

Spooky Tritium Overall Status

October 31, 2017

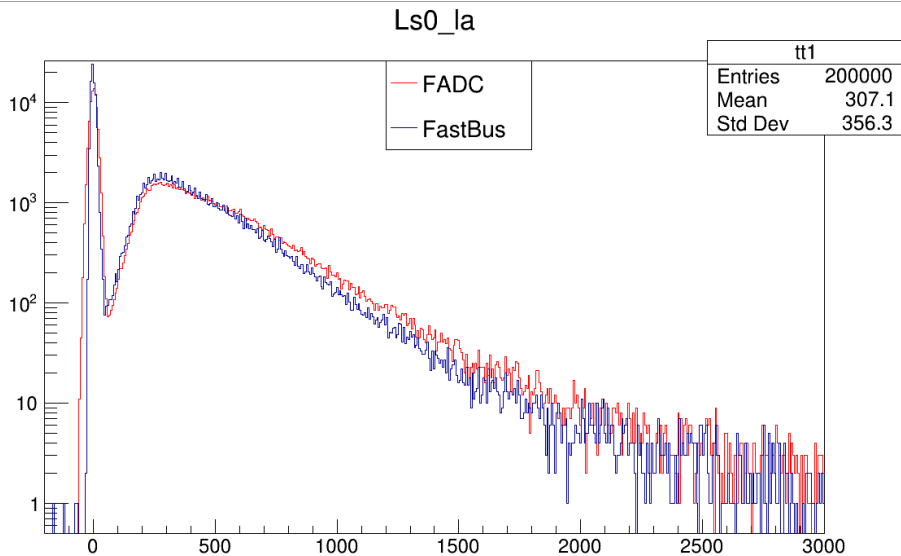
Evan McClellan

October 31, 2017

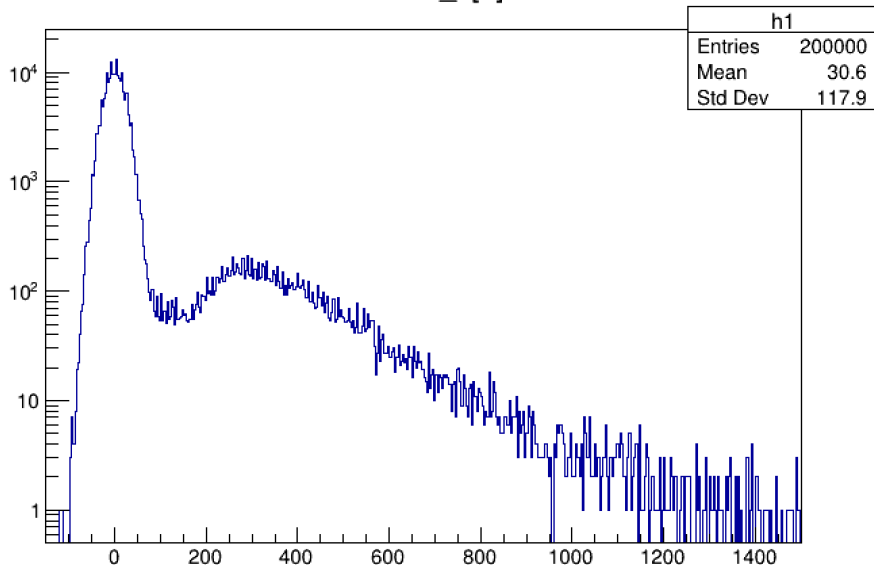
- Installed 4 Flash ADC 250 boards on each arm
 - S2 goes only to fADCs
 - GC and S0 are split to fADCs and FastBus
 - Calorimeters go only to fastBus
 - Raster/BPM signals are split to fADCs and FastBus

- CentOS7, ROOT6, Podd1.6
 - aonl1-3 and adaq1-3 upgraded to CentOS7
 - ROOT6 installed
 - Tritium is using Podd1.6

