Please, read the notes below, let me know if you something looks to be not clear. I can update some pictures if needed.

- Pages 1-4 Pulser linearity has been checked. At each calibration point we calculated difference between calibration curve and measurement: L = (fitted-measured)/measured). L has been histogrammed for each layer. BNL pulser is linear with better than 0.3% accuracy in all dynamic amplitude range 0-4000ADC. The linearity check(pages1-4) and calibration(pages4-6) are sown for different datasets (different chambers, so please not compare).

- Pages 4-6 ROD Calibration procedure, for each channel the linear fit is performed(see next page):
  signal in ADC = a0 + k*(charge in mV of pulser)
  The x axis units are in pulser mV (not fC as printed).
  The crosstalk coefficients for ASMI of Revision E are used.

- Page 7 Cross-talks in electronics. TB revision is shown.

- Pages 8 RATPAC testbed Production summary results are shown

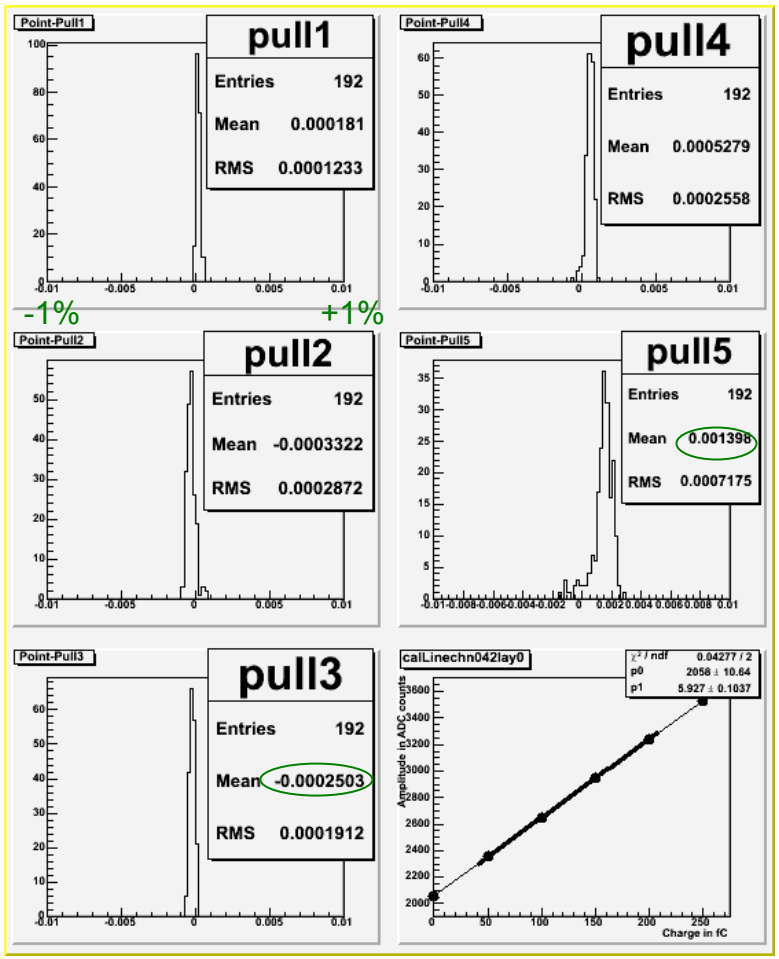
for ~100 assembled ASMIIs (GLINK 1 only=half layer)

1. Noise RMS
2. Fitted amplitude at the 3rd calibration point (corresponding to 1000 ADC gain)
3. Calibration intercept
4. Calibration slope (reverse calibration coefficient in mV/ADC, where mV of pulser)
5. NO CROSSTALKS at full functionality check
6. Note, calibration is different from (reversed to) the ROD one: charge in mV = a0+ k*(signal in ADC of pulser)

Statistics is around 9000, namely 96 channels per glink times 100 ASMIIs.

