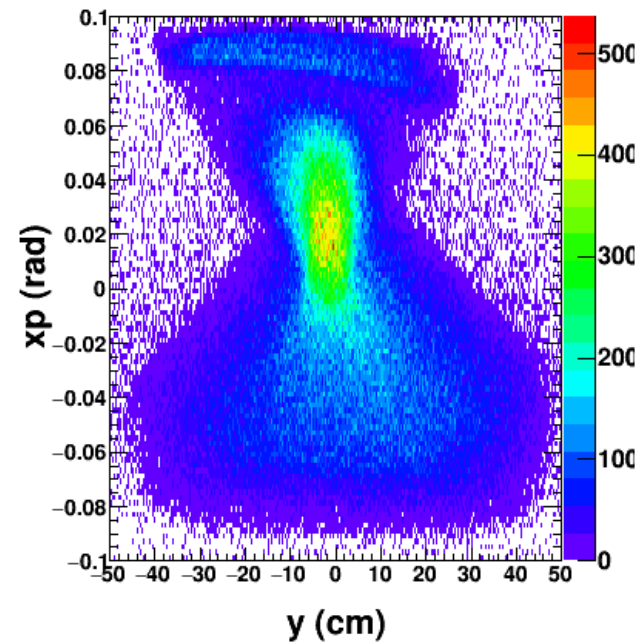
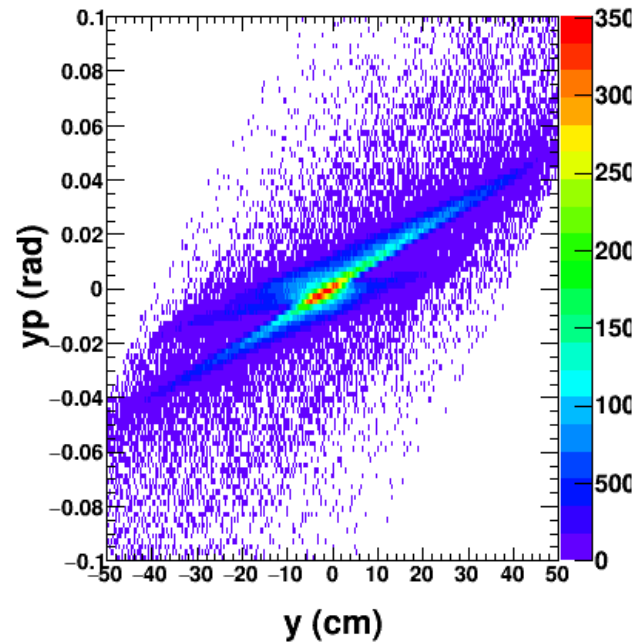
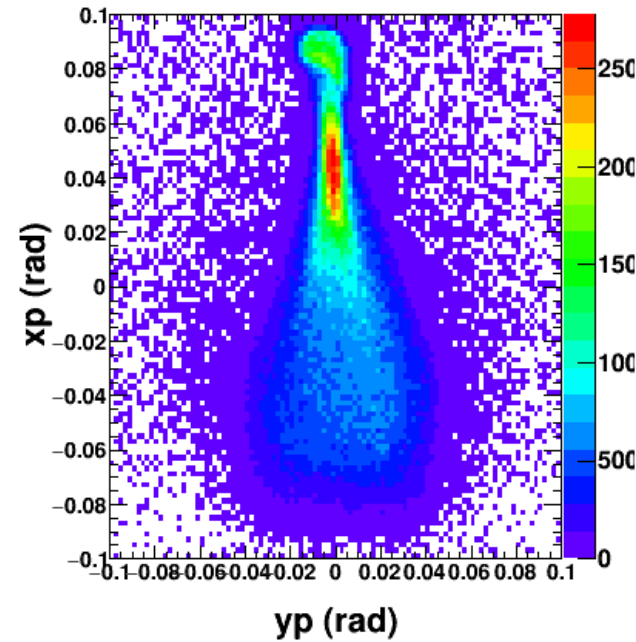
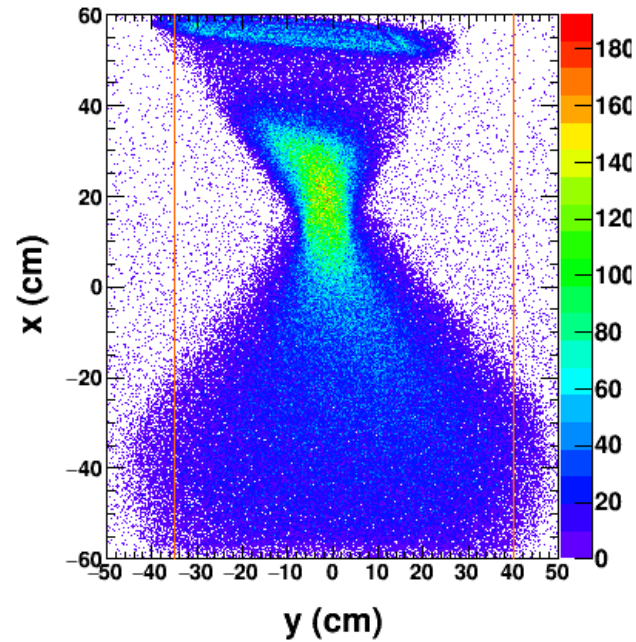


Quartz Plane Gain Matching – Fall 2017 Hall C Running

Simona Petruta Malace

SHMS Kinematics and Runs for Gain Matching



→ For SHMS kinematics I picked $\theta = 25.01$ deg and $E_p = 1.4$ GeV/c

→ The quartz plane was already satisfactorily efficient at the starting gains and a discriminator threshold of 30 mV (which remains the suggested running threshold)

→ I re-adjusted voltages (mostly for the Bottom or Pos PMTs) so that I have 1/3 of the mean amplitudes from all PMTs (pulse amplitudes at the FADC) roughly above 150 mV