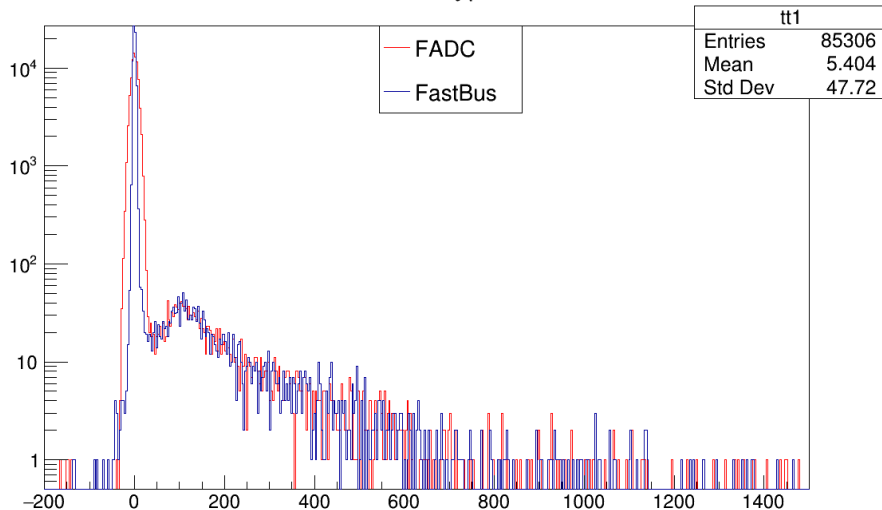
- NIM Trigger Overhaul



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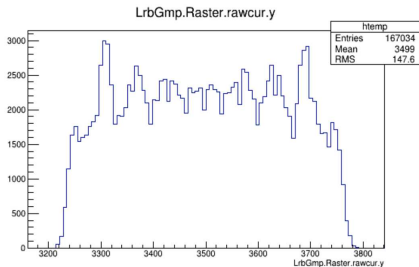


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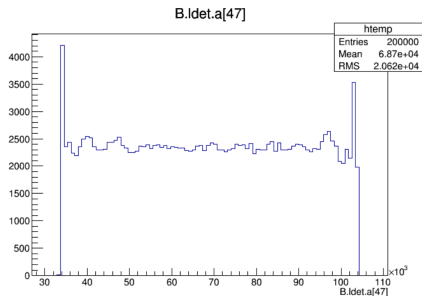


