Hybrid 8j375 Traveler

May 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 8J375 has die: 245-051 245-055 170-094 170-103 170-086 170-091 170-092 170-093

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 8j375 classification info. Created 11:31:19 05/24/00

Hybrid 8j375 quality: bad
Chip classification: fair bad good good fair good good good
Bad channels (chip-channel): 0-98 1-69 1-109 1-117
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-13-98 0-15-98 0-17-98
   0-21-58 0-21-59 0-22-58 0-22-59 0-22-98 0-26-58 0-26-59 0-27-58
   0-27-59 0-29-58 0-29-59 0-31-58 0-31-59 0-33-58 0-33-59 0-36-98
   0-42-57 0-42-58 0-42-59 0-43-58 0-43-59 0-43-98 0-5-98 0-6-98
   0-8-98 0-9-58 4-23-64 4-23-76 4-3-42
Channels at pedestal needed for DCMS: 31.6 31.6 34.6 34.2 35.5 34.6 32.6 32.6
```

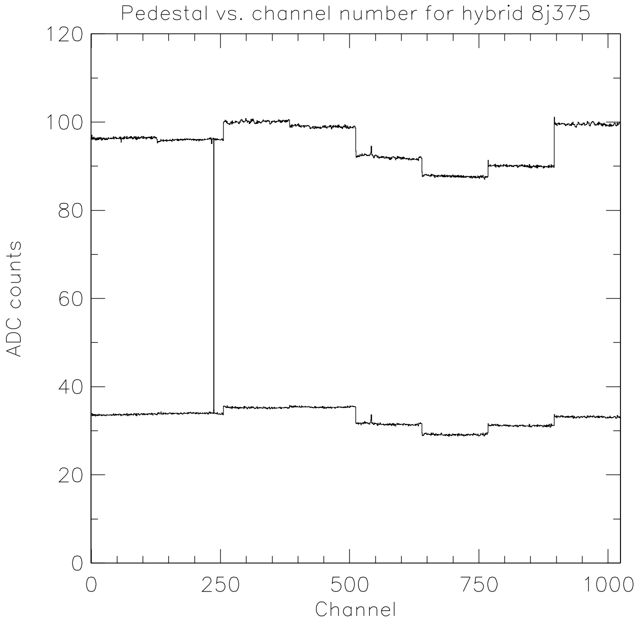
4 Comments

HV tested.

5 Pedestal

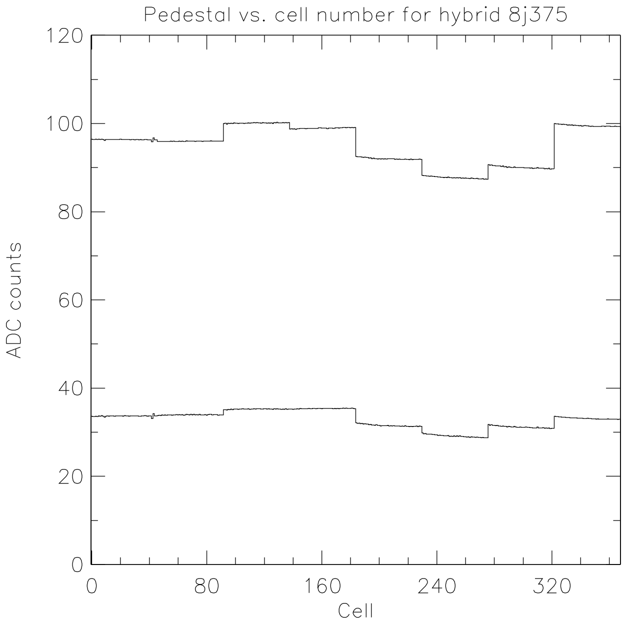
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

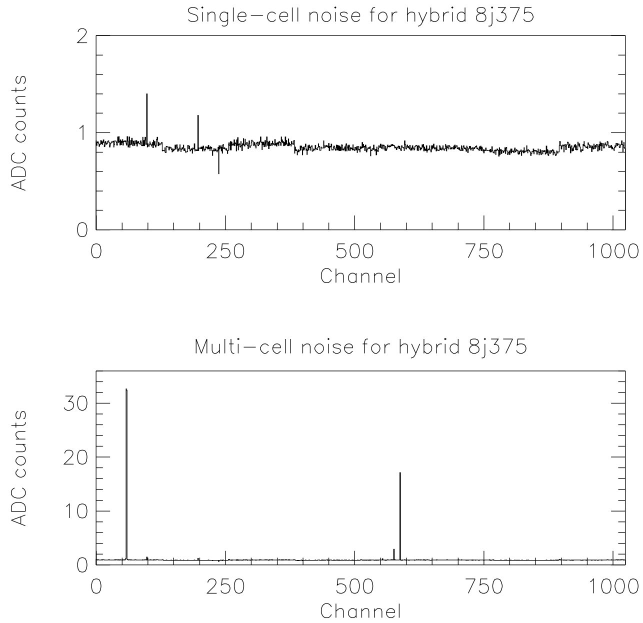
Pedestal vs. Pipeline Cell ID



6 Noise

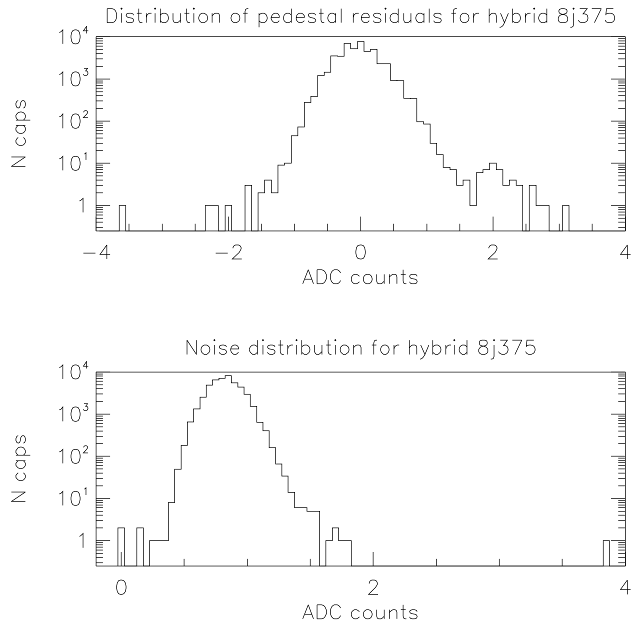
The following plots show the single-cell and multi-cell RMS noise:

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