Linearity Check Layer 1

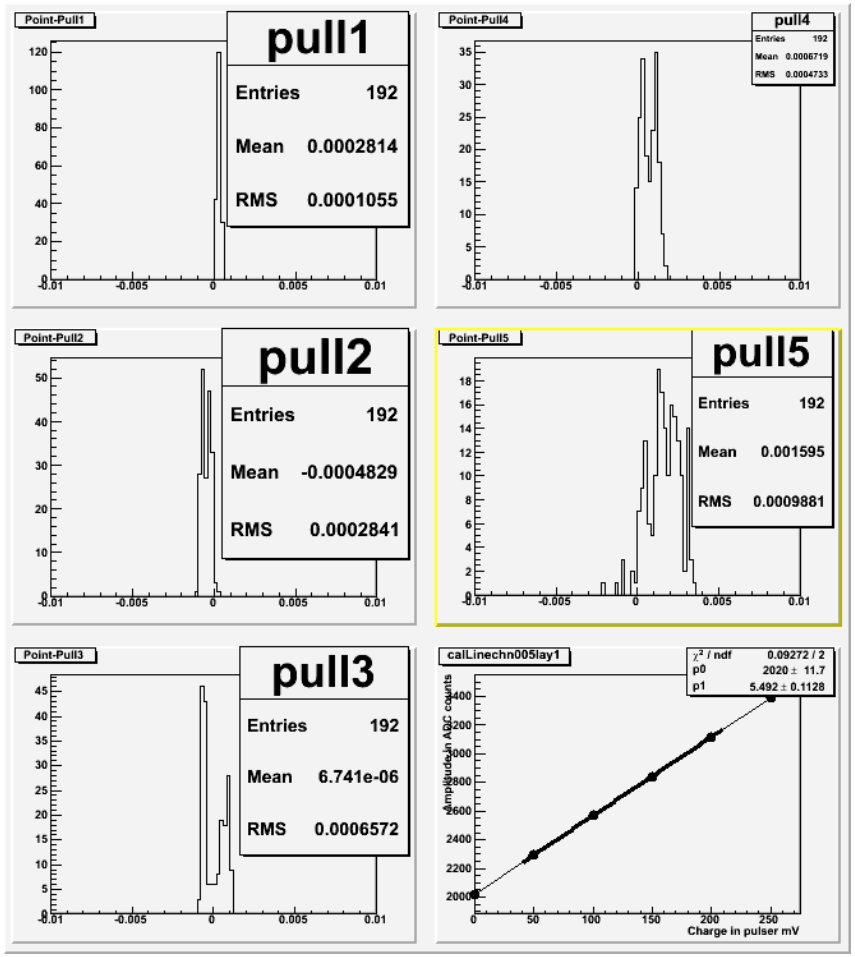
BNL pulser



* parameter of the linear fit p1 is calibration constant K or slope

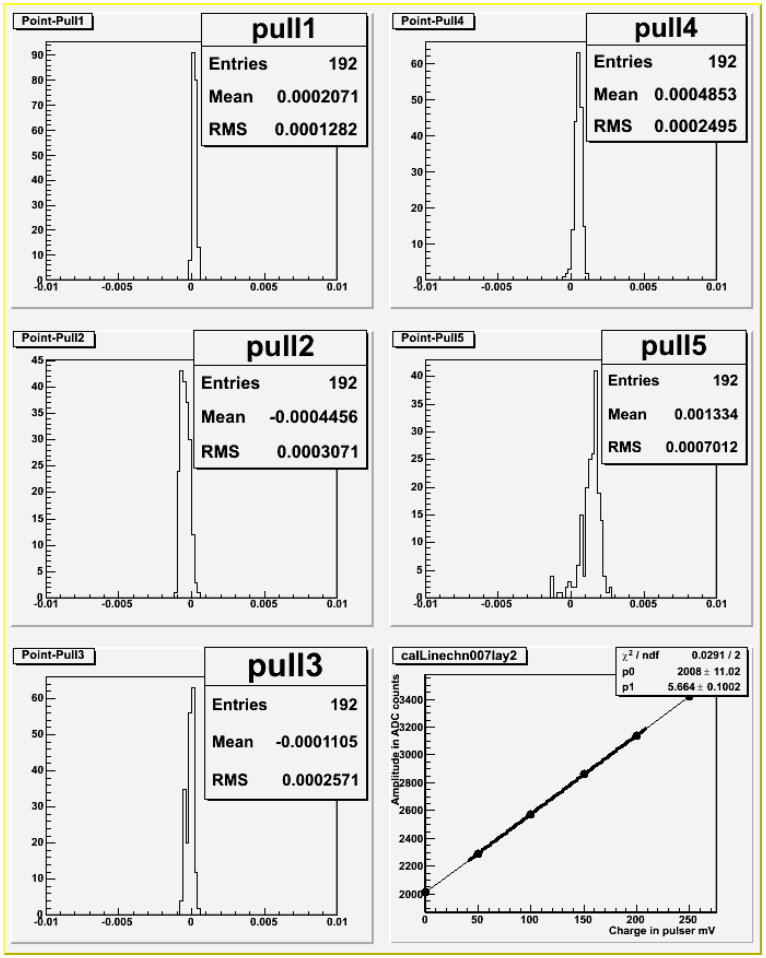
Linearity Check Layer 2