→ Run 1694: before changing voltages

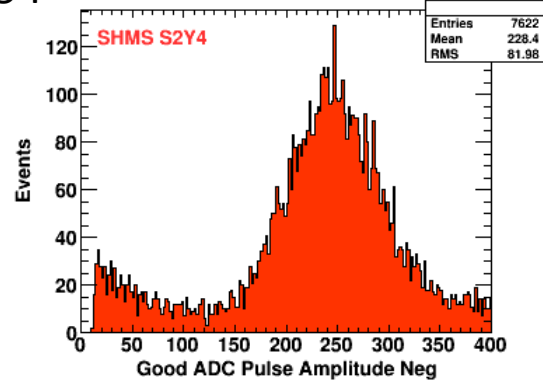
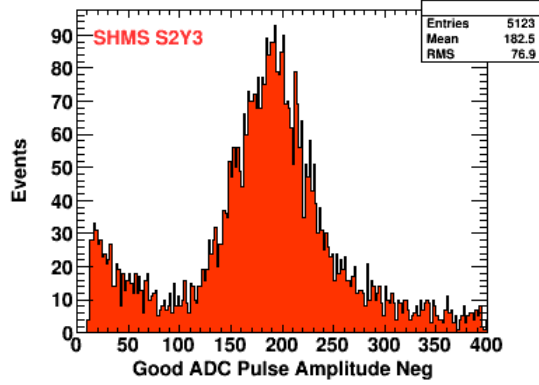
→ Run 1698: first choice of voltages

→ These voltages were used to do a threshold scan: 1698 at 30 mV, 1699 at 20 mV and 1700 at 40 mV; the behavior of some discriminators was questionable so I decided that I would skip the 50 mV setting and re-do the scan if there is an opportunity (not needed for physics running though)

