Hybrid 2z118 Traveler

October 5, 1999

1 Connectivity

Repairs on shorts:

Fixes for opens:

2 Chips

The following chips were assembled on this hybrid (in the order that the chips get read out):
Hybrid 2Z118 has die: 079-035 079-043

3 Bad Channels

The following channels were bad or exceedingly noisy:

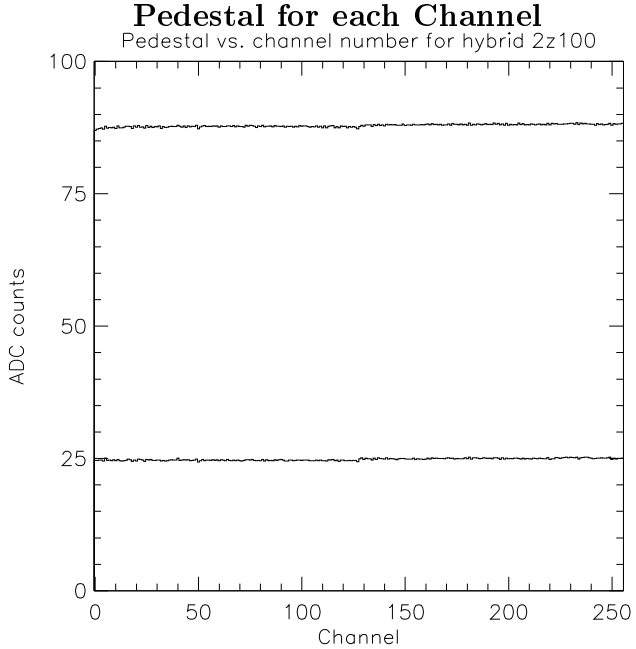
4 Comments

This hybrid was origially named 2z100 due to a typo. Hybrid 2z100 already existed. The bug was caught after it was shipped to FNAL. This traveler was generated to go with the re-named hybrid (2z118).

5 Pedestal

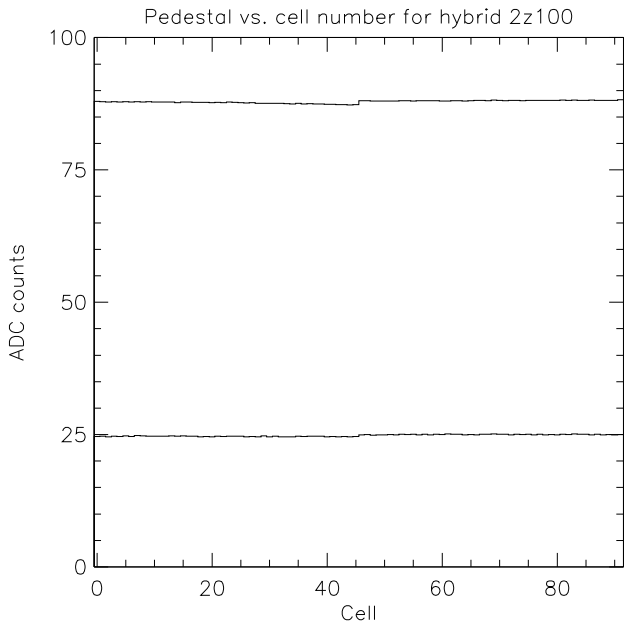
The following plot shows the pedestals vs. channel number with and without charge injection:

Pedestal for each Channel



The following plot shows the average pedestal vs. pipeline cell ID with and without charge injection. The x-axis is cell ID offset by 46 for each chip. Thus cell ID 5 on chip 1 is at x=5, chip 2 at x=49, chip 3 at x=97, etc.

