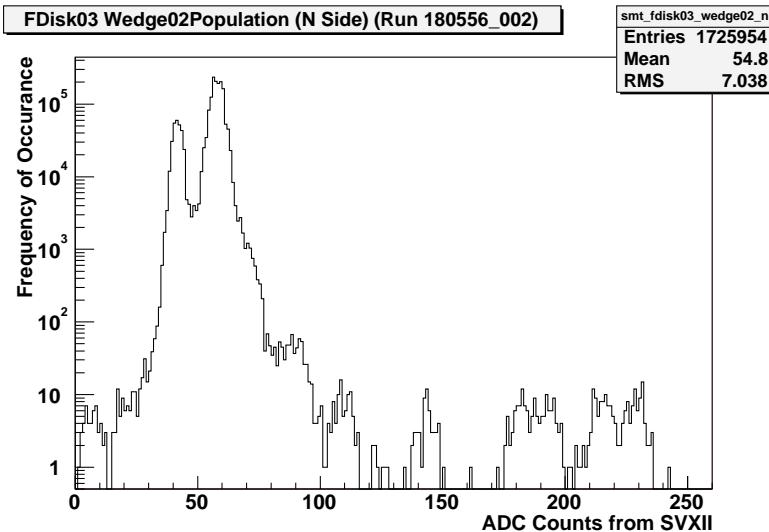
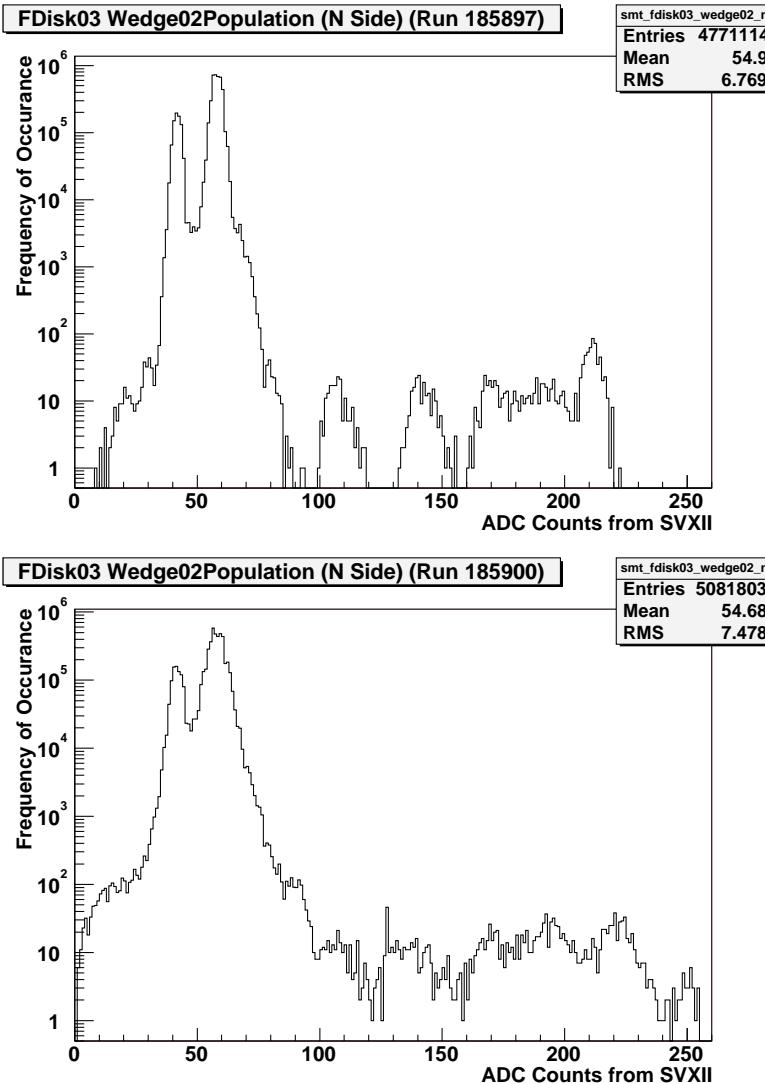
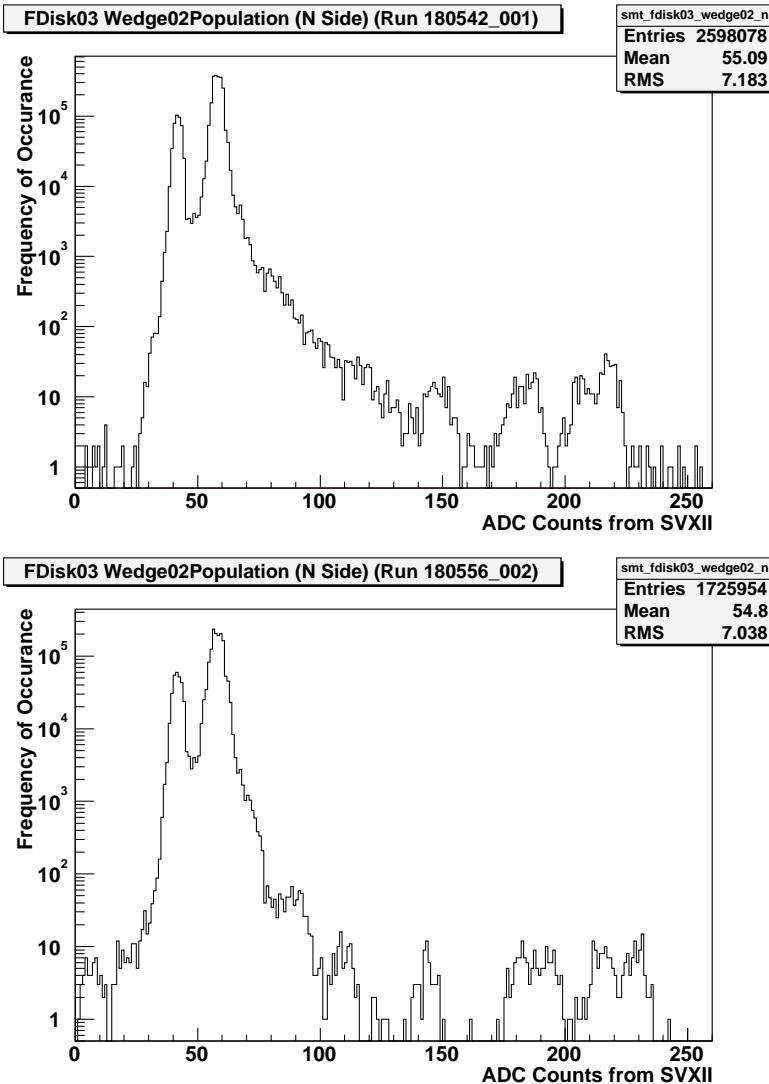
HV: 0%