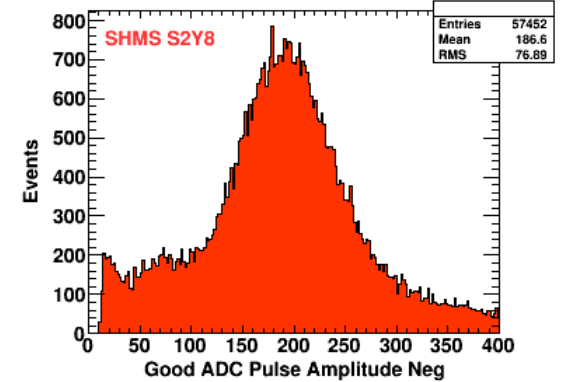
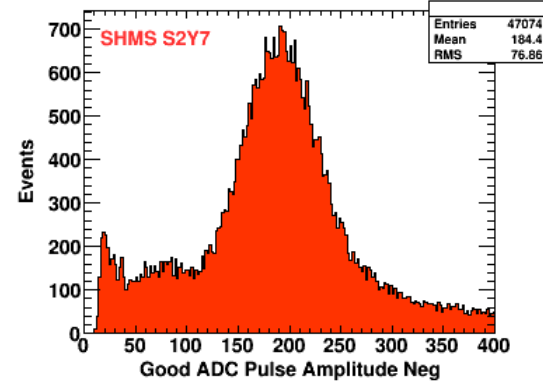
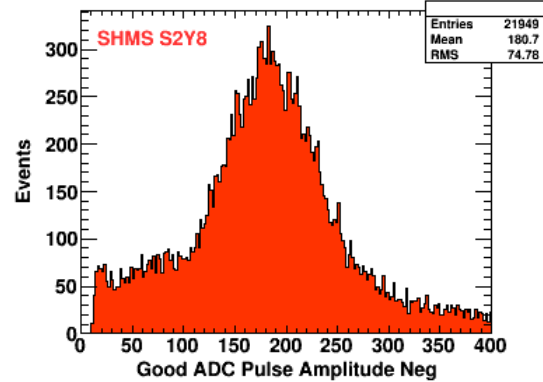
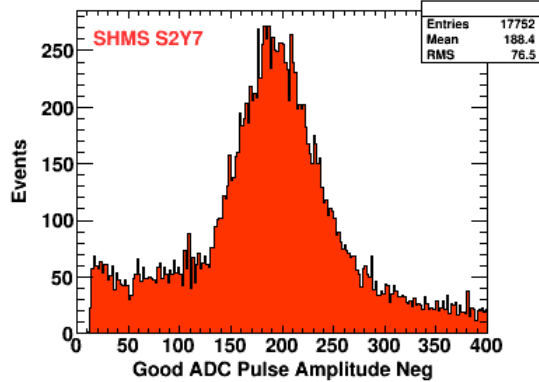
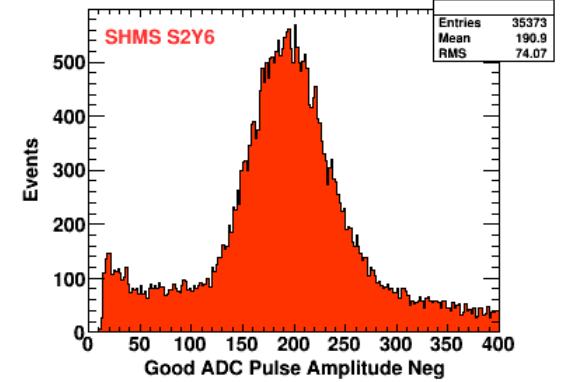
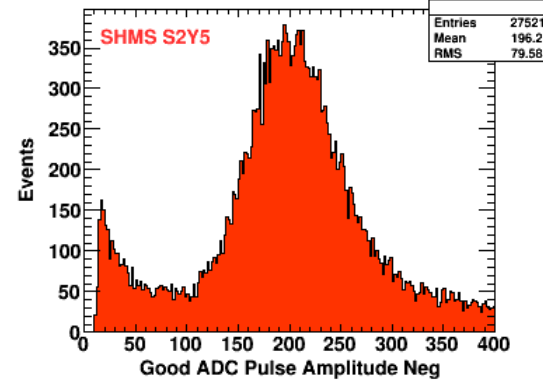
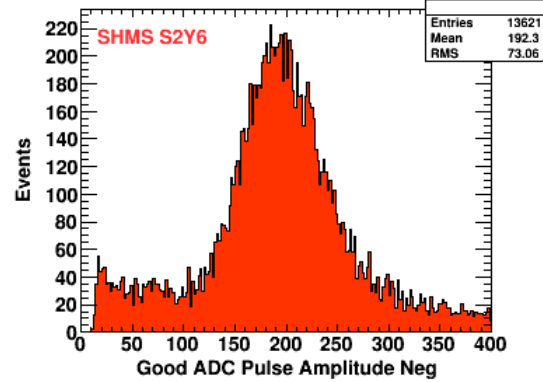
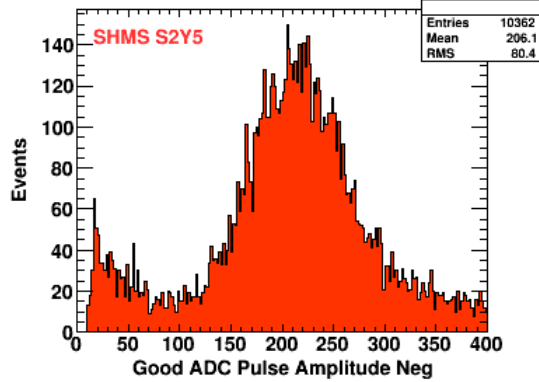
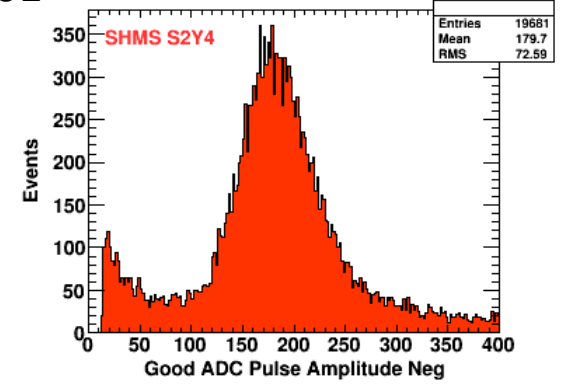
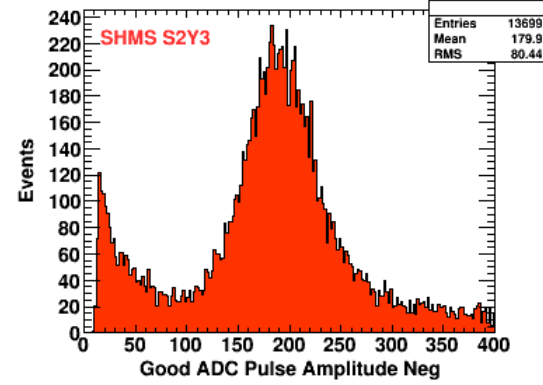
→ Run 1701: final voltages

