Hybrid 8j18 Traveler

October 26, 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 8J18 has die: 060-046 060-047 060-050 060-051 051-047 051-051 052-002 052-005

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 v3-018 classification info. Created 17:51:53 10/25/99

Hybrid v3-018 quality: fair
Chip classification: good fair good good good good fair fair
Bad channels (chip-channel): 1-16 6-2 6-3
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-11-16 6-10-3 6-21-2 6-21-3 6-22-3 6-5-3 7-3-4
Channels at pedestal needed for DCMS: 36.6 36.5 38.6 36.6 34.8 34.6 39.2 35.6
```

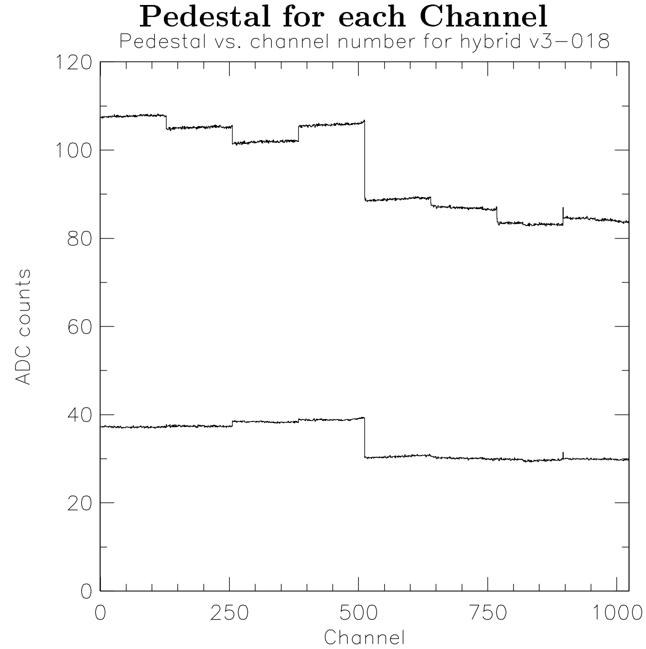
4 Comments

No comments.

5 Pedestal

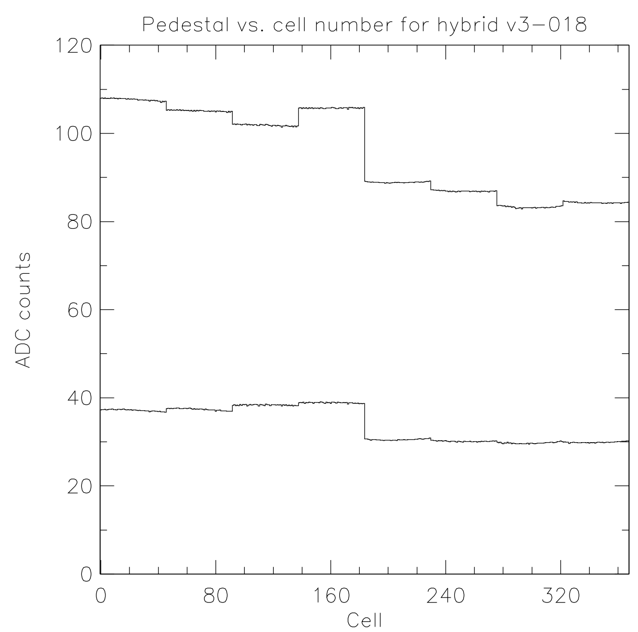
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

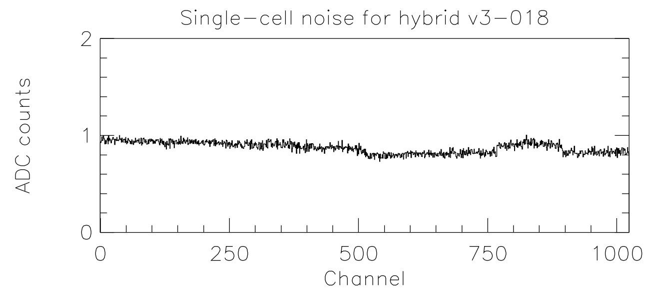
Pedestal vs. Pipeline Cell ID

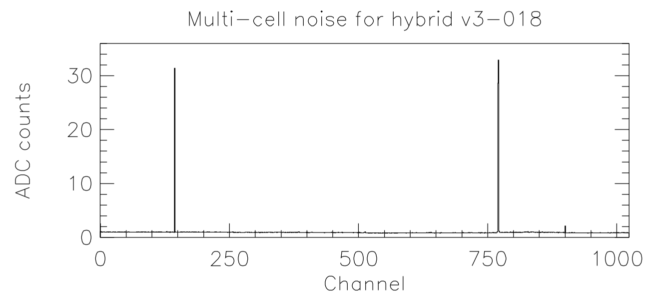


6 Noise

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

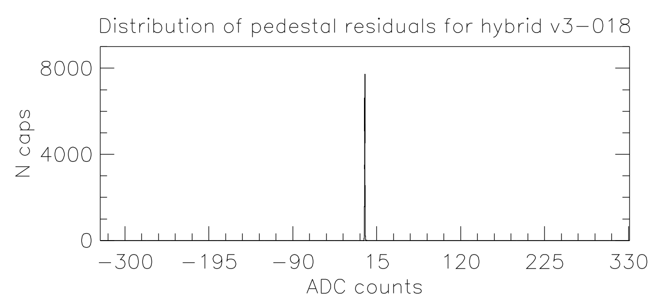
RMS Noise

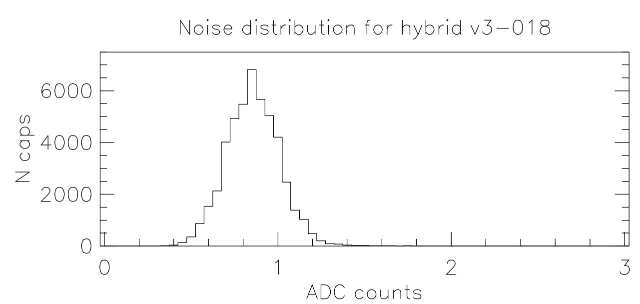




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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