Multi-Modal

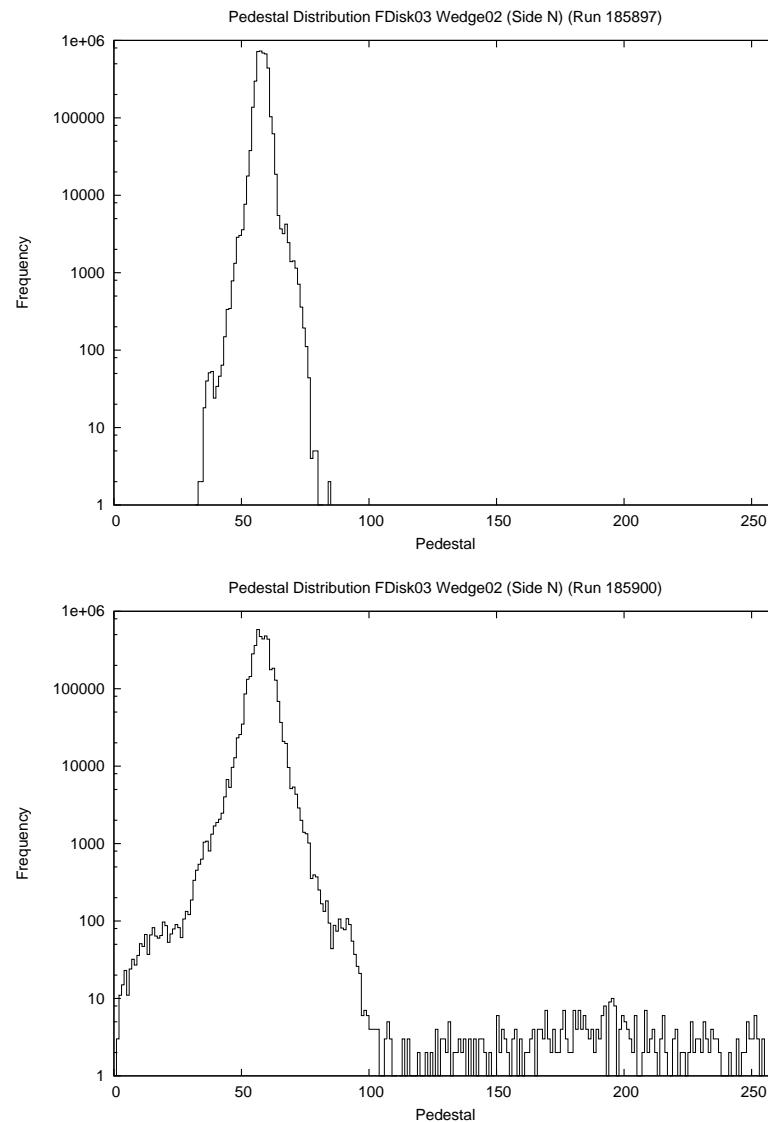
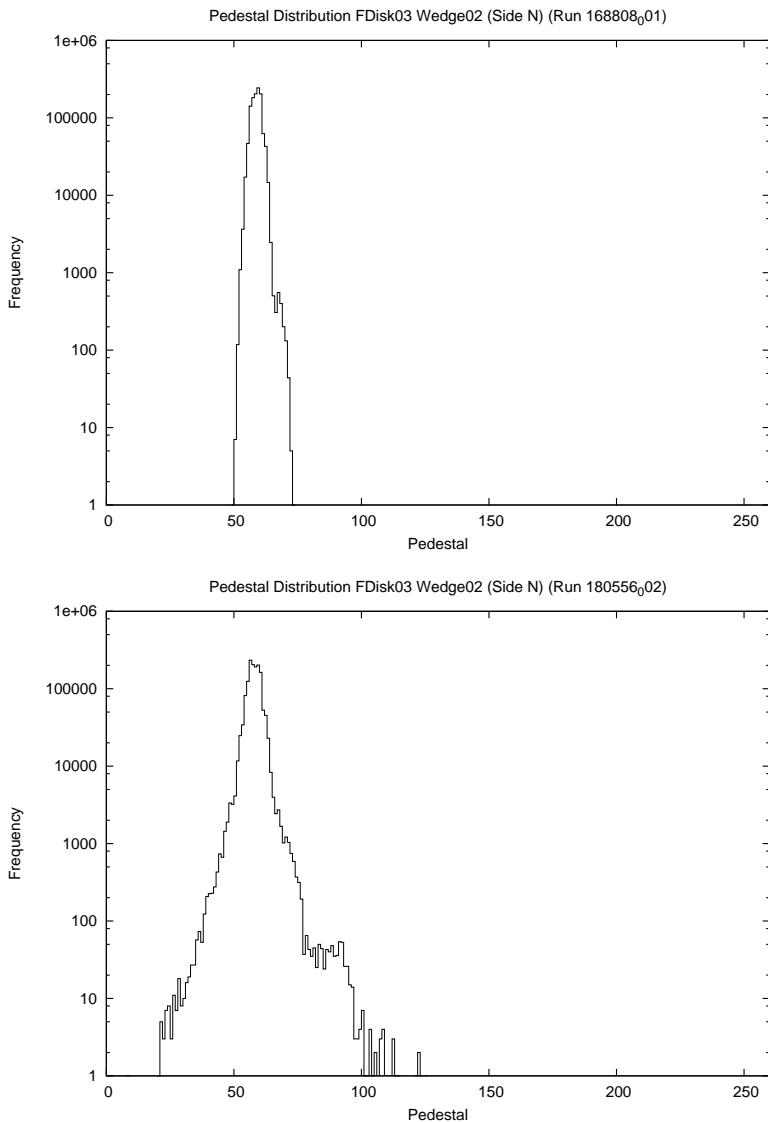


- Usually caused from different average pedestal values for a run
- Could be caused from the “Noisy” signature discussed below

