Hybrid 8j135 Traveler

December 16, 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 8J135 has die: 198-100 198-103 198-104 198-106 197-028 197-029 197-031 197-036

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 8j135 classification info. Created 10:23:28 12/13/99

Hybrid 8j135 quality: fair
Chip classification: fair fair good good fair fair good good
Bad channels (chip-channel): 0-33 0-101 5-18
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-40-32 1-22-10 4-31-11
   5-20-18 5-24-18 5-27-18 5-27-19 5-29-18 5-31-18 5-31-19 5-40-18
   5-40-19
Channels at pedestal needed for DCMS: 30.6 33.7 34.6 32.6 30.7 30.8 30.5 32.7
```

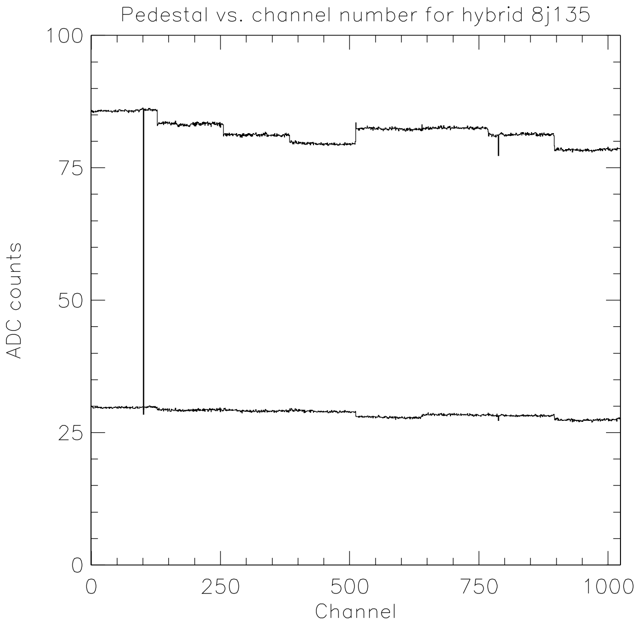
4 Comments

No comments.

5 Pedestal

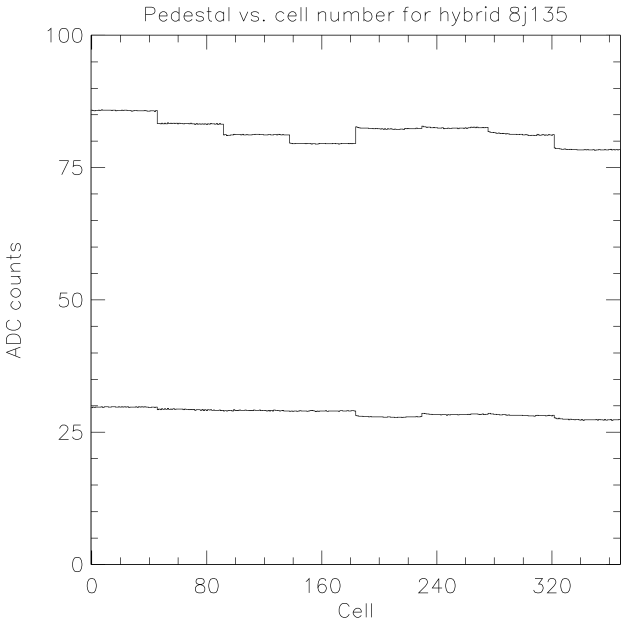
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

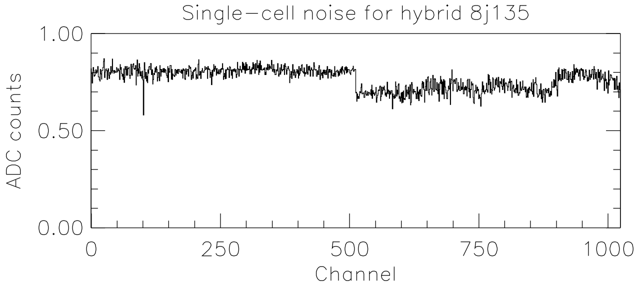
Pedestal vs. Pipeline Cell ID

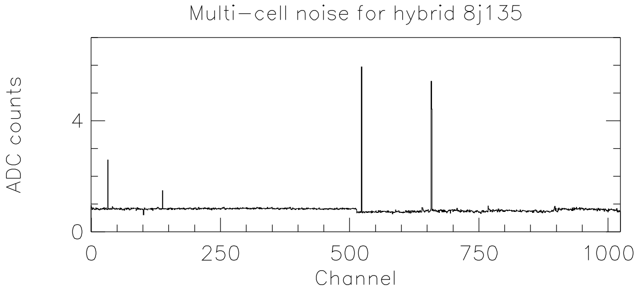


6 Noise

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

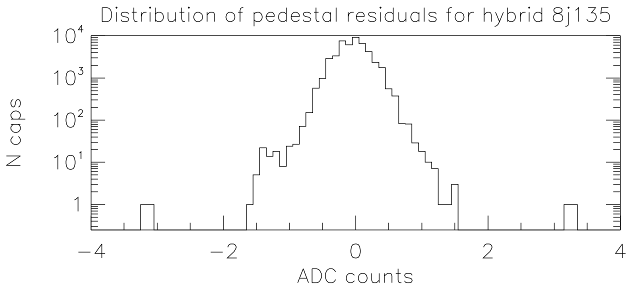
RMS Noise

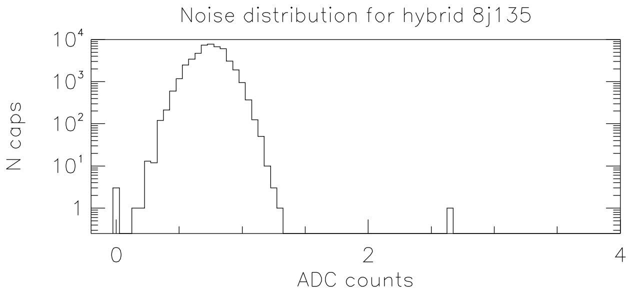




The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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