Hybrid 8j333 Traveler

August 14, 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 8J333 has die: 207-054 207-055 221-020 207-059 159-059 159-060 159-063 159-064

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 8j333 classification info. Created 12:53:13 07/21/00

Hybrid 8j333 quality: bad
Chip classification: bad bad fair good good fair fair good
Bad channels (chip-channel): 0-6 0-22 0-60 0-61 0-122 1-13 1-26 1-27 1-45 1-46 1-71 1-92 2-99 6-47
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-13-103 1-20-92 5-13-23
   5-16-23 5-18-23 5-20-23 5-29-22 5-29-23 5-30-23 5-42-23
Channels at pedestal needed for DCMS: 29.7 27.7 31.7 31.6 31.7 30.6 32.6 33.7
```

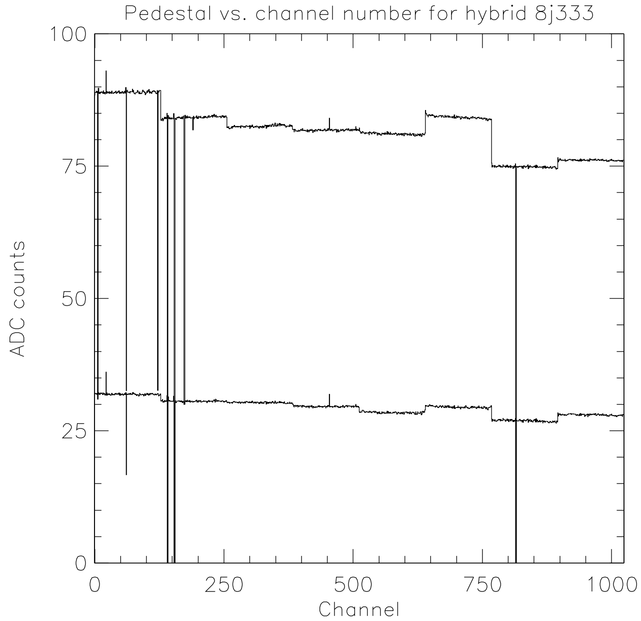
4 Comments

HV tested.

5 Pedestal

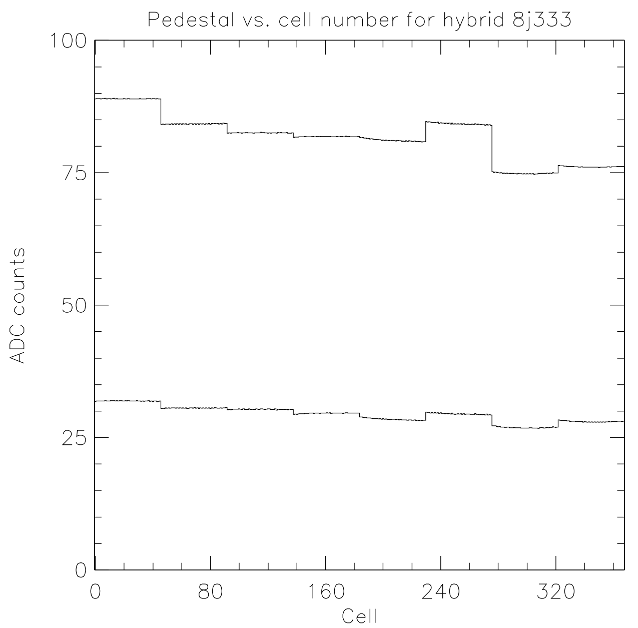
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

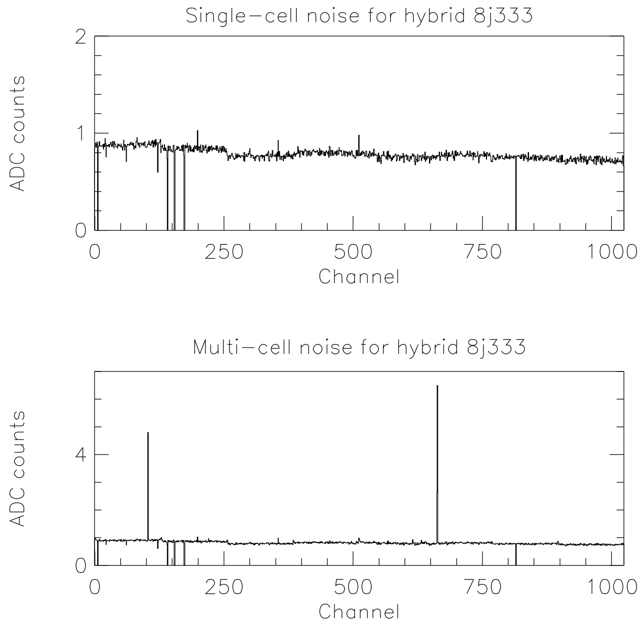
Pedestal vs. Pipeline Cell ID



6 Noise

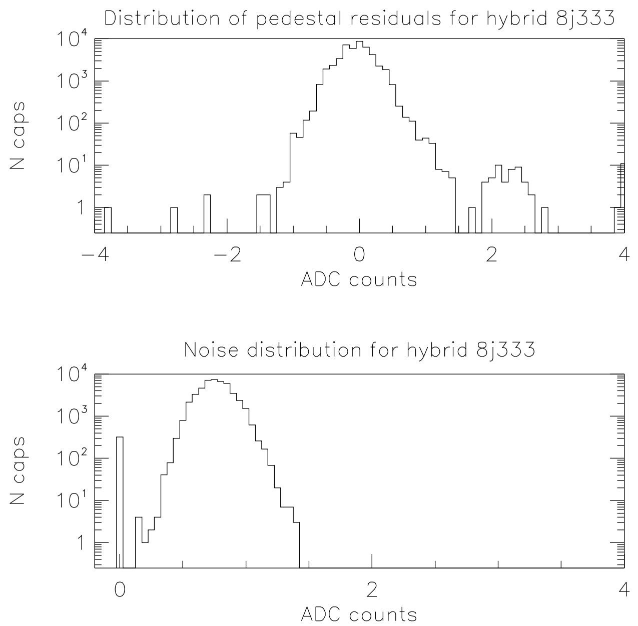
The following plots show the single-cell and multi-cell RMS noise:

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