Hybrid 8j138 Traveler

December 20, 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 8J138 has die: 197-062 197-063 197-064 197-065 200-003 200-004 200-009 200-012

3 Data Analysis Summary

The following summarizes the findings of the Burn-in data analysis program. The first chip in the readout name is numbered 0.

```
% Hybrid 8j138 classification info. Created 13:47:37 12/20/99

Hybrid 8j138 quality: fair
Chip classification: good fair fair good good good fair fair
Bad channels (chip-channel): 6-14 7-47
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-45-36 2-25-105 2-27-48
   6-20-14 7-16-36
Channels at pedestal needed for DCMS: 31.7 31.6 32.6 31.7 29.5 29.6 30.7 28.7
```

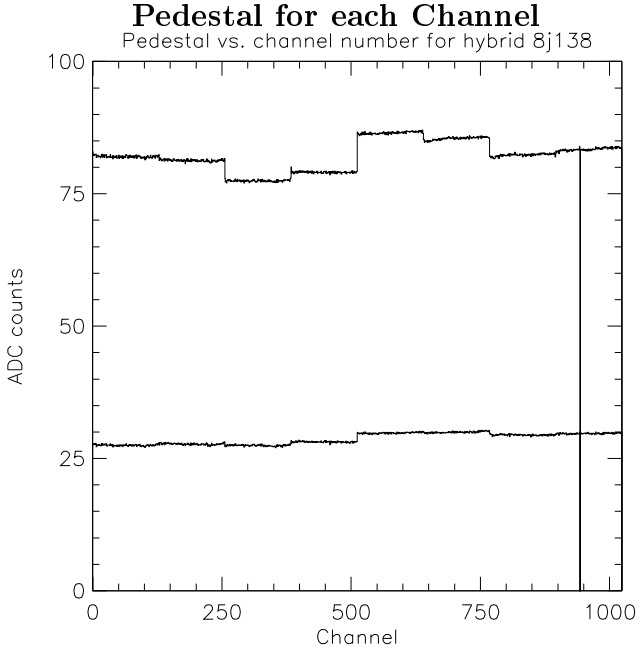
4 Comments

No comments.

5 Pedestal

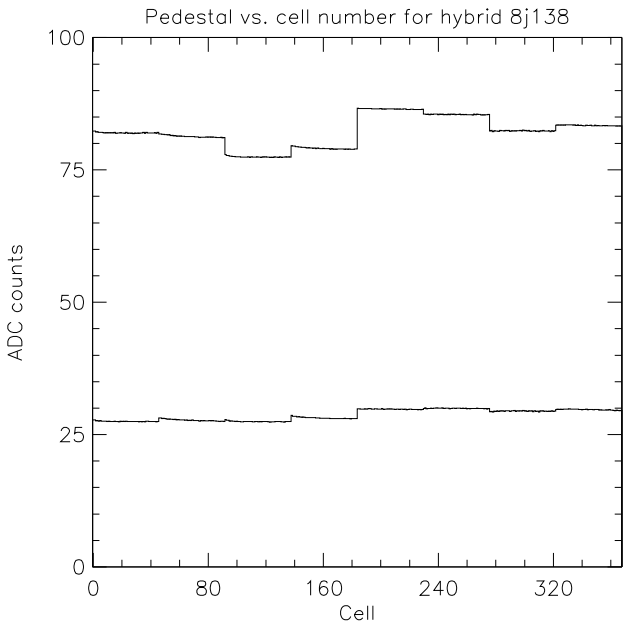
The following plot shows the pedestals vs. channel number with and without charge injection:

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 for chip 1 is at x=5, chip 2 at x=51, chip 3 at x=97, etc.