BNL pulser



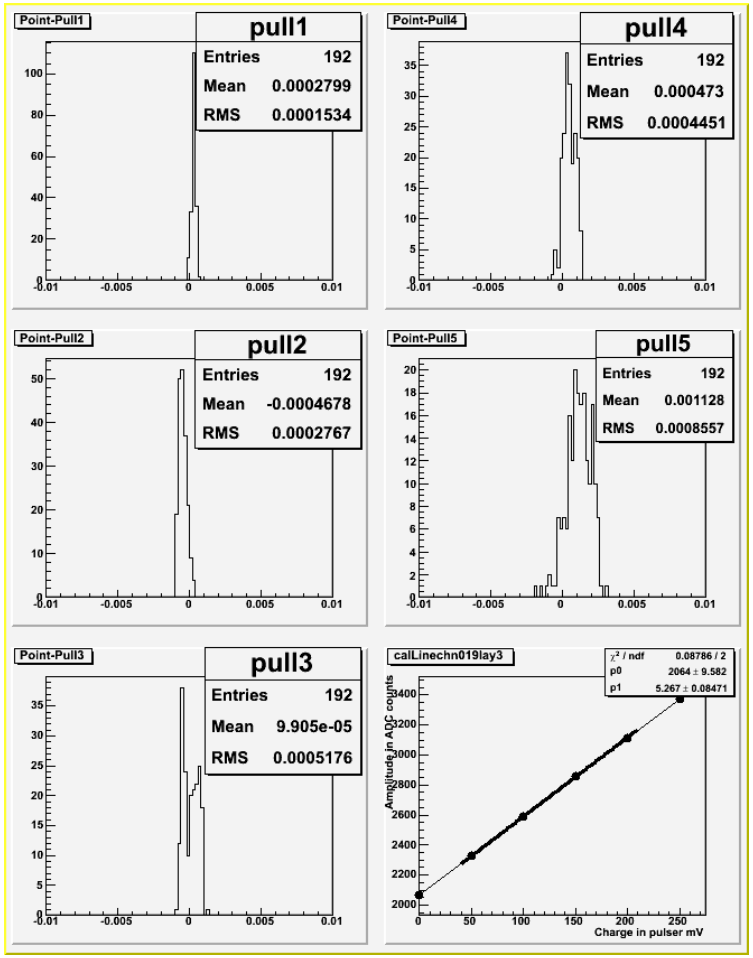
Linearity Check Layer 3

BNL pulser

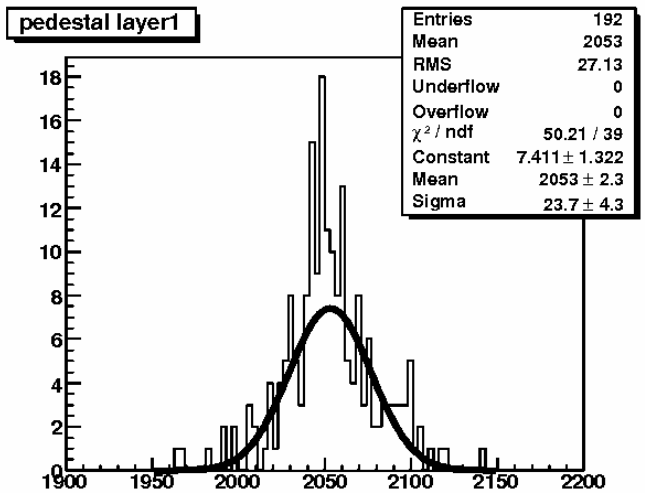


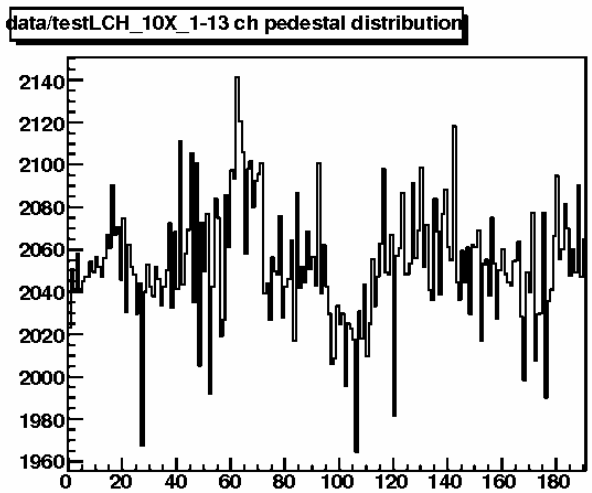
Linearity Check Layer 4

