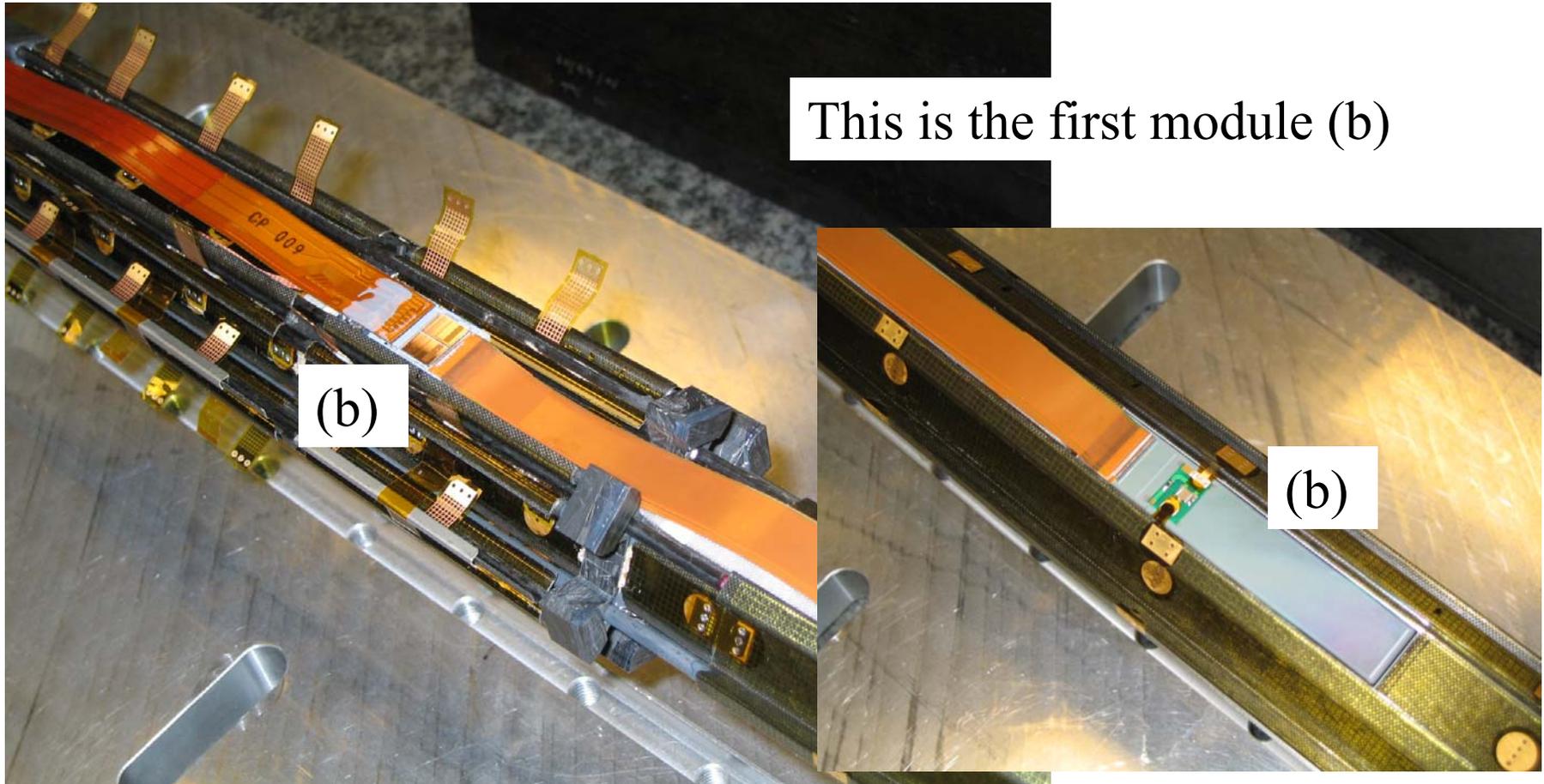


# L0 module on the structure

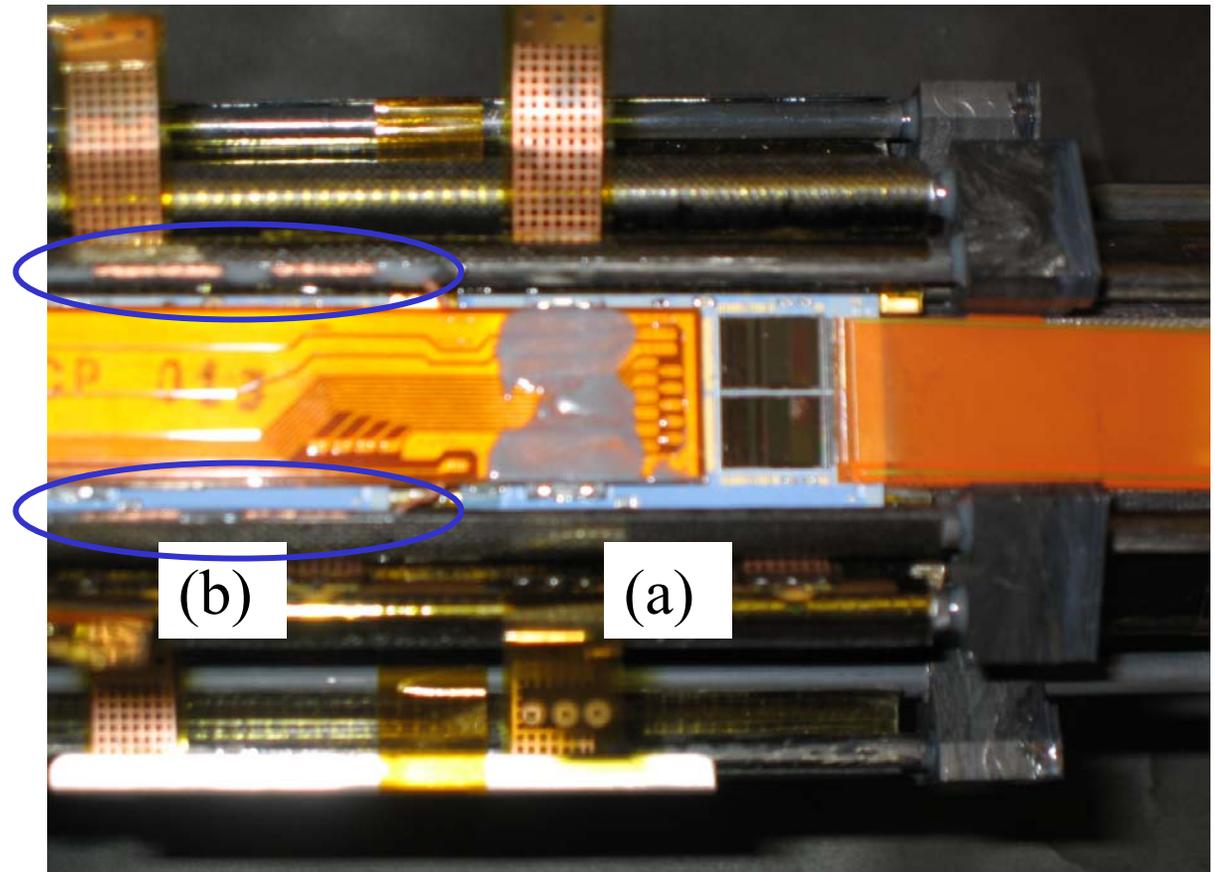
- Two modules are installed on the sector-A



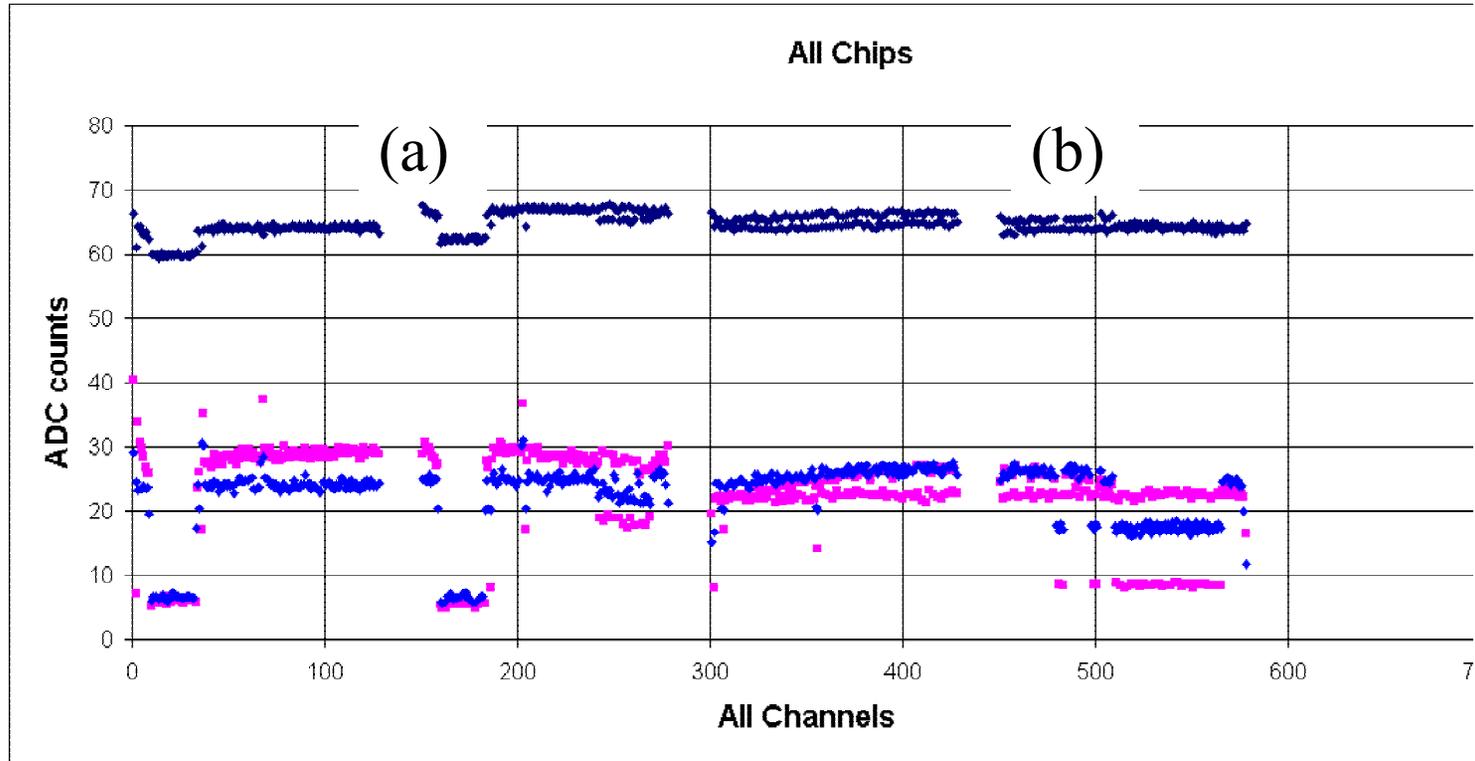
# Hybrid Grounding

- Two modules have old hybrid → no ground pad on the backplane...

Rather long wires used to get ground connection to the structure, especially for module (a)