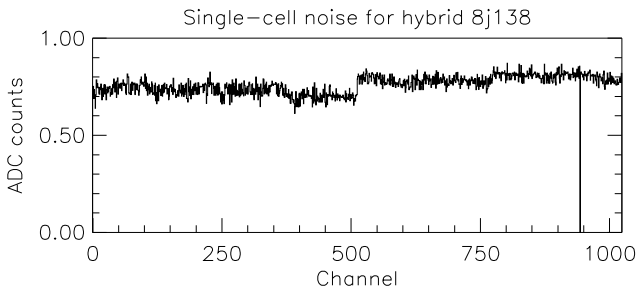
Pedestal vs. Pipeline Cell ID

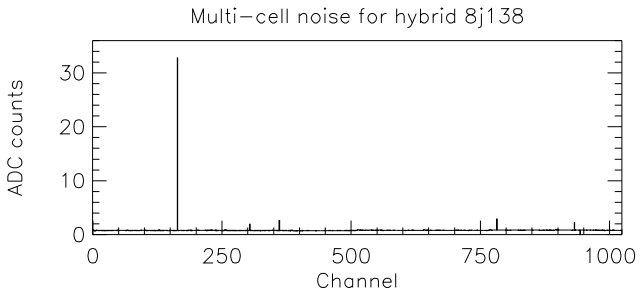


6 Noise

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

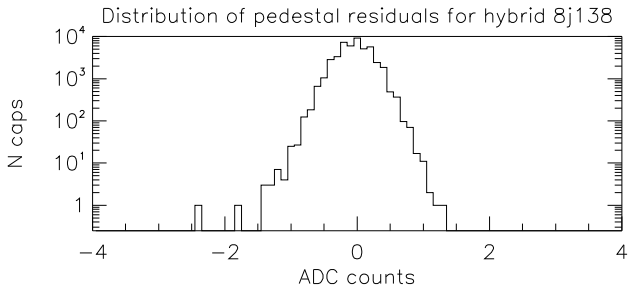
RMS Noise

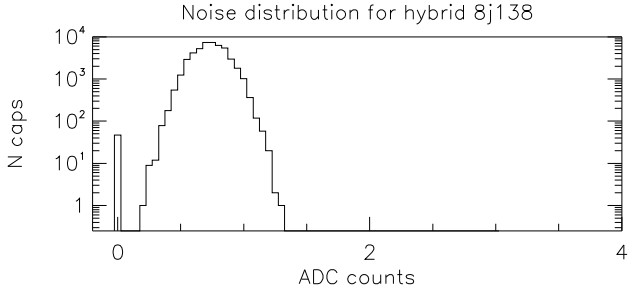




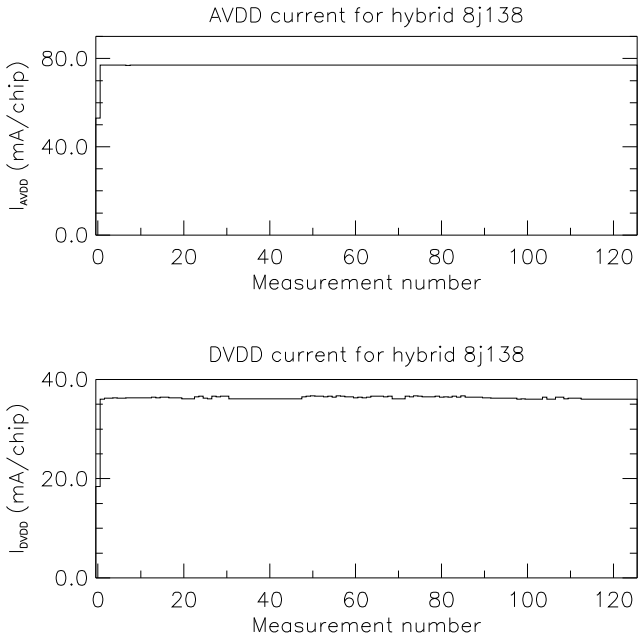
The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

Distribution of Pedestals and Noise





7 Currents

The following plots show the supply currents per chip as a function of measurment number. Currents are measured approximately every 10 minutes:

Supply Currents During Burn-in