Raster Comparison

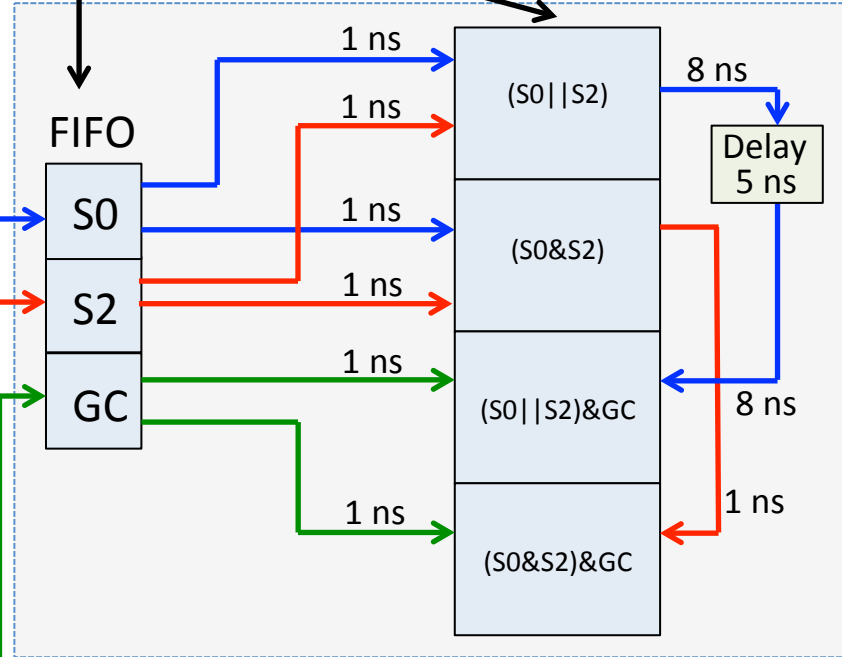
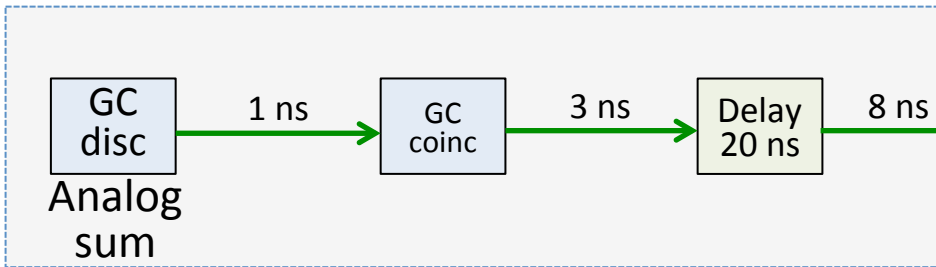
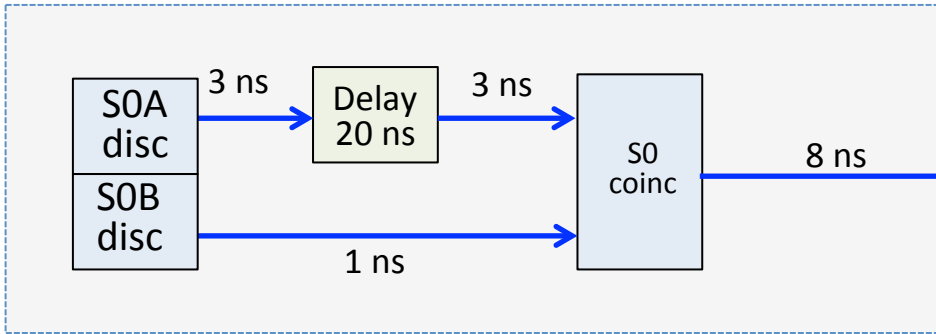
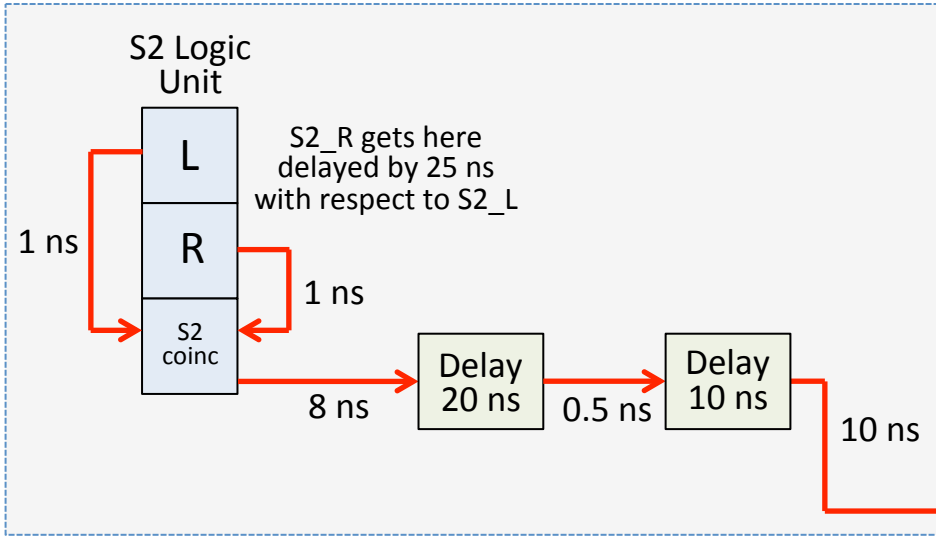
Offset/Attenuator + fastbus