Noisy

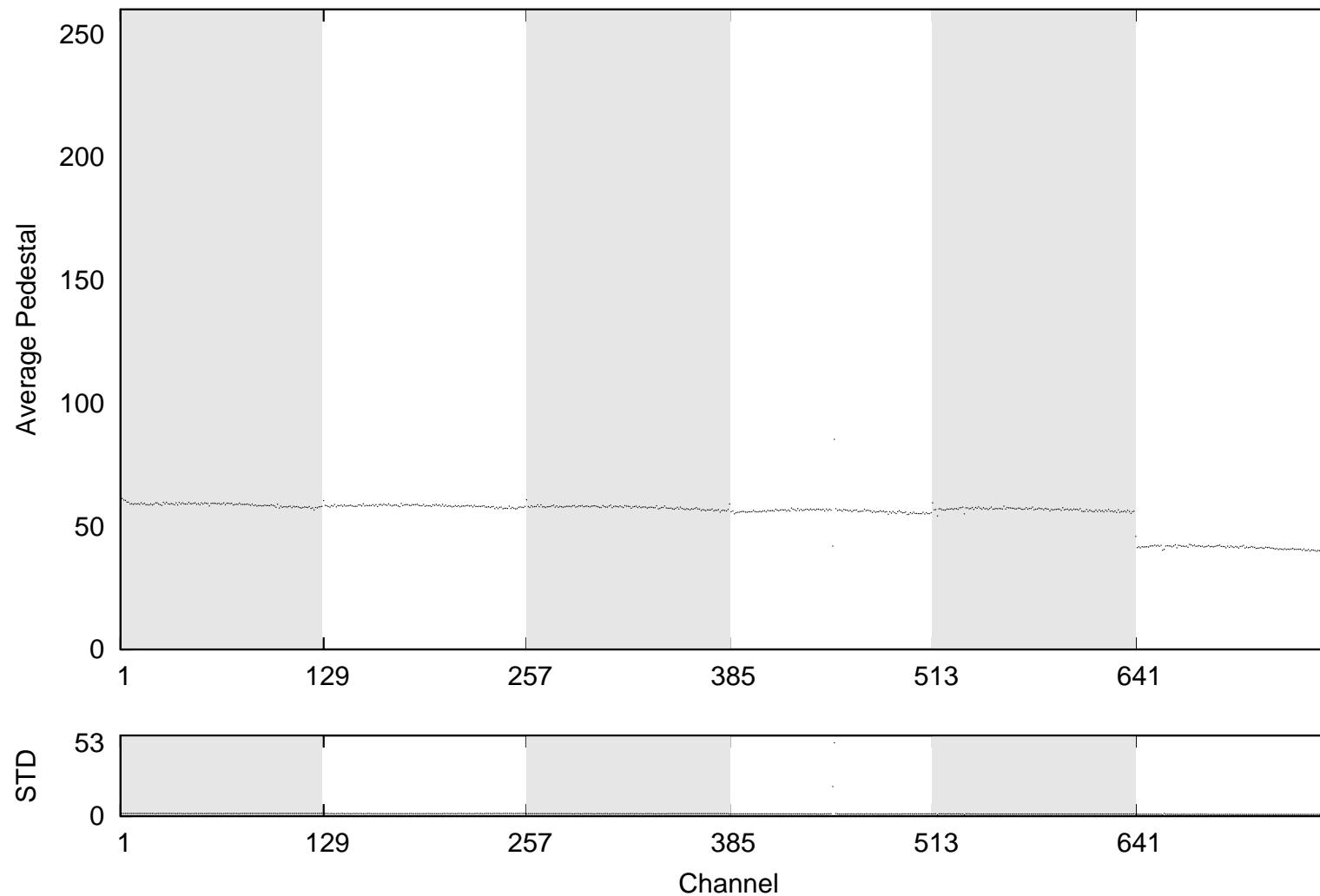


Noisy



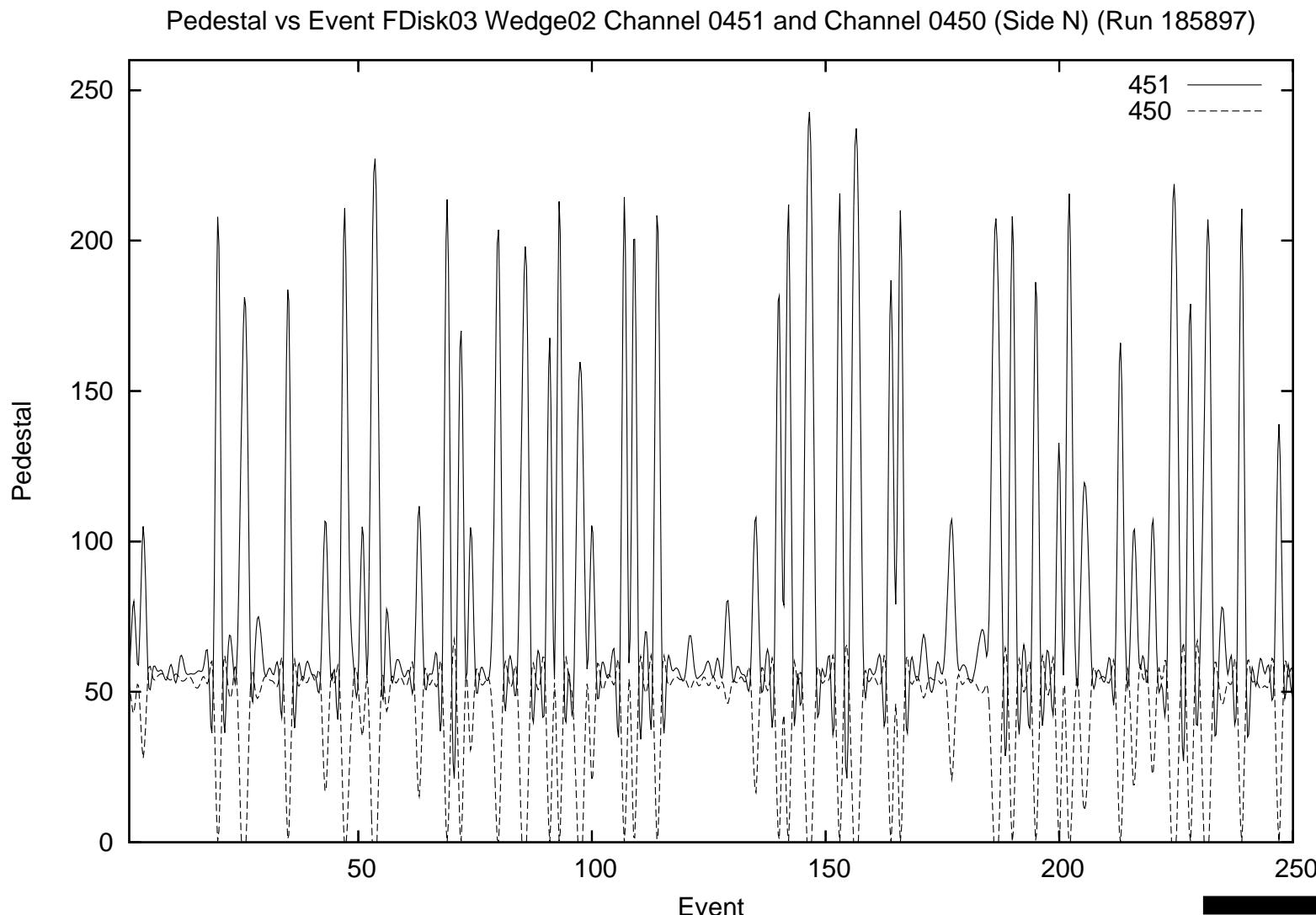
Noisy

Statistics for FDisk03 Wedge02 (Side N) (Run 185897)



