Hybrid 8j363 Traveler

July 14, 2000

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 8J363 has die: 168-108 168-109 168-111 168-112 206-078 206-079 206-080 206-084

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 8j363 classification info. Created 11:46:55 06/30/00

Hybrid 8j363 quality: fair
Chip classification: good good fair good fair good good good
Bad channels (chip-channel): 2-55
Bad cells: none
Random bad capacitors (chip-cell-channel): 2-14-54 2-3-100 4-1-83
   4-17-82 4-17-83 4-18-83 4-19-83 4-22-51 4-39-21 4-43-83 4-6-83
Channels at pedestal needed for DCMS: 32.6 34.6 32.6 30.6 30.6 30.7 30.6 32.6
```

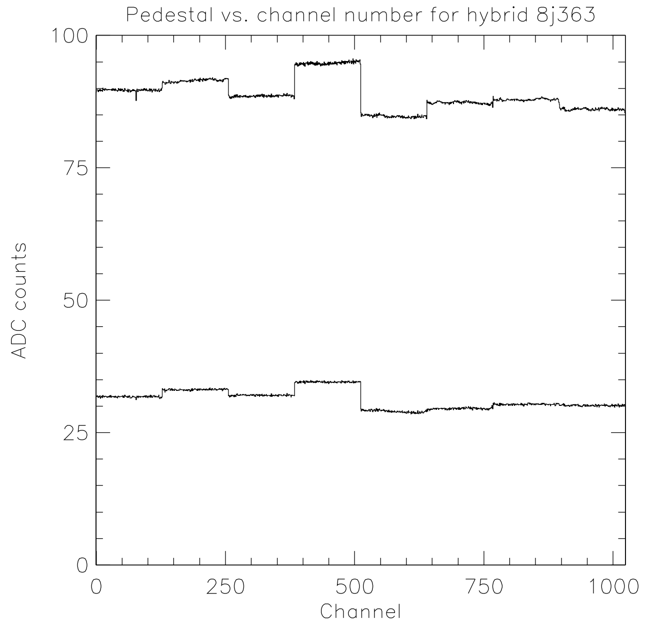
4 Comments

HV tested.

5 Pedestal

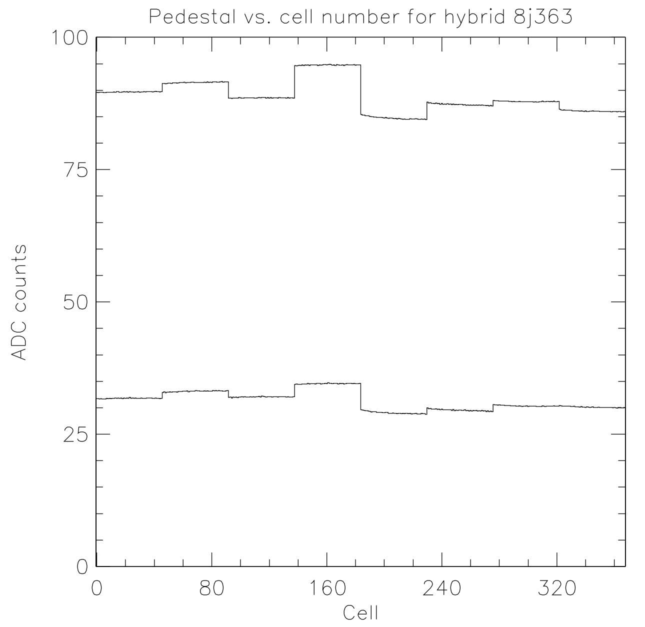
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

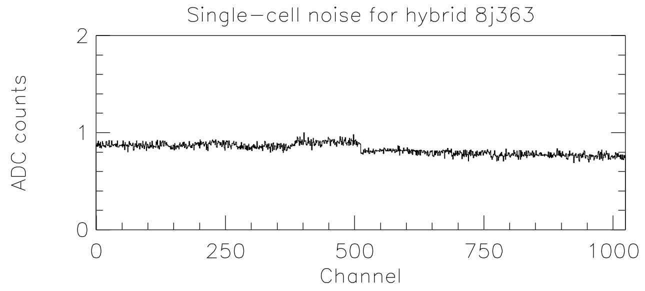
Pedestal vs. Pipeline Cell ID

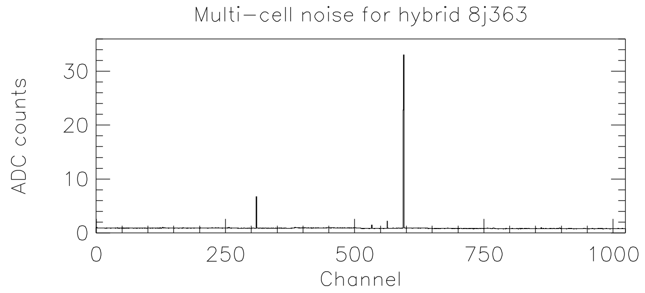


6 Noise

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

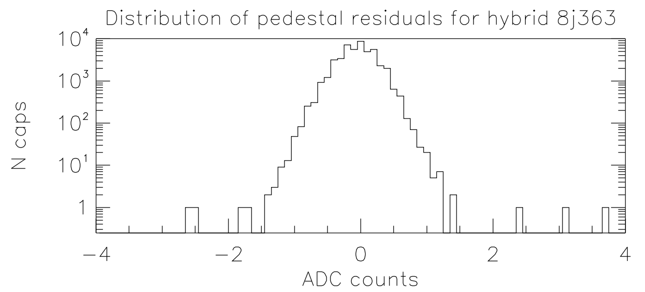
RMS Noise

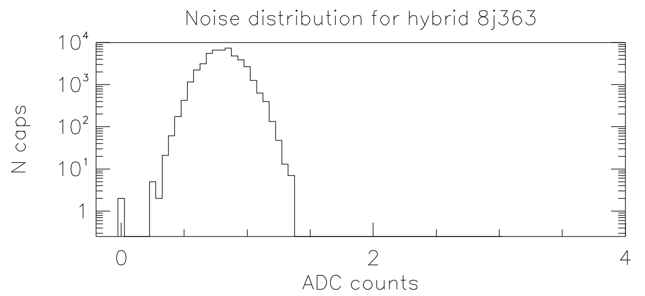




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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