Hybrid 8j91 Traveler

December 10, 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 8J91 has die: 039-051 040-001 040-002 040-003 040-040 040-041 040-043 040-044

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 8j91 classification info. Created 15:48:27 12/01/99

Hybrid 8j91 quality: fair
Chip classification: fair fair good good good fair good good
Bad channels: none
Bad cells: none
Random bad capacitors (chip-cell-channel): 0-14-40 0-18-40 0-24-40
   0-29-40 0-4-40 0-5-40 1-21-76 1-21-77 1-22-75 1-25-87 5-38-106
Channels at pedestal needed for DCMS: 34.2 34.6 33.6 35.5 35.7 34.6 34.7 34.6
```

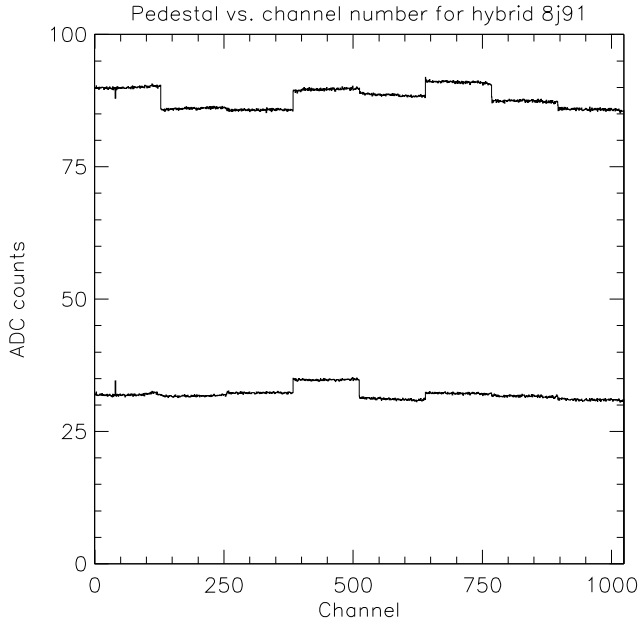
4 Comments

No comments.

5 Pedestal

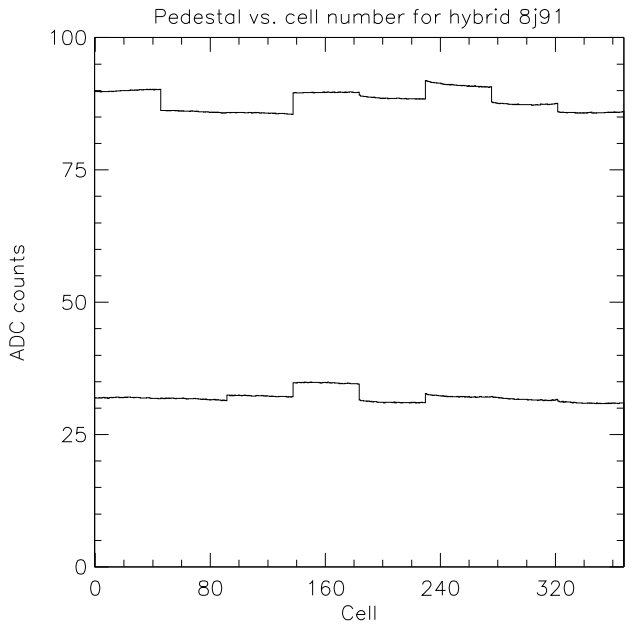
The following plot shows the pedestals vs. channel number with and without charge injection:

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.

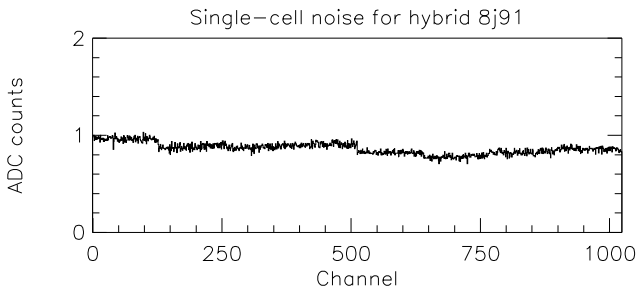
Pedestal vs. Pipeline Cell ID

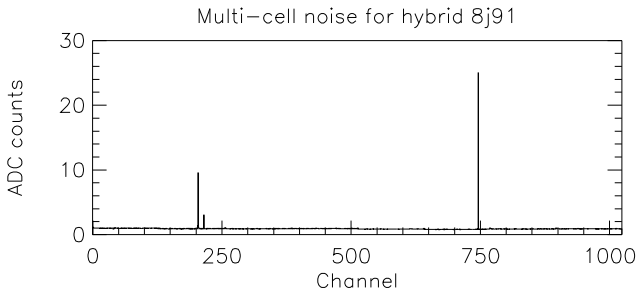


6 Noise

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

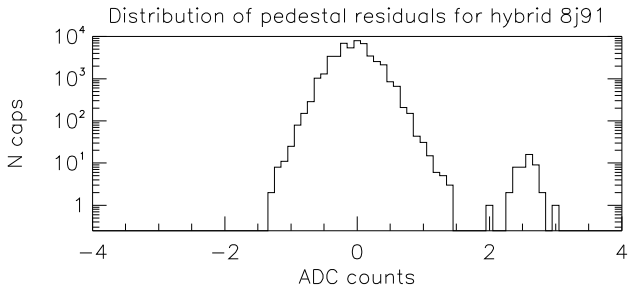
RMS Noise

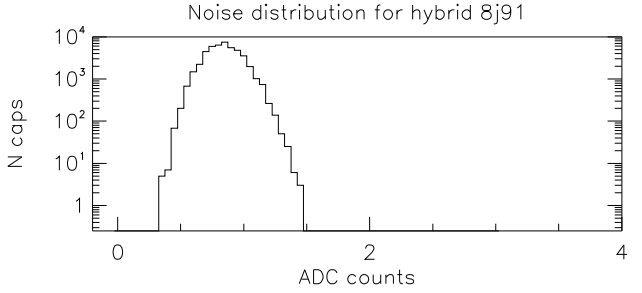




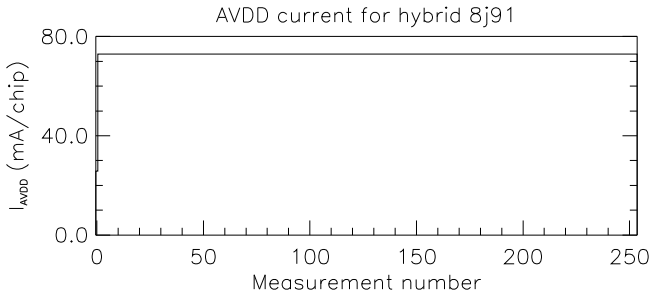
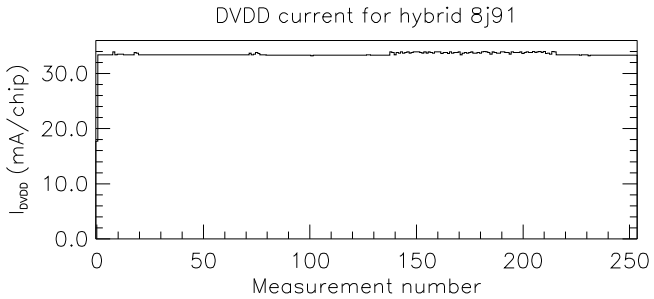
The following are histograms of the pedestal of each pipeline capacitor relative to the chip average (top); and the RMS noise of each capacitor (bottom):

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