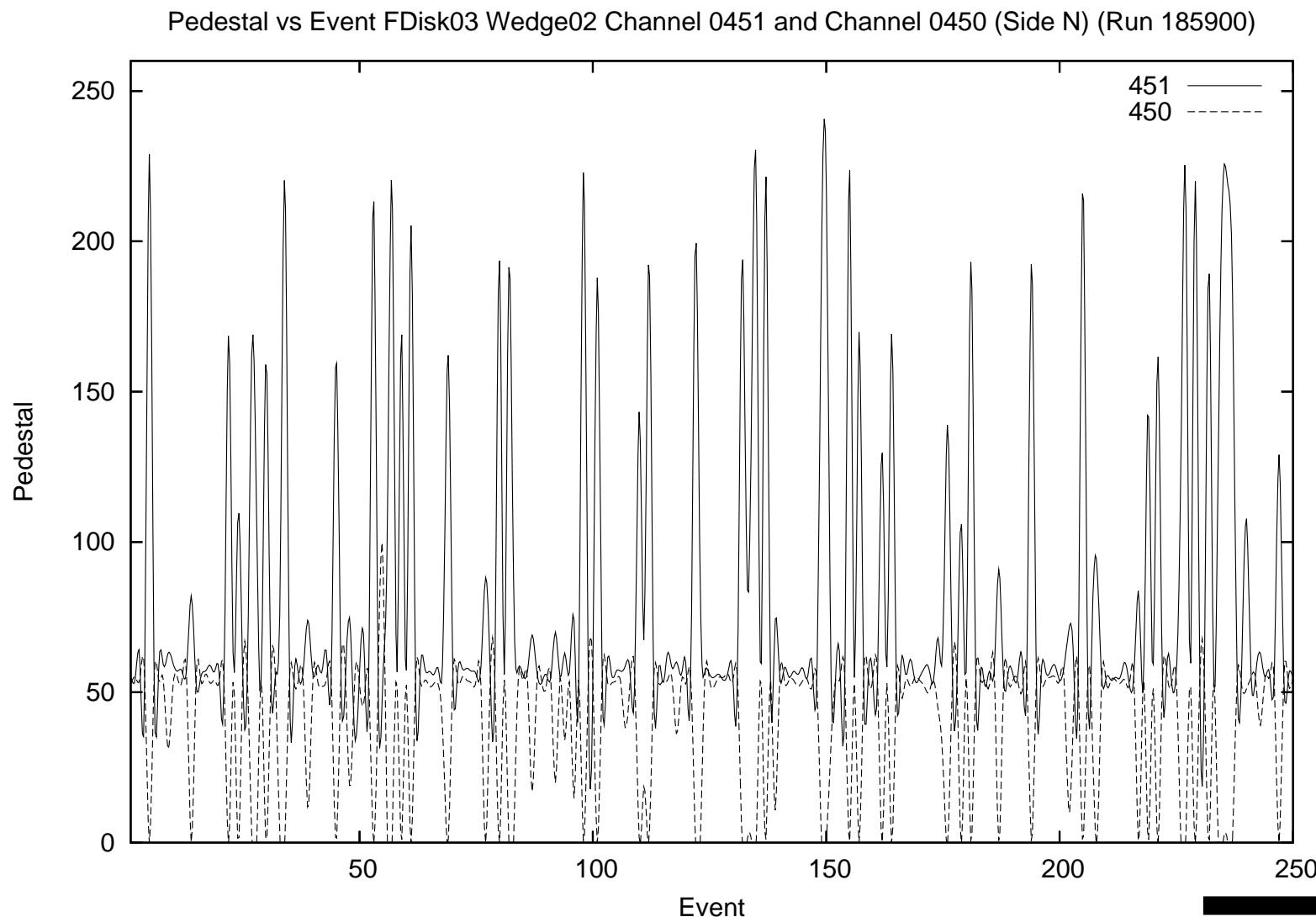
Noisy

HV: 100%

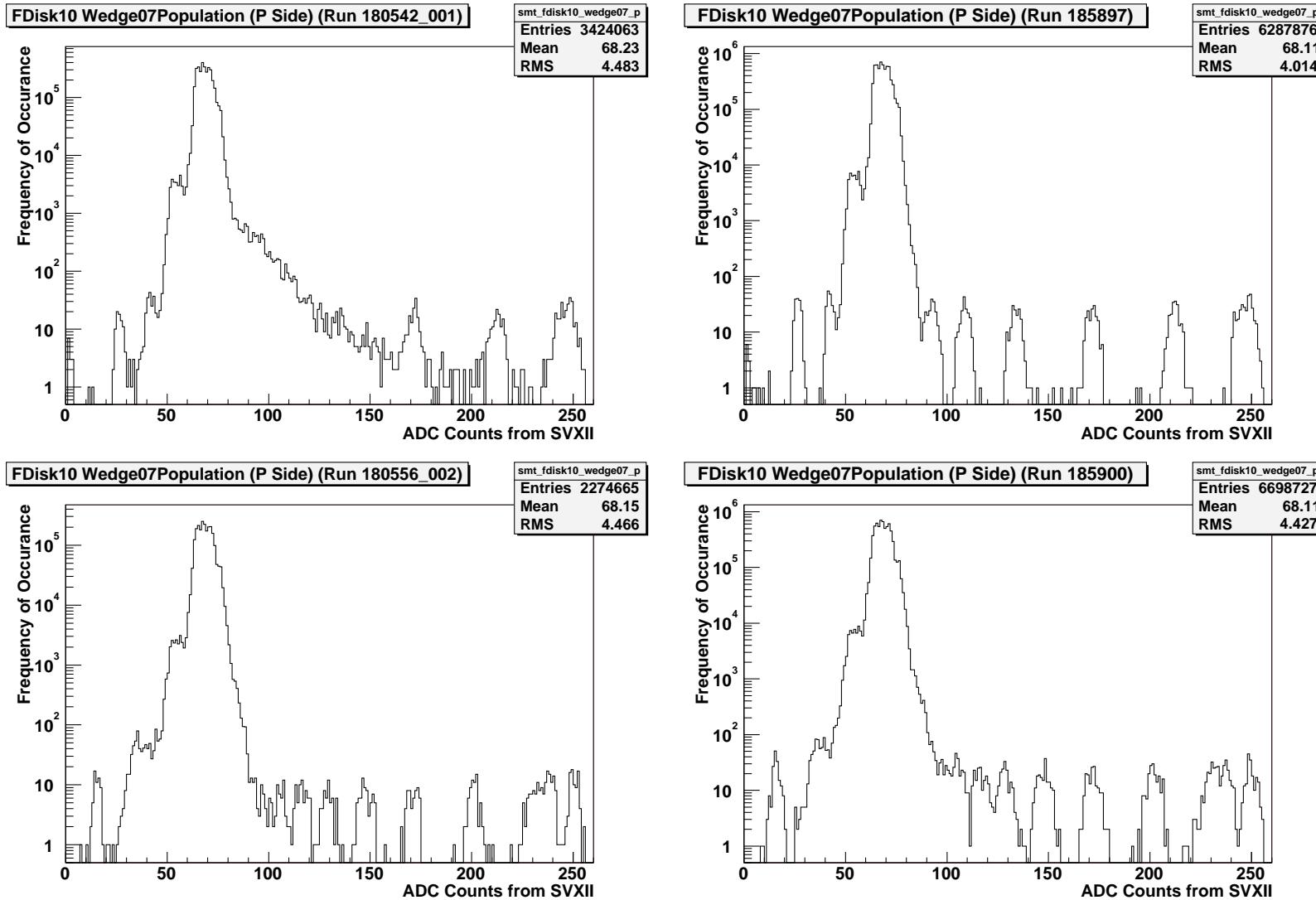


Noisy

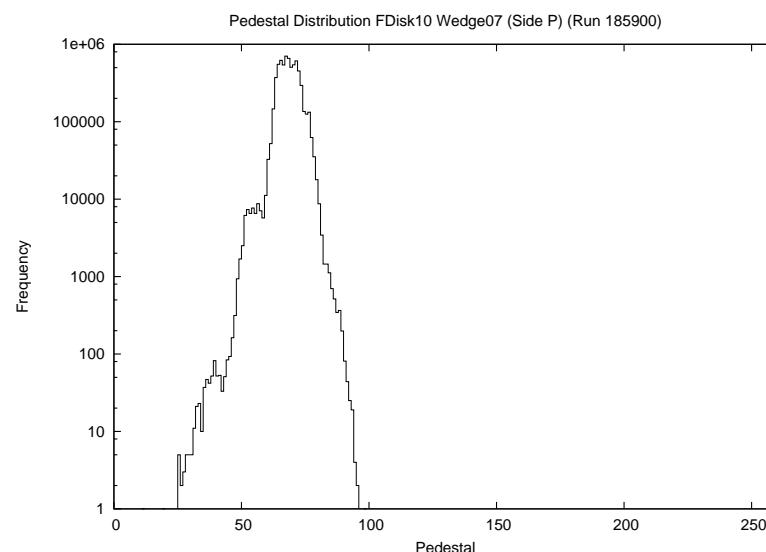