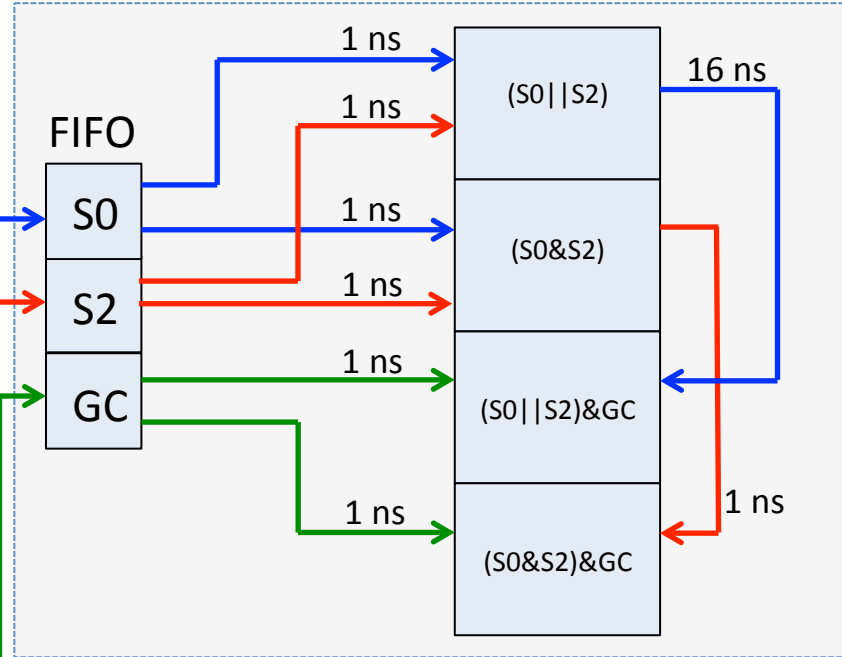
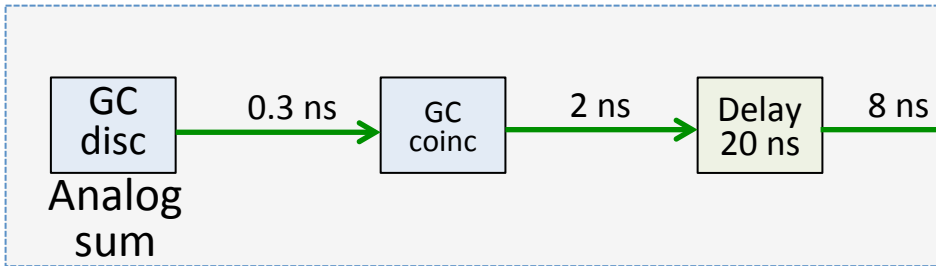
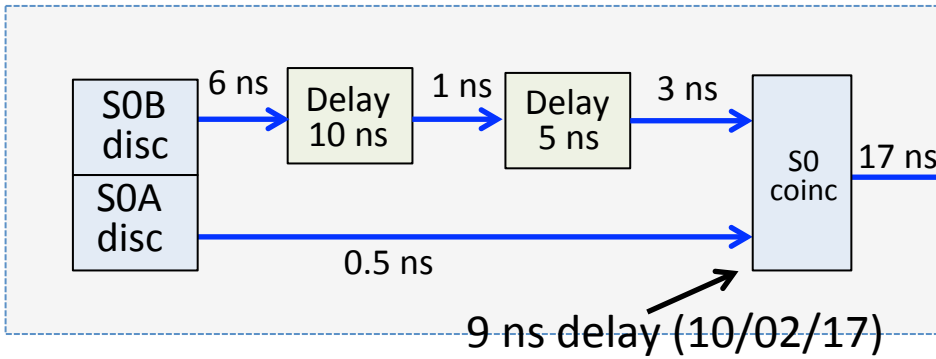
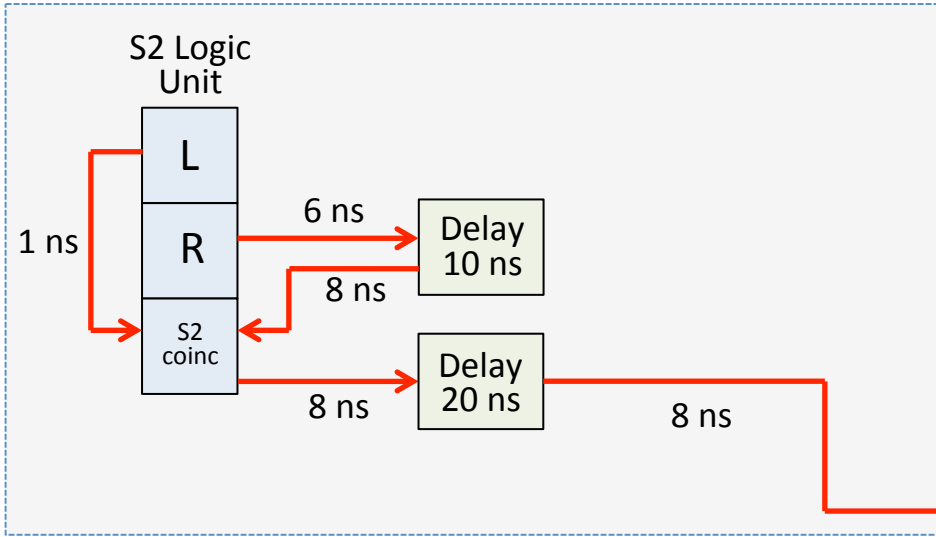