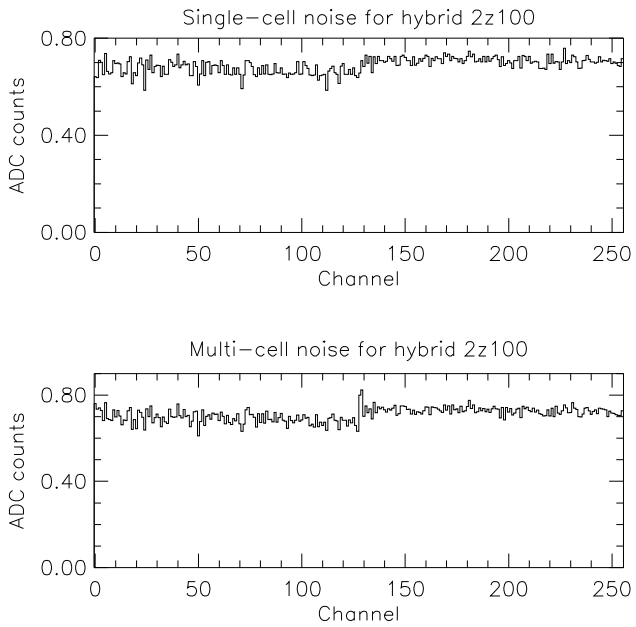
Pedestal vs. Pipeline Cell ID



6 Noise

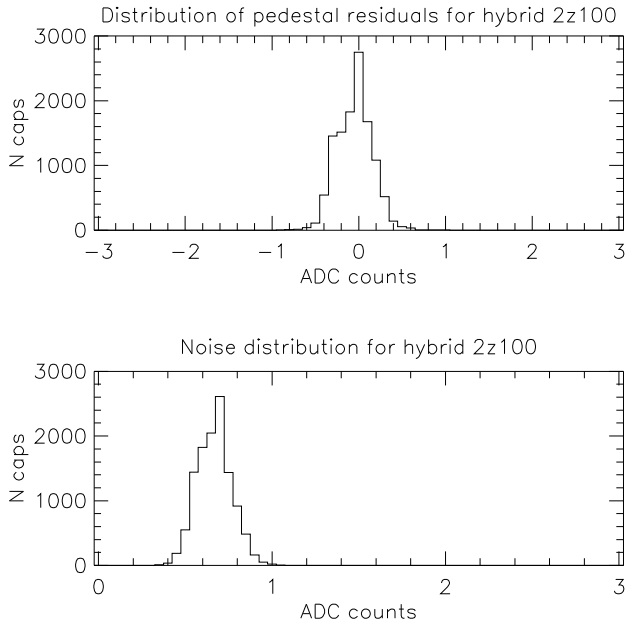
The following plots show the single-cell and multi-cell RMS noise:

RMS Noise

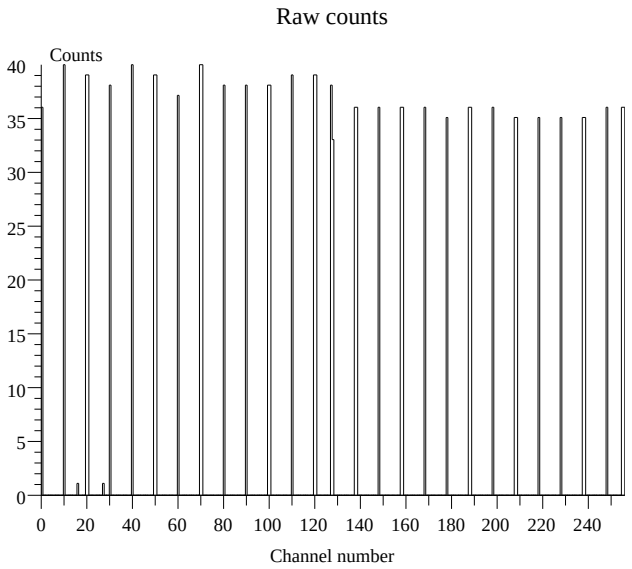


The upper plot shows the difference between the pedestal of each channel and the average pedestal and the lower plots shows the RMS noise of all the channels:

Distribution of pedestals and noise



7 Dynamic Threshold Subtraction

The following plot shows the readout of channels with charge injection with the dynamic threshold subtraction turned on:

Dynamic Threshold Subtraction