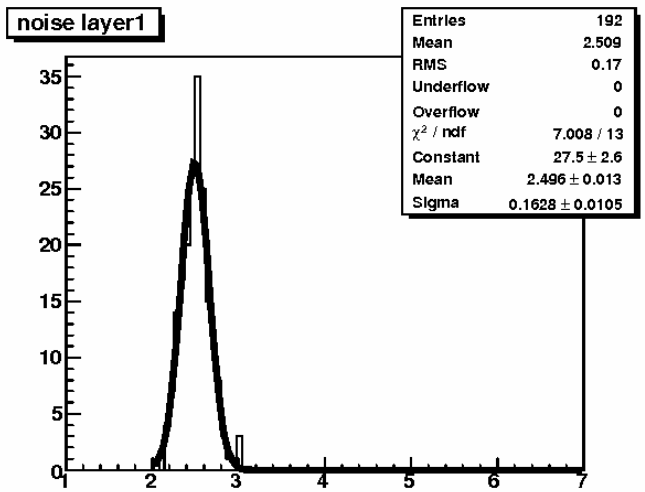
BNL pulser

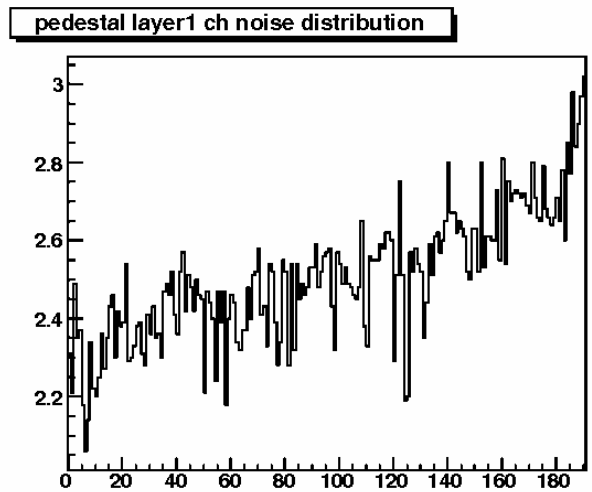


Example Large chamber #10. Precision strip side (X). Pedestal and Noise distributions. ROD data.