Inline Attenuator + flashADC



10 ns delay (09/26/17)



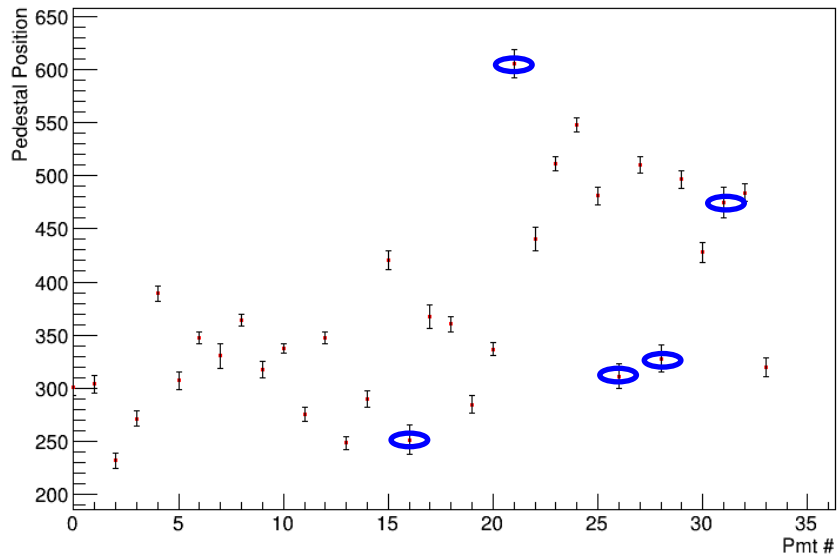


Smaller Changes and Maintenance

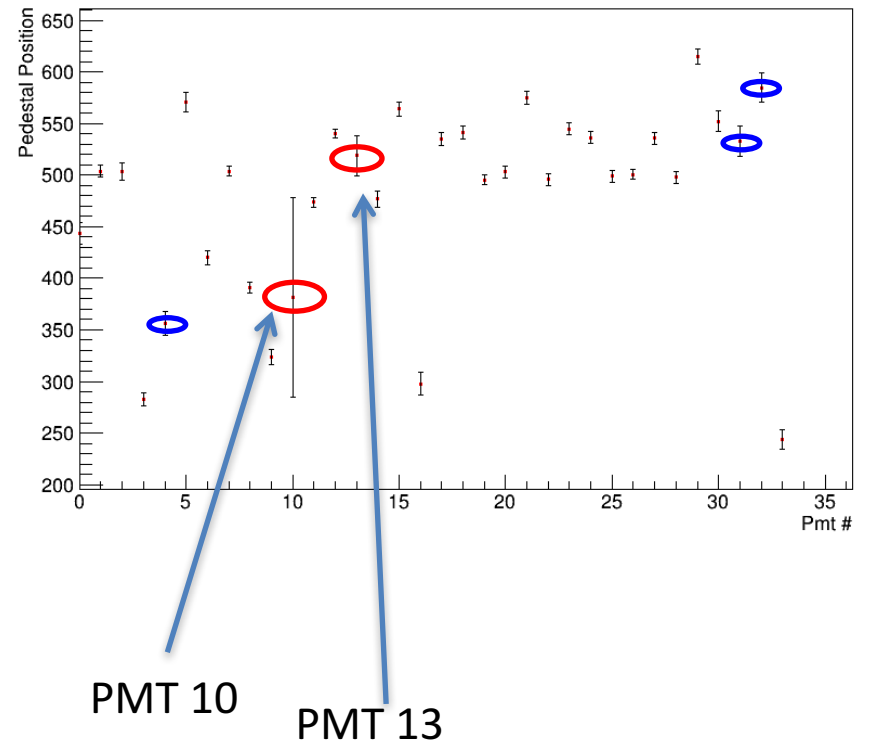
- BPM fans (fixed odd BPM readout issue)
- Q1 calibration curve
- BCM/Unser fixes, calibration
- replay code updates
- online plots and scripts updates
- Detector Checkout

