Hybrid 8j430 Traveler

June 26, 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 8J430 has die: 244-121 171-119 171-121 171-128 168-066 168-069 168-070 168-072

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 8j430 classification info. Created 14:20:25 06/23/00

Hybrid 8j430 quality: fair
Chip classification: good fair fair fair fair good fair fair
Bad channels (chip-channel): 2-109 4-36
Bad cells: none
Random bad capacitors (chip-cell-channel): 1-26-8 1-33-8 2-19-110
   2-36-96 2-41-25 2-43-17 3-43-123 6-12-100 6-29-108 6-38-71 7-35-54
   7-43-89 7-44-111 7-7-13
Channels at pedestal needed for DCMS: 31.6 35.6 35.7 34.1 32.7 32.6 33.6 33.6
```

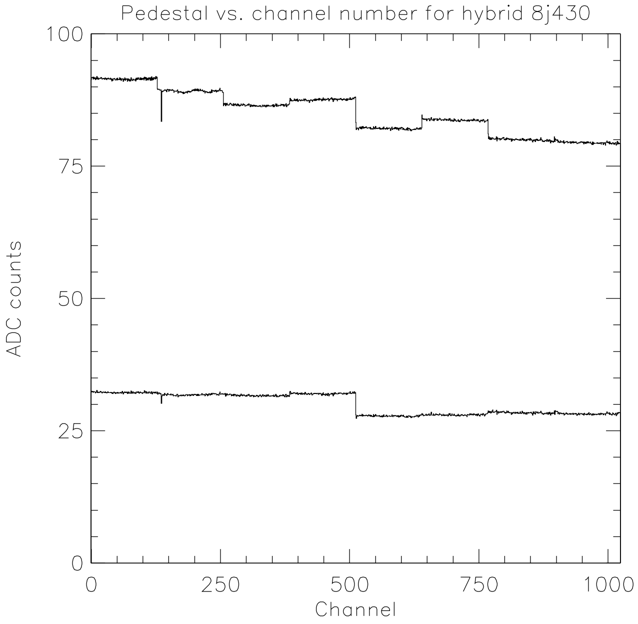
4 Comments

HV tested.

5 Pedestal

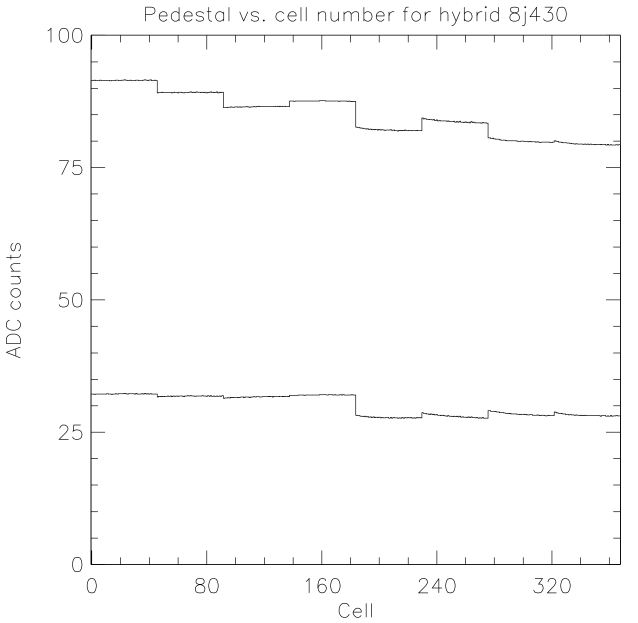
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

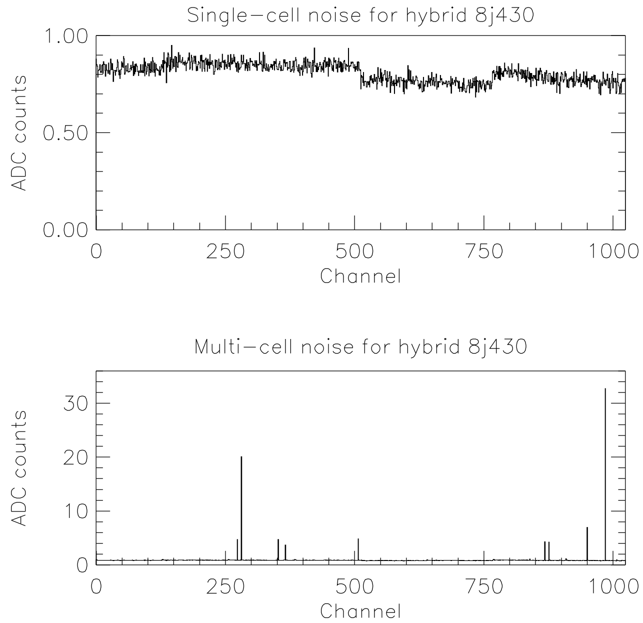
Pedestal vs. Pipeline Cell ID



6 Noise

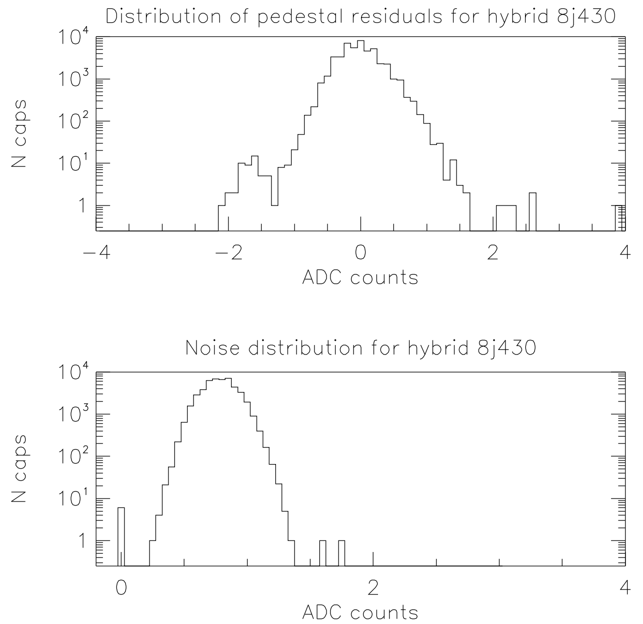
The following plots show the single-cell and multi-cell RMS noise:

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