SHMS Quartz Plane Amplitudes before/after Gain Matching

1694



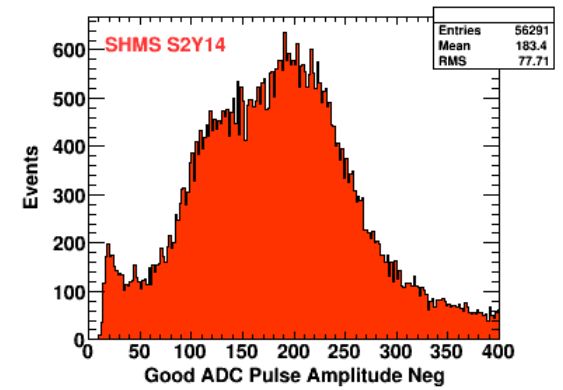
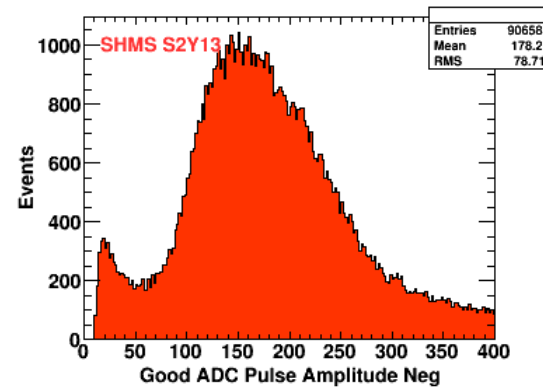
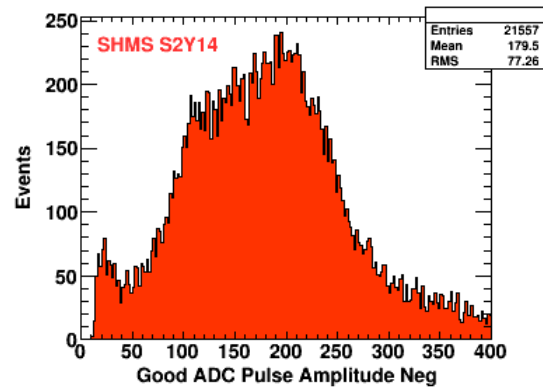
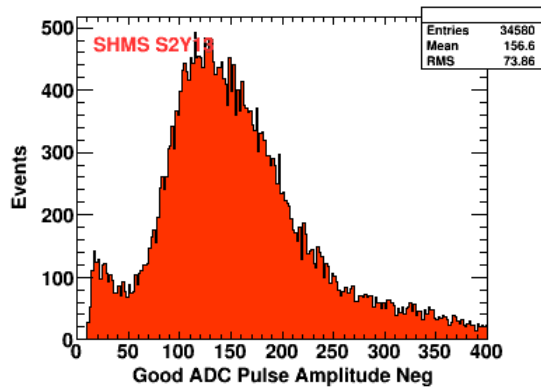
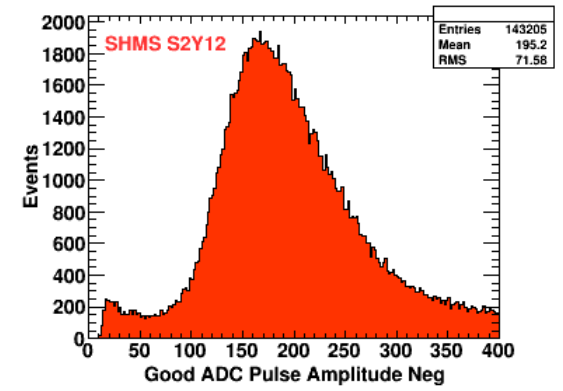
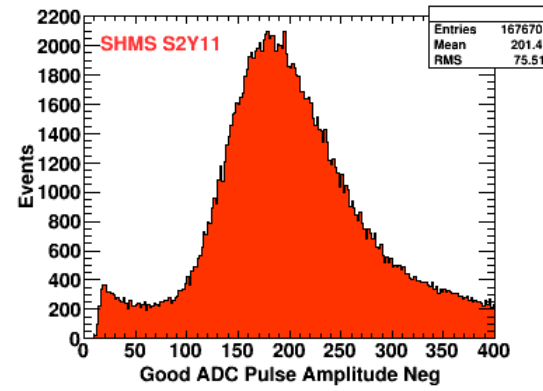
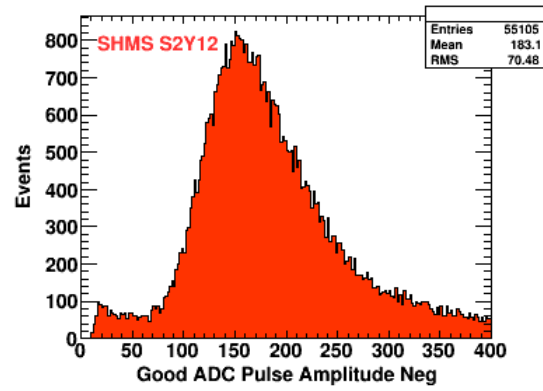
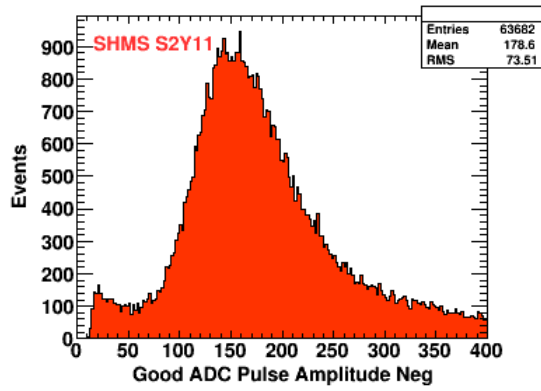
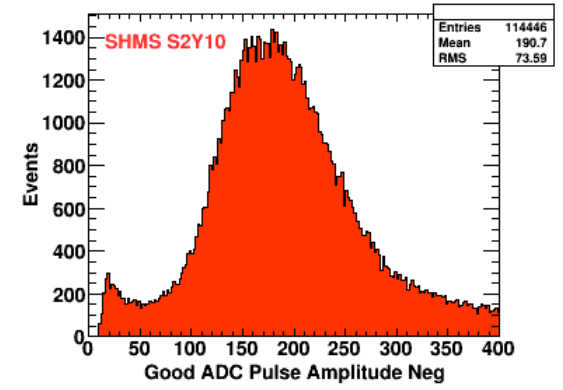
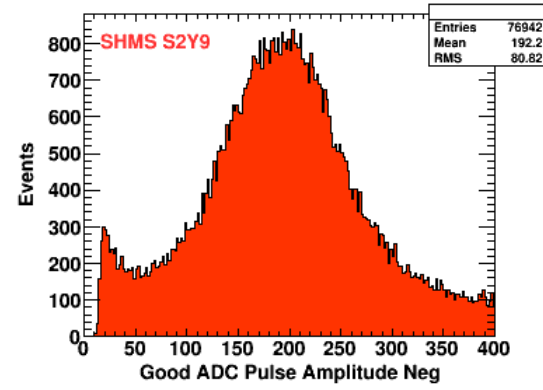
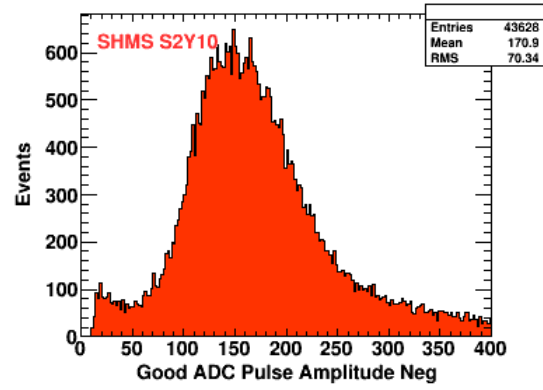
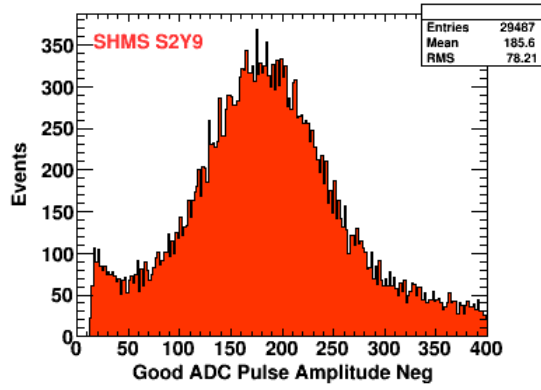
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SHMS Quartz Plane Amplitudes before/after Gain Matching

