Hybrid 8j165 Traveler

January 11, 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 8J165 has die: 205-079 205-080 205-081 205-082 200-072 200-073 200-074 200-077

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 8j165 classification info. Created 15:00:13 01/10/00

Hybrid 8j165 quality: fair
Chip classification: good fair good good good good fair good
Bad channels (chip-channel): 1-91 6-19
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-0-91 1-12-91 1-13-91
   1-14-91 1-15-91 1-16-91 1-17-91 1-18-91 1-21-91 1-24-91 1-25-91
   1-3-91 1-30-91 1-31-91 1-33-91 1-37-91 1-4-91 1-41-91 1-42-91
   1-43-91 1-44-91 1-45-91 1-8-91 1-9-91
Channels at pedestal needed for DCMS: 32.5 30.5 31.7 33.5 32.6 32.7 32.4 34.5
```

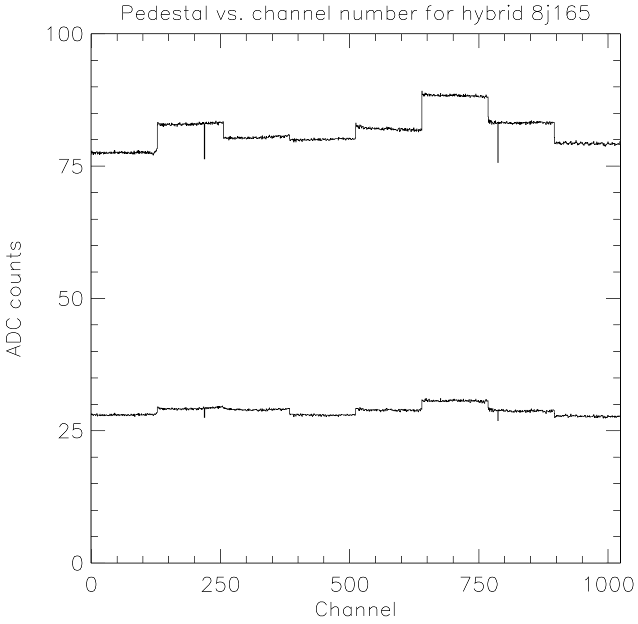
4 Comments

No comments.

5 Pedestal

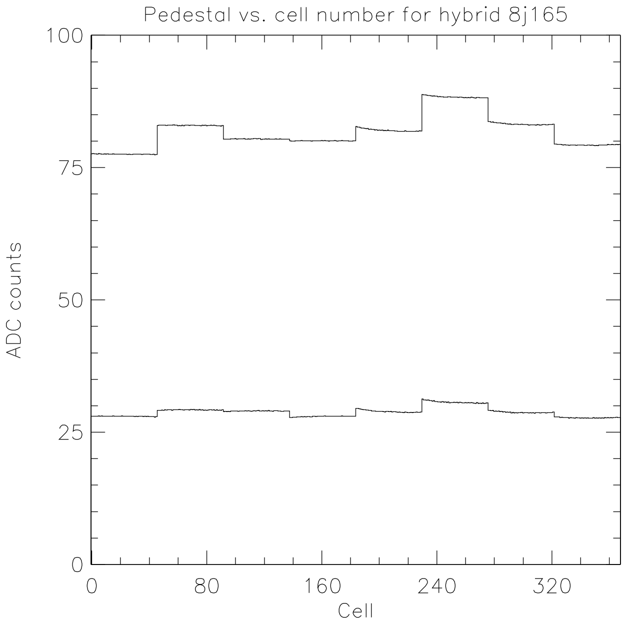
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

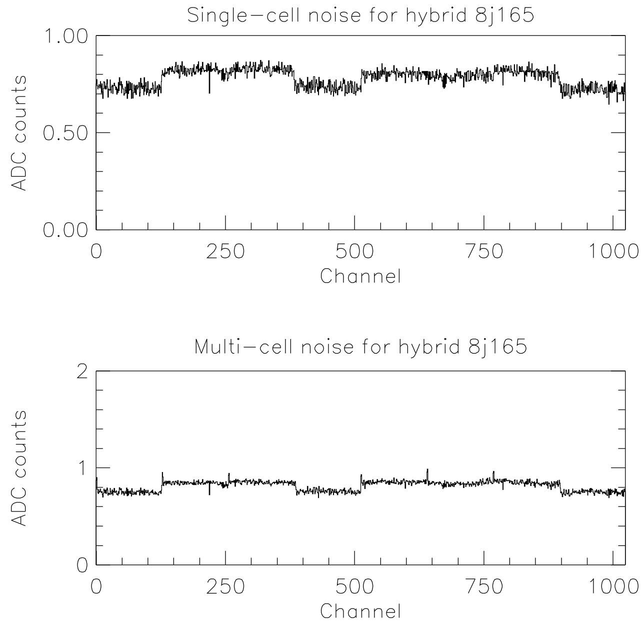
Pedestal vs. Pipeline Cell ID



6 Noise

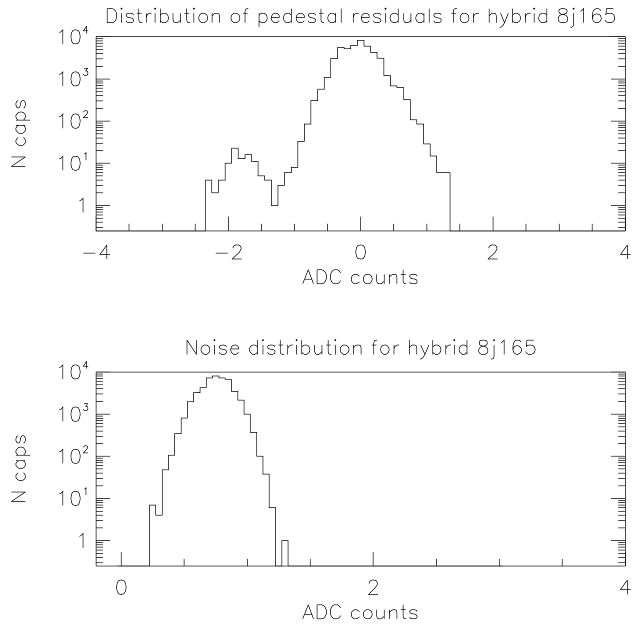
The following plots show the single-cell and multi-cell RMS noise:

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