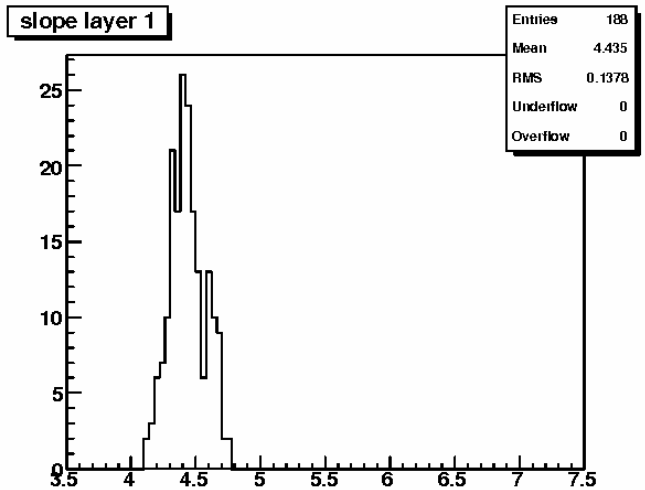


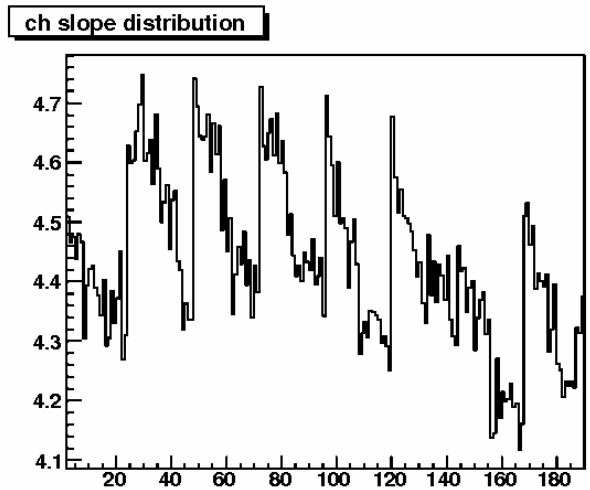


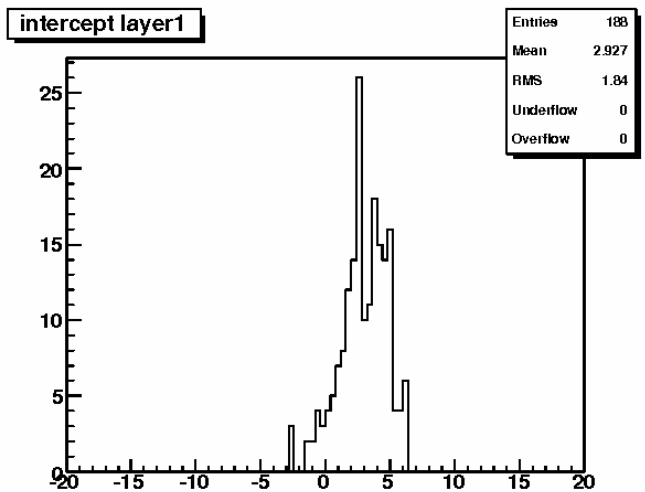


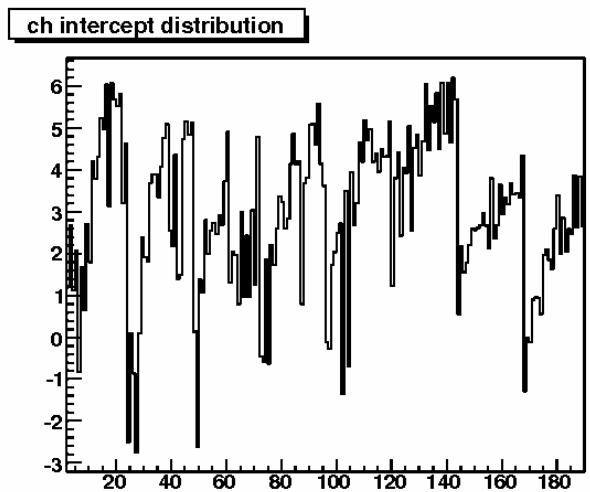


Example Large chamber #10. Precision strip side (X). No crosstalk. ROD data.