1694

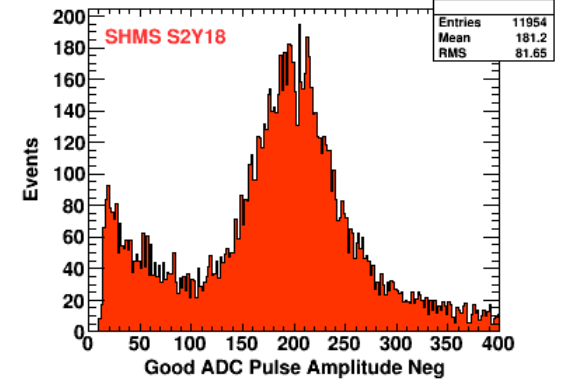
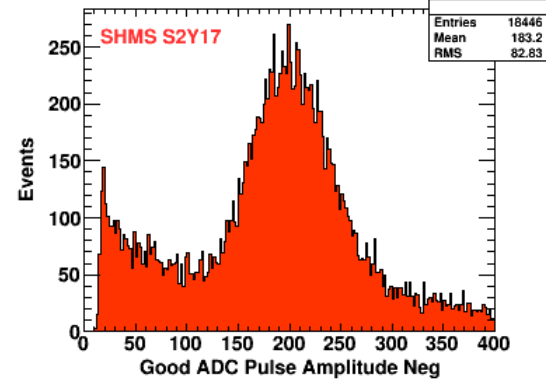
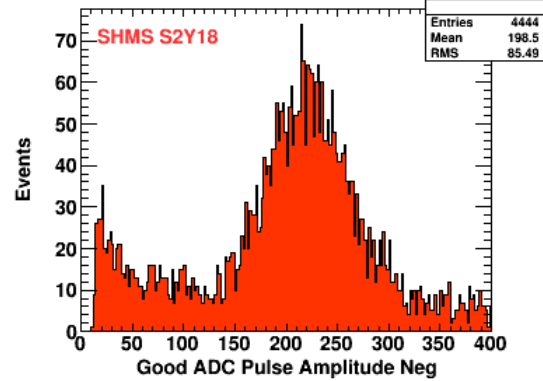
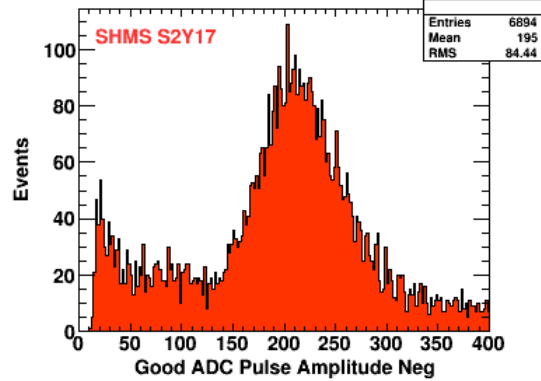
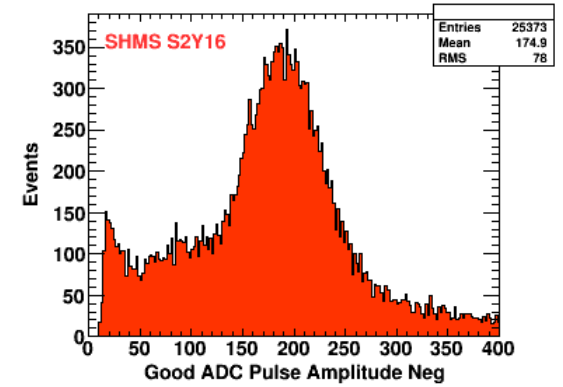
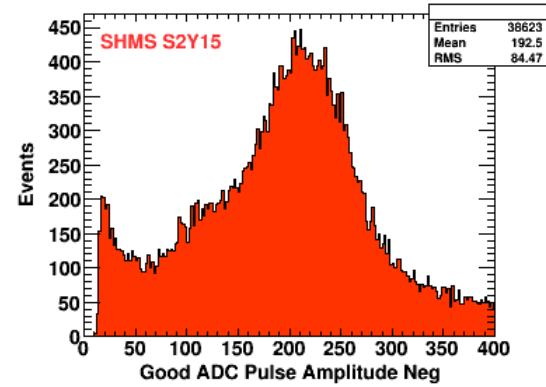
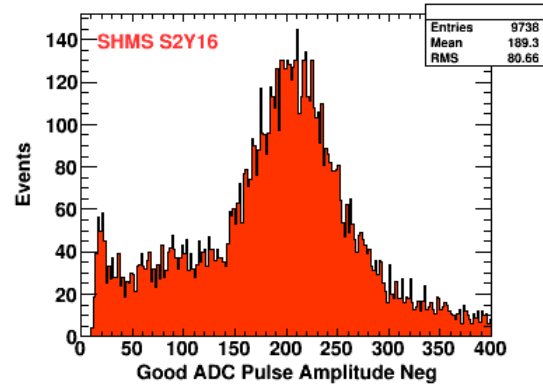
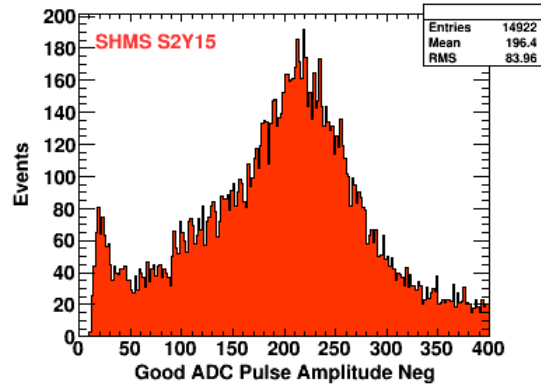
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SHMS Quartz Plane Amplitudes before/after Gain Matching