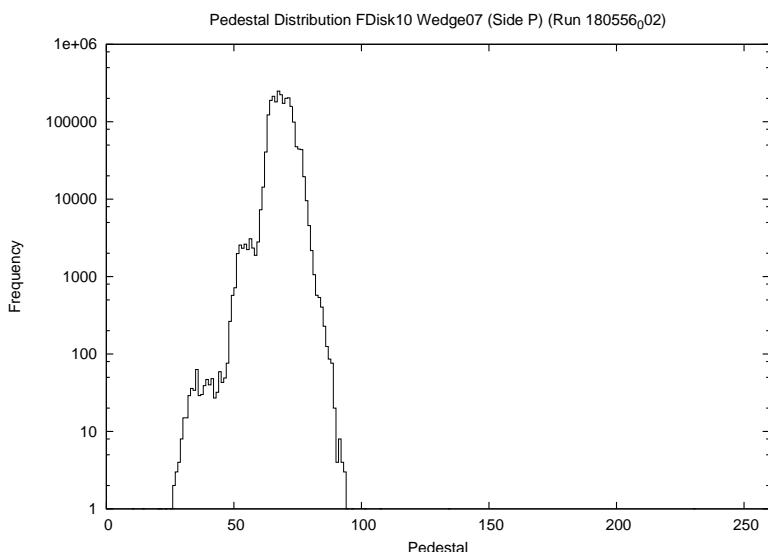
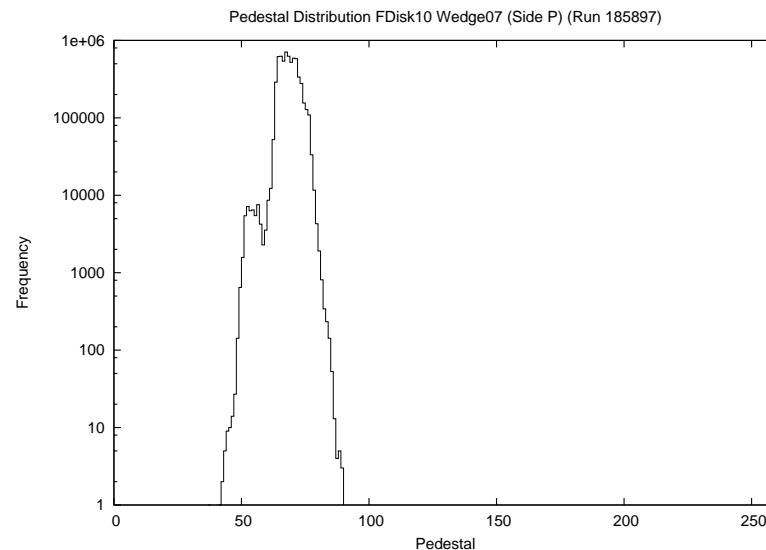
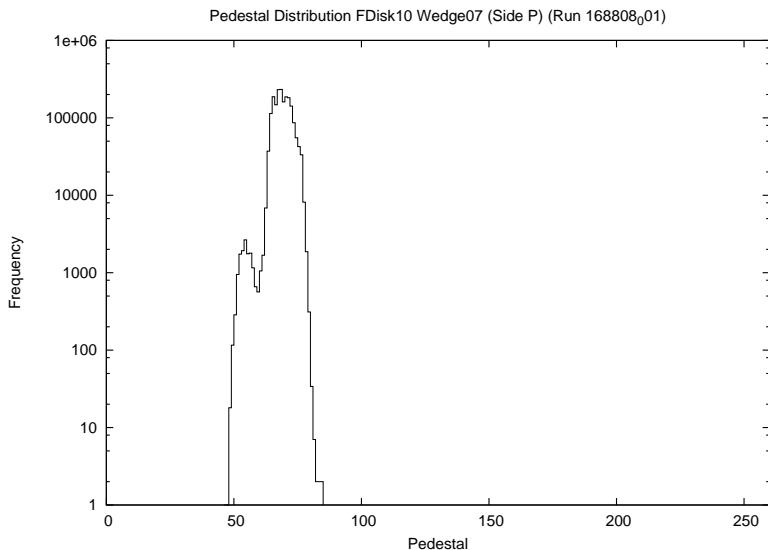
HV: 0%