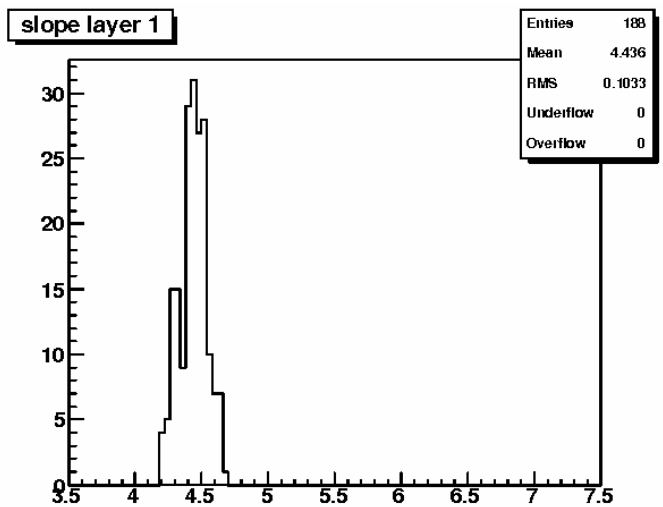


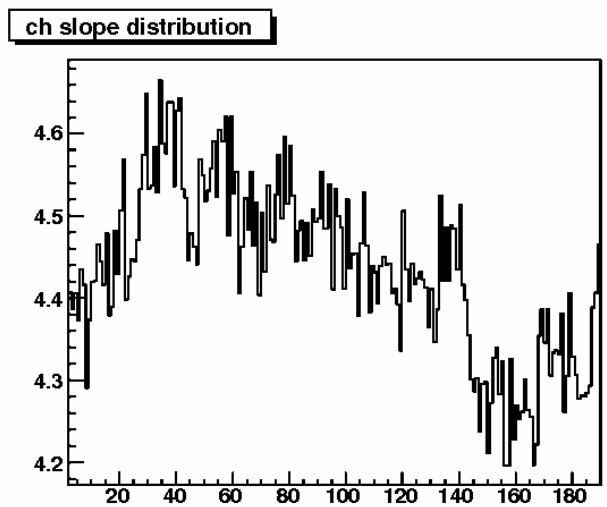


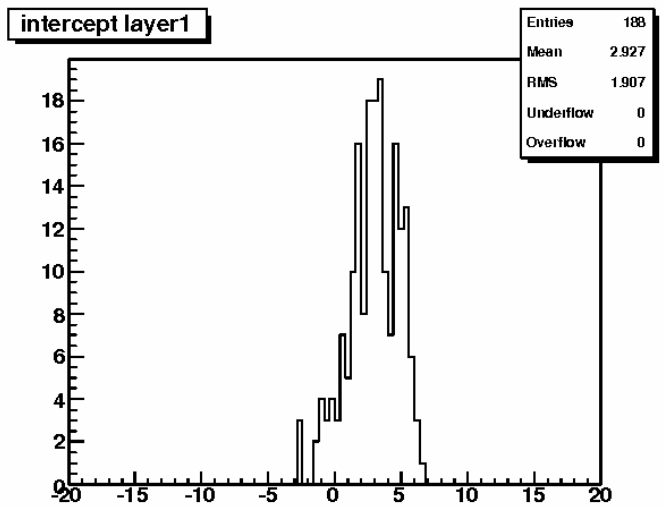


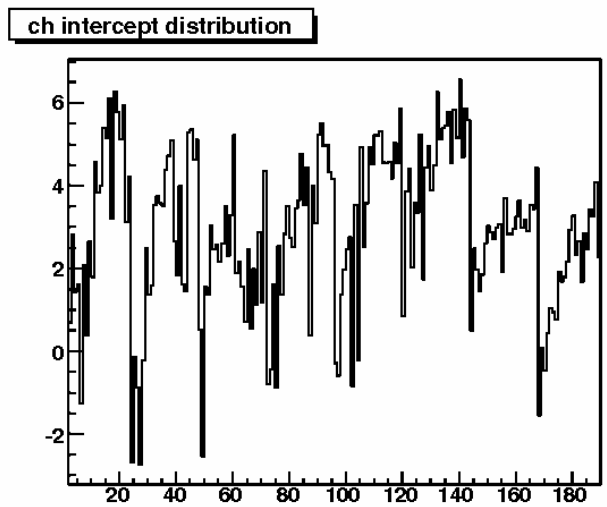


Example Large chamber #10. Precision strip side (X). Crosstalk corrections applied ROD data





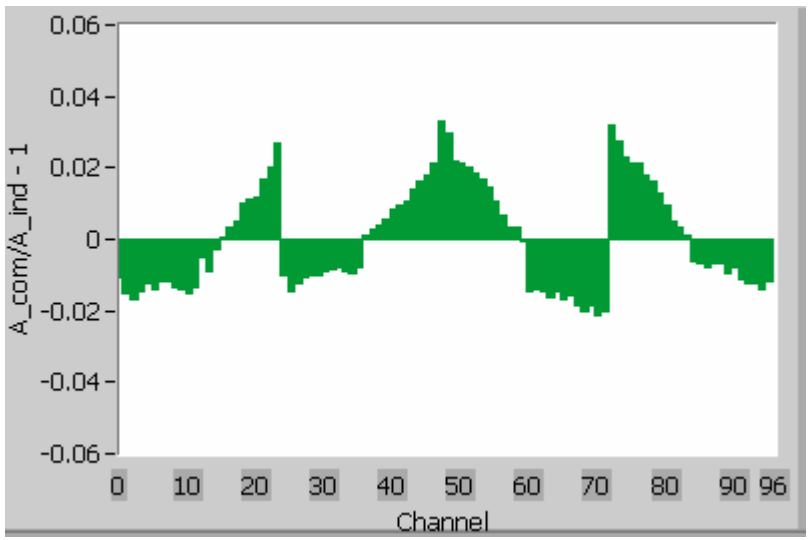




Cross talks in electronics

results from the RATPAC testbed TB design

The picture of cross talks [ratio of common amplitude (all channels are simultaneously injected with charge) to individual (just particular channel is pulsed) minus 1] for GLINK B is shown.
ASMI of Revision A was connected to the left connector and
Rev. B to the right connector of ASMII.
The left (right) ASMI serves the channels 0-47(48-95).
Production Rev. E is very similar to Rev.B, but the effect is a little bigger



Production summary results on RATPAC stand-alone testbed not ROD