1694

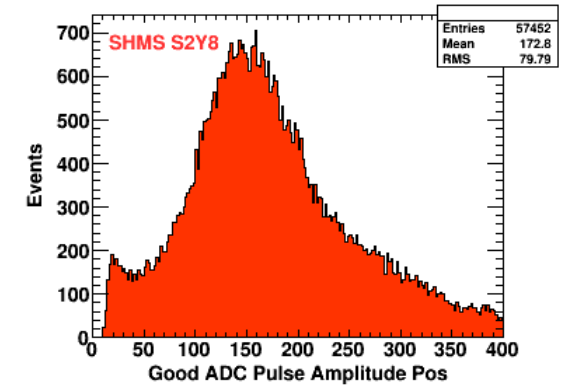
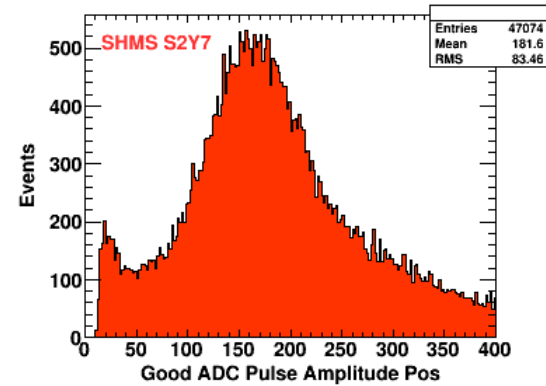
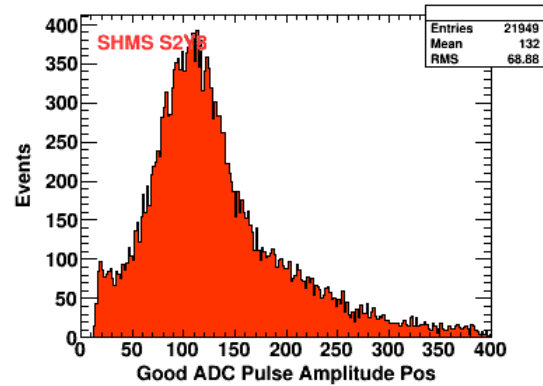
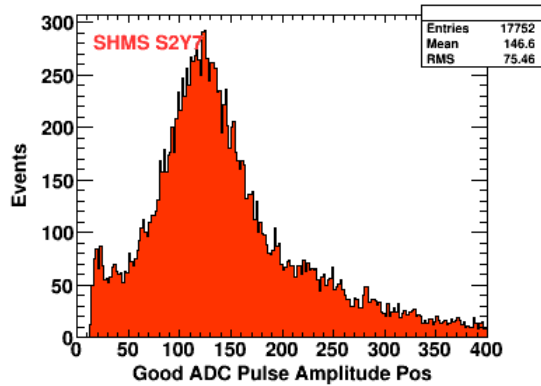
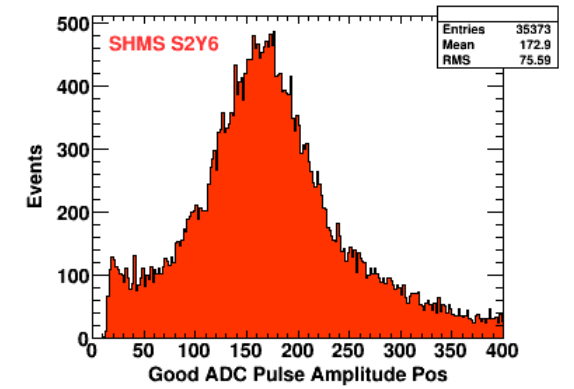
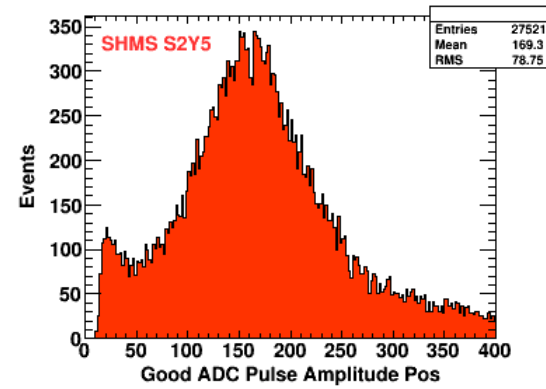
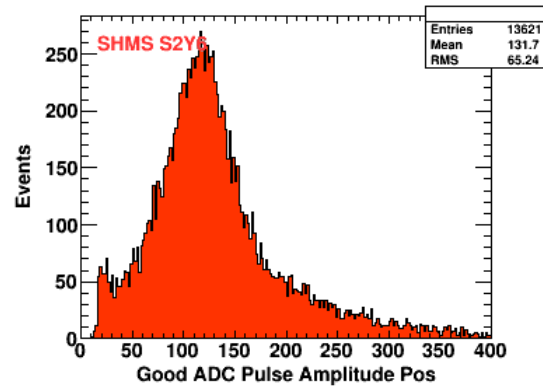
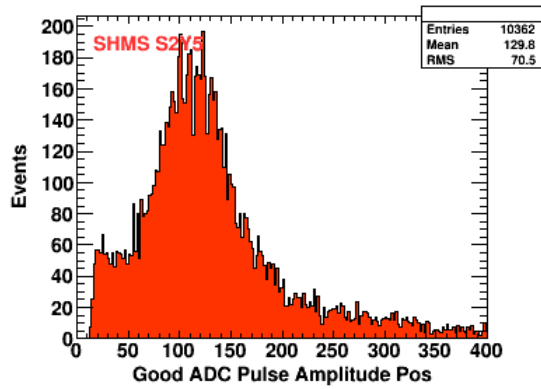
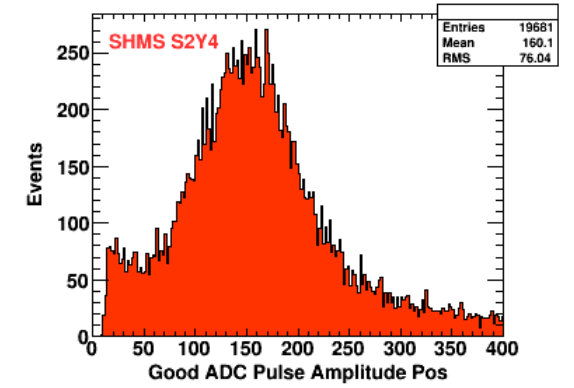
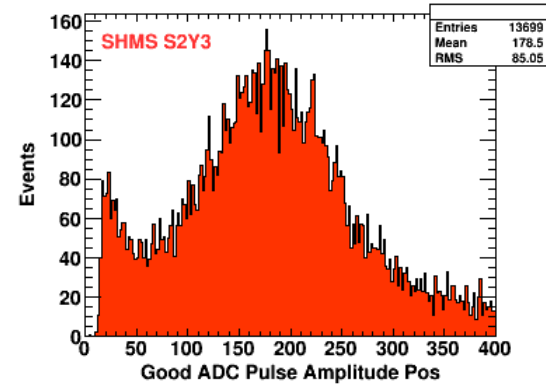
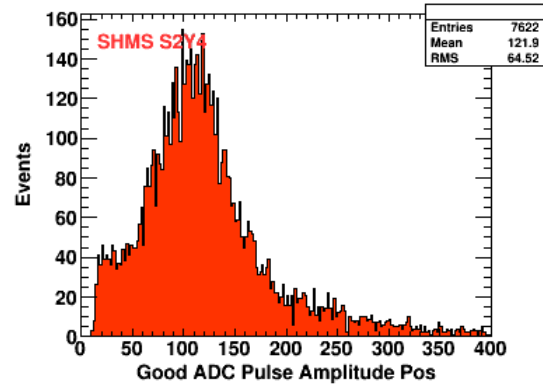
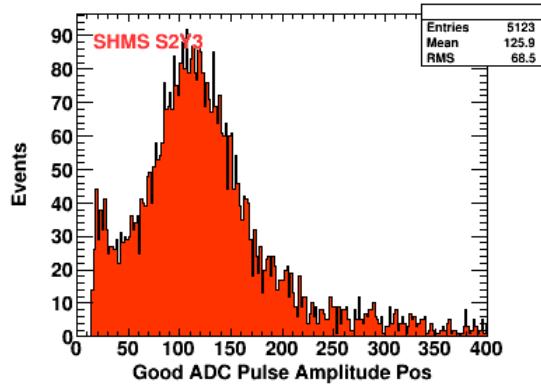
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SHMS Quartz Plane Amplitudes before/after Gain Matching