Noisy

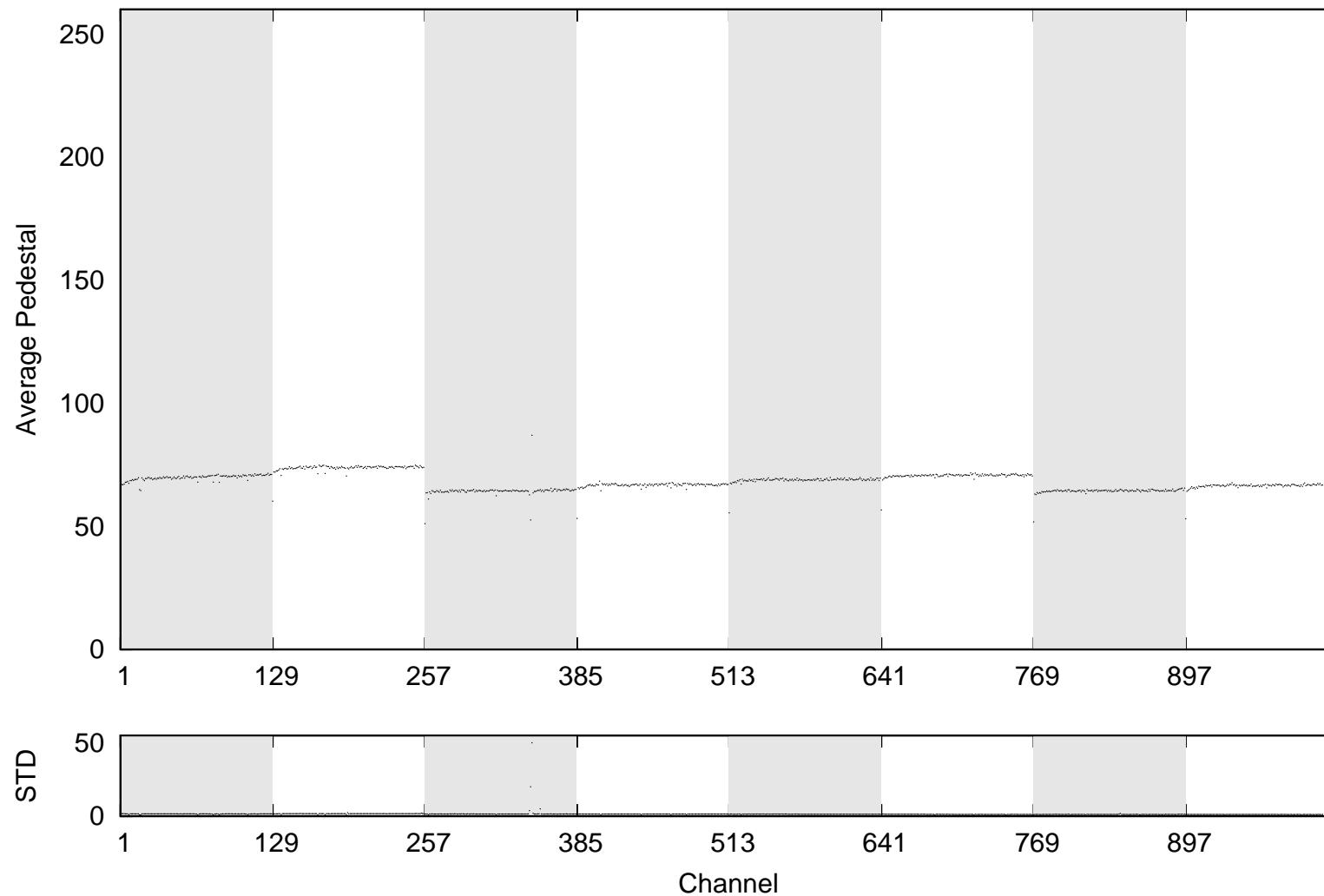


Noisy



Noisy

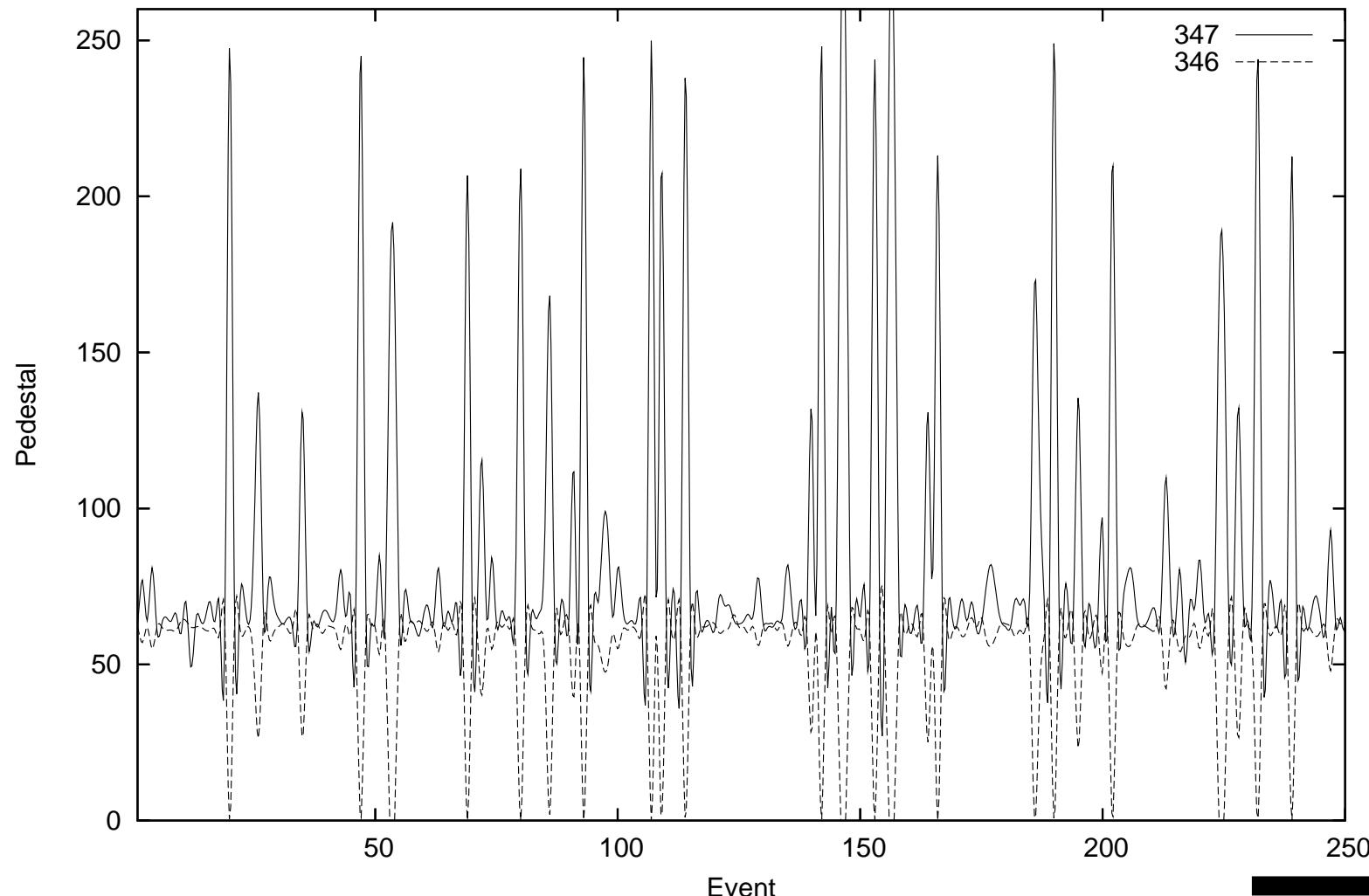
Statistics for FDisk10 Wedge07 (Side P) (Run 185897)



Noisy

HV: 100%

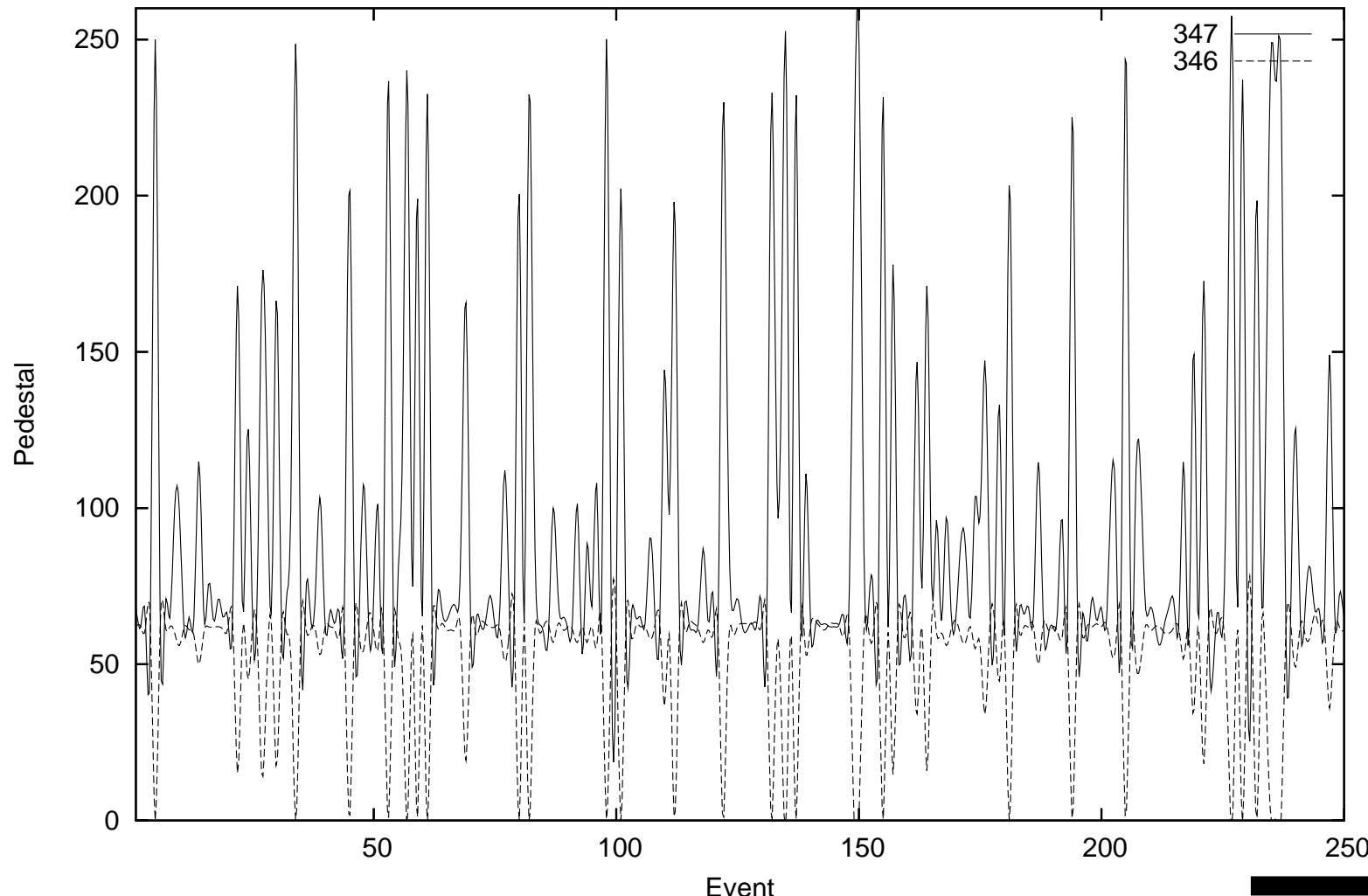
Pedestal vs Event FDisk10 Wedge07 Channel 0347 and Channel 0346 (Side P) (Run 185897)