LHRS Pedestal Positions

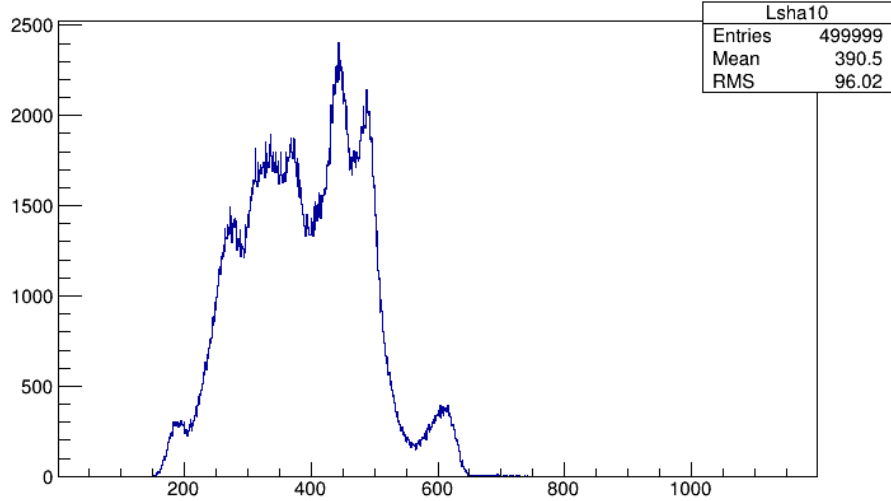
prl1 pedestal positions



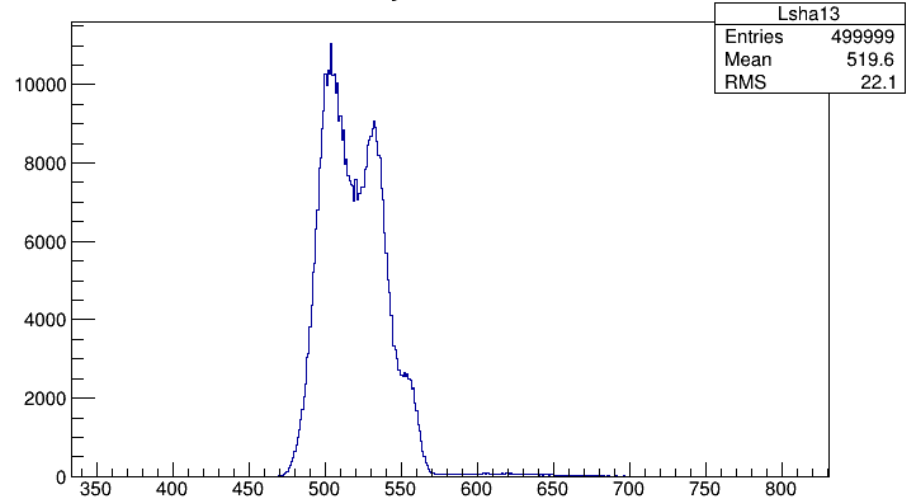
prl2 pedestal positions



PionRejecotr2 ADCs 10

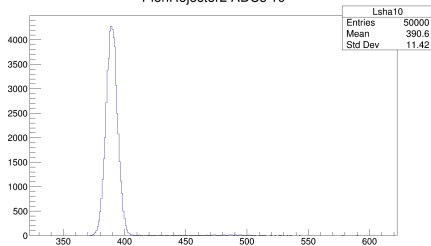


PionRejecotr2 ADCs 13

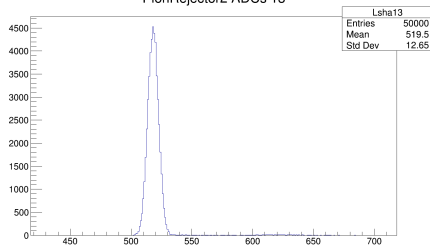


LHRS PiR2 ch10,13 After HV cycle

PionRejector2 ADCs 10

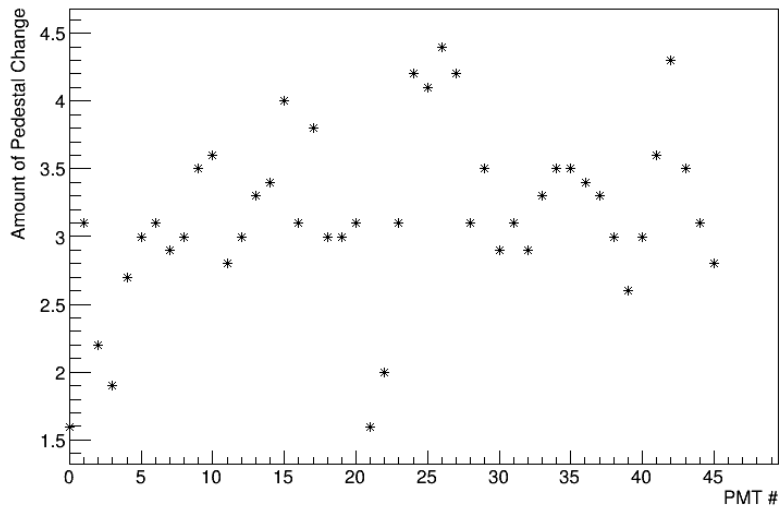


PionRejector2 ADCs 13

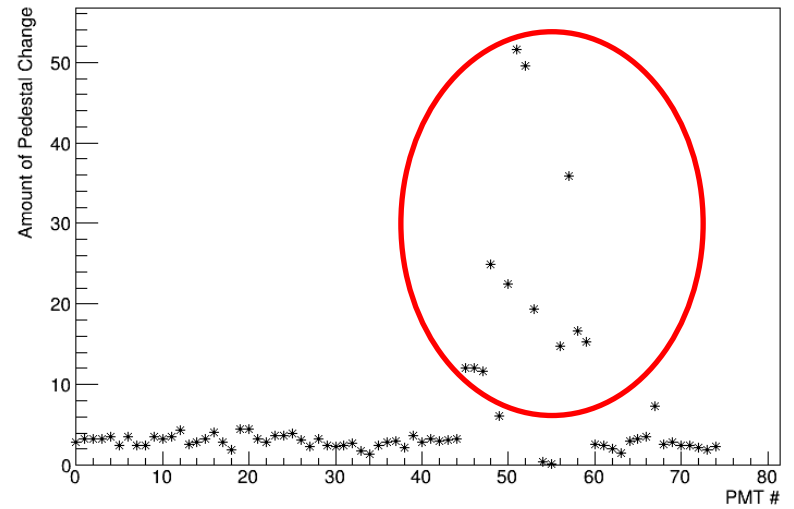


RHRS Change in Pedestal Positions

Change in PreShower Pedestal since March 2017



Change in Shower Pedestal since March 2017



- Run Plan
- Commissioning Plan
- Experimental Readiness To-Do

Fall 2017	Spring 2018	Fall 2018
		E12-11-112 x>1
	E12-10-103 MARATHON	E12-14-011 (e,e'p)
E12-11-112 x>1		E12-17-003 (e,e'K)

Fall 2017 Run

LHRS

Commissioning	Data
17°	17°

RHRS

Commissioning	Data
17°	20 – 30°

First Beam

- 1 Beam Centering
- 2 BPM Calibration
- 3 Raster Size Calibration
- 4 Trigger Timing Checkout (in parallel)
- 5 Detector Checkout (in parallel)
- 6 HRS Optics (new Q1 setting)
- 7 “Boiling” Study

Later

- Beam Energy Measurement (parasitic only)
- BCM Calibrations
- Detector Calibrations

- Finalize CODA configurations
- Setup/Test remote power control for crates
- Finalize Start-of-Run and End-of-Run scripts

- Run Cosmics, Monitor changes
- (Install/Test F1 TDCs)

- FADCs on same TS branch as fastbus
- Split raster and BPMs (parts in-hand)
- Finalize/label all cables

- How-Tos!
- New strip chart interface?
- Update online live time calculation scripts
- Do 'Mock Shifts' to test everything

Thanks!