1694

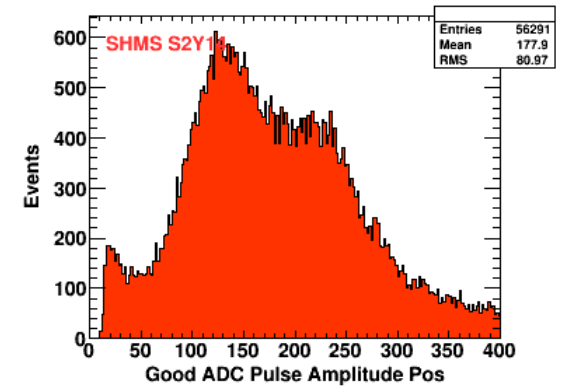
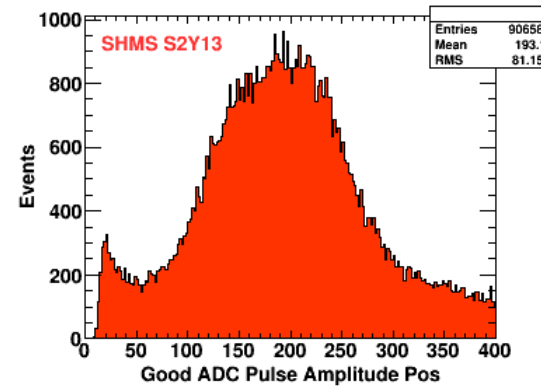
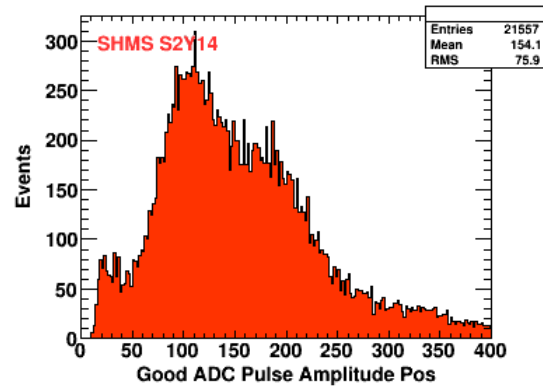
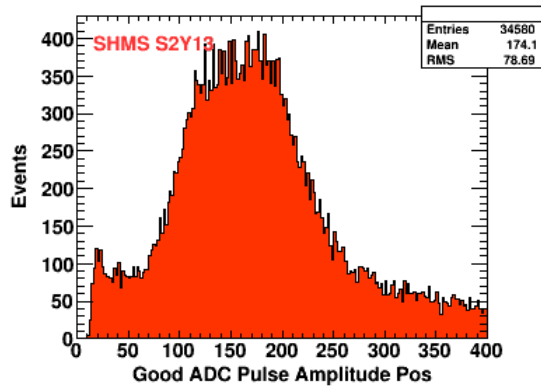
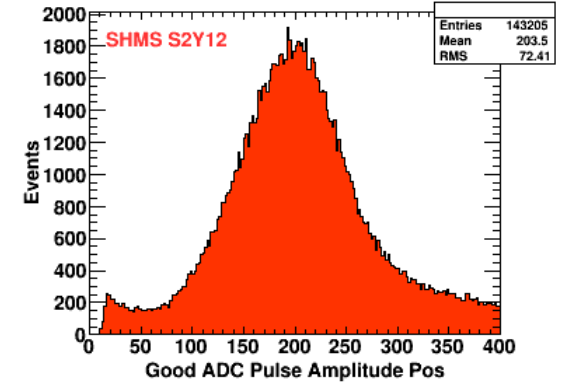
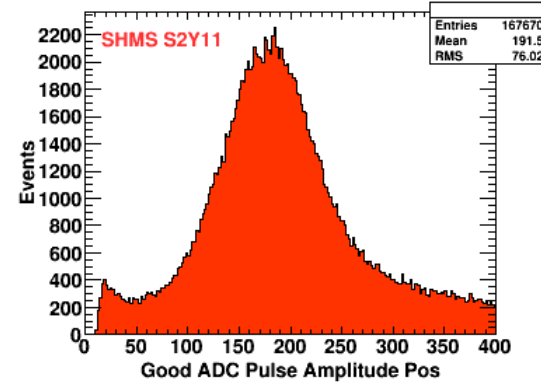
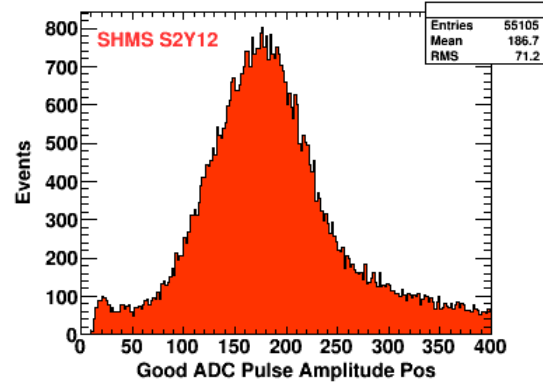
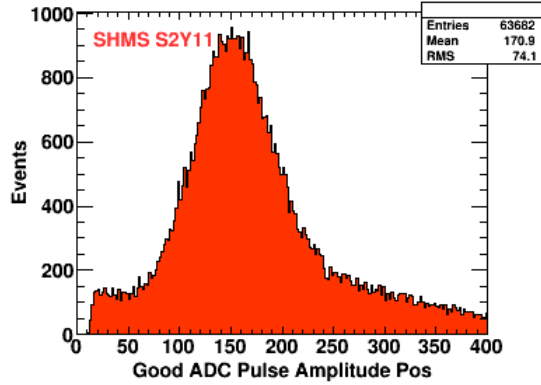
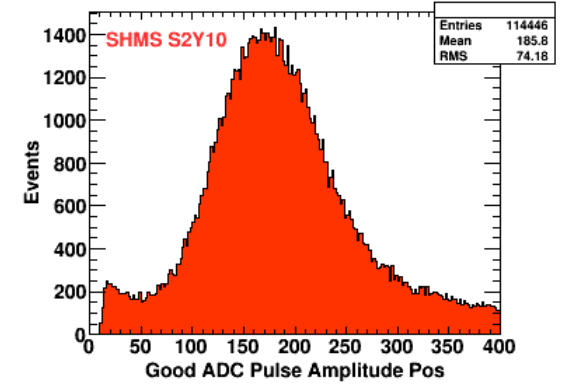