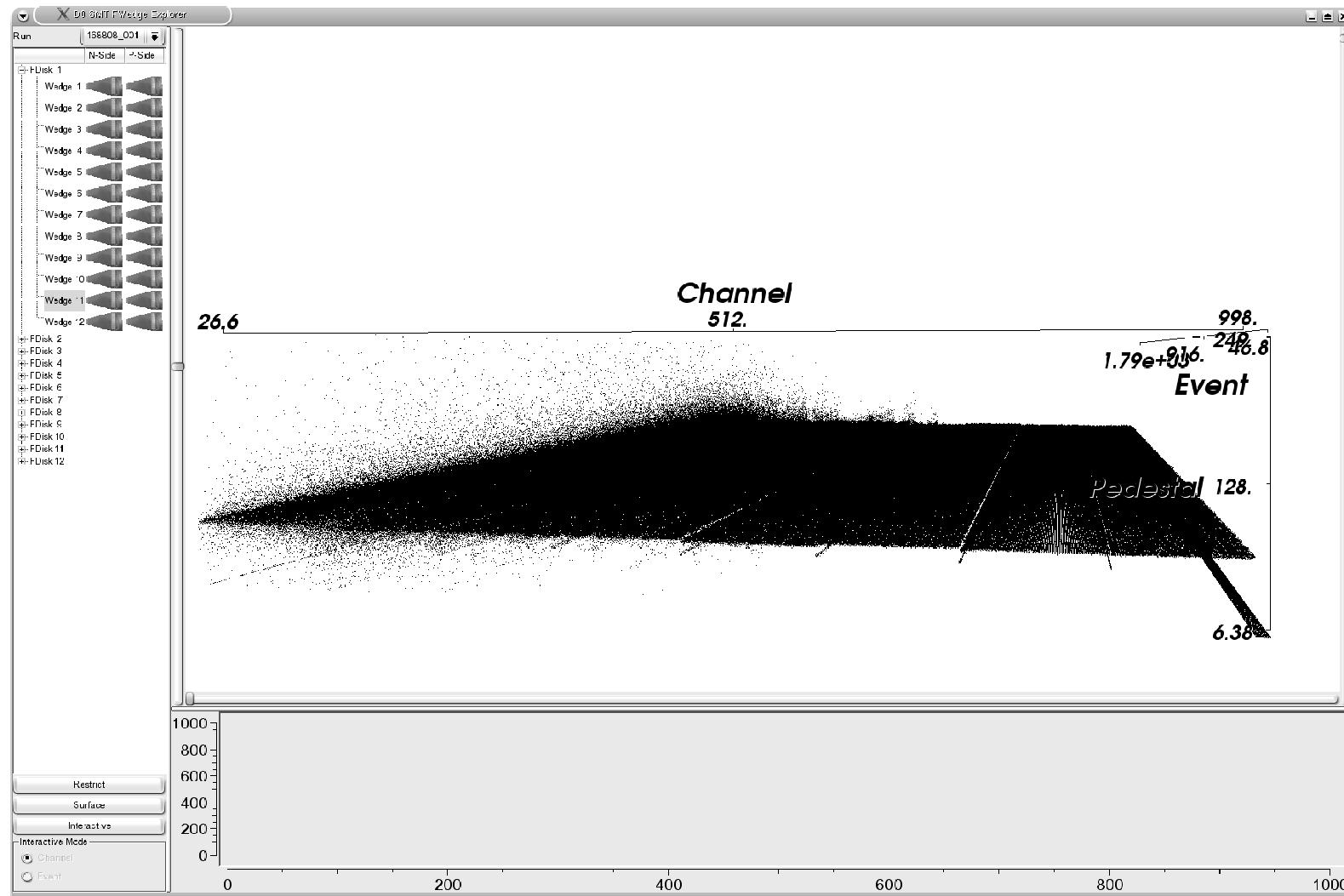
Noisy

HV: 0%

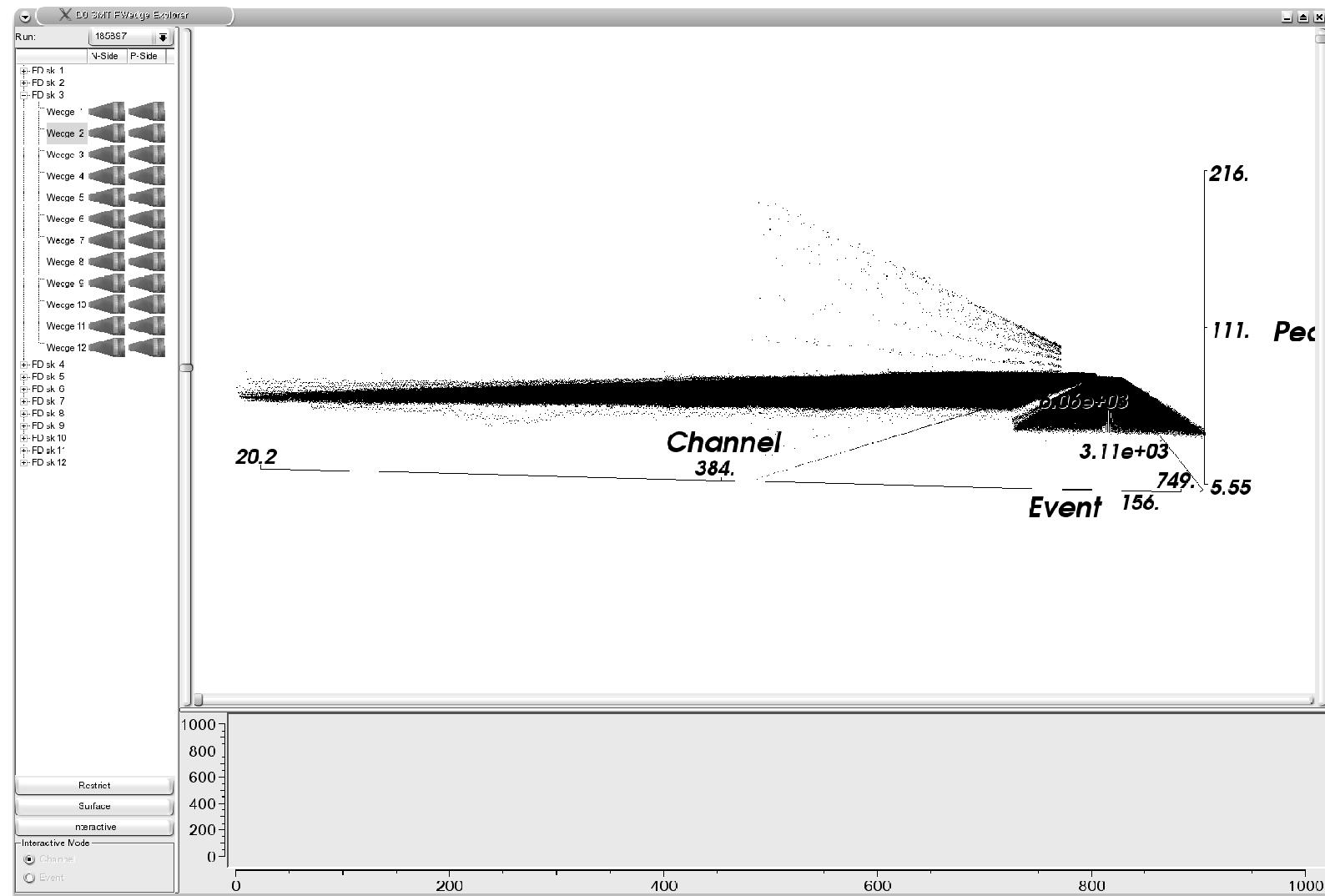
Pedestal vs Event FDisk10 Wedge07 Channel 0347 and Channel 0346 (Side P) (Run 185900)



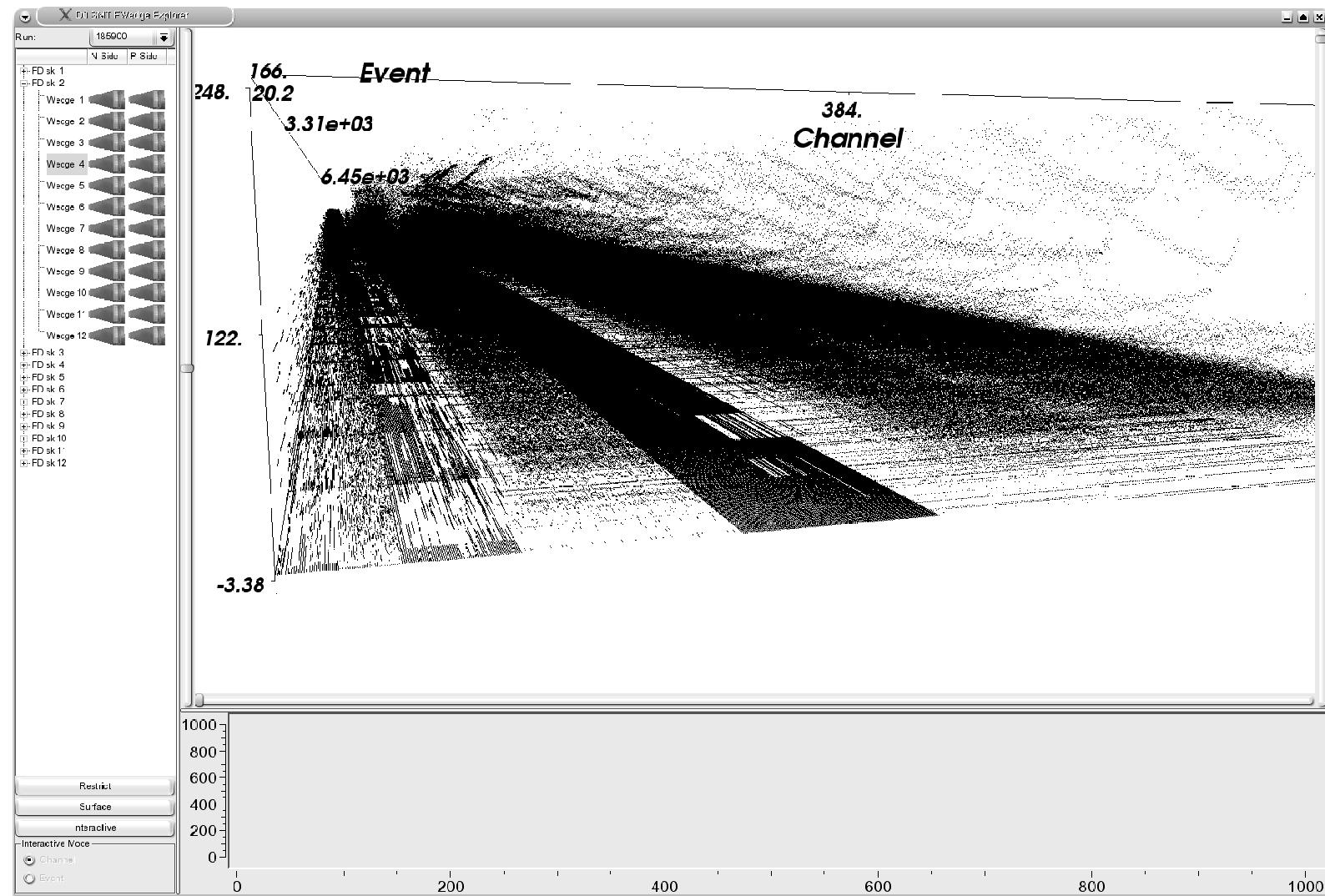
Extra Strange Stuff



Extra Strange Stuff



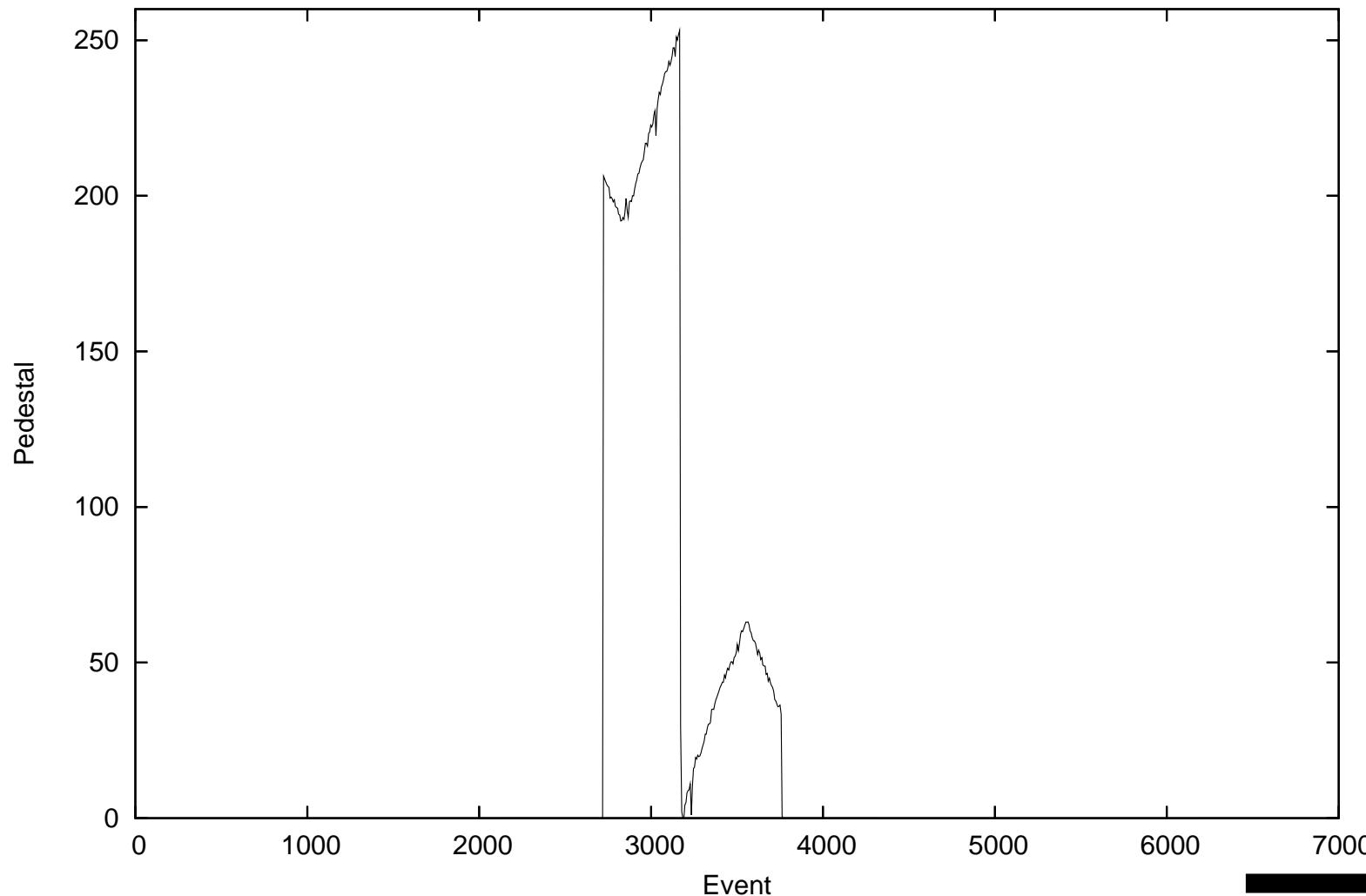
Extra Strange Stuff



Noisy

HV: 100%

Pedestal vs Event FDisk02 Wedge04 Channel 0268 (Side N) (Run 185897)



Noisy

HV: 0%

Pedestal vs Event FDisk02 Wedge04 Channel 0268 (Side N) (Run 185900)