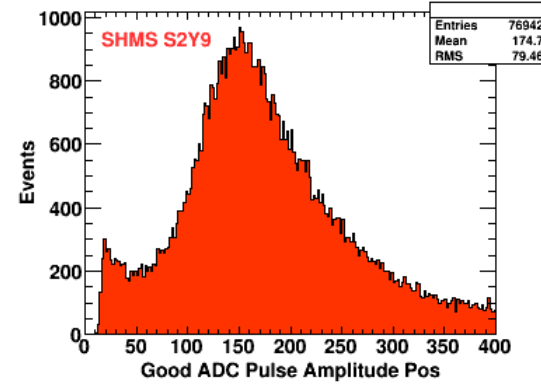
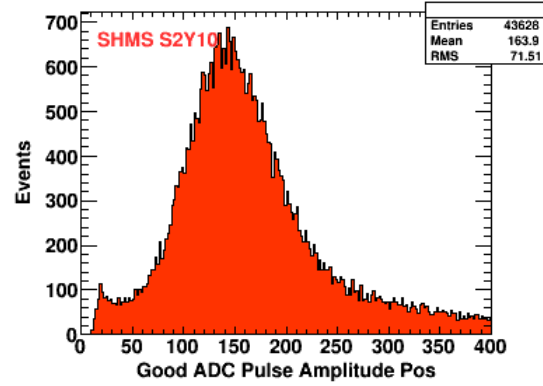
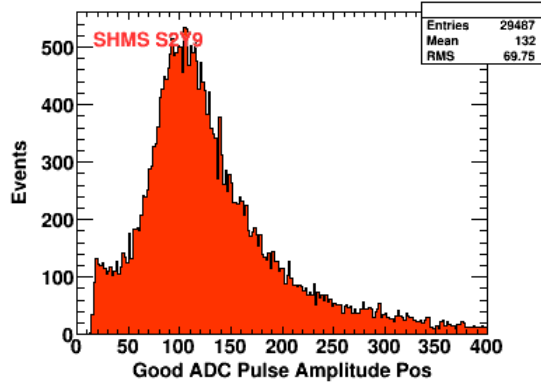
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SHMS Quartz Plane Amplitudes before/after Gain Matching

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SHMS Quartz Plane Amplitudes before/after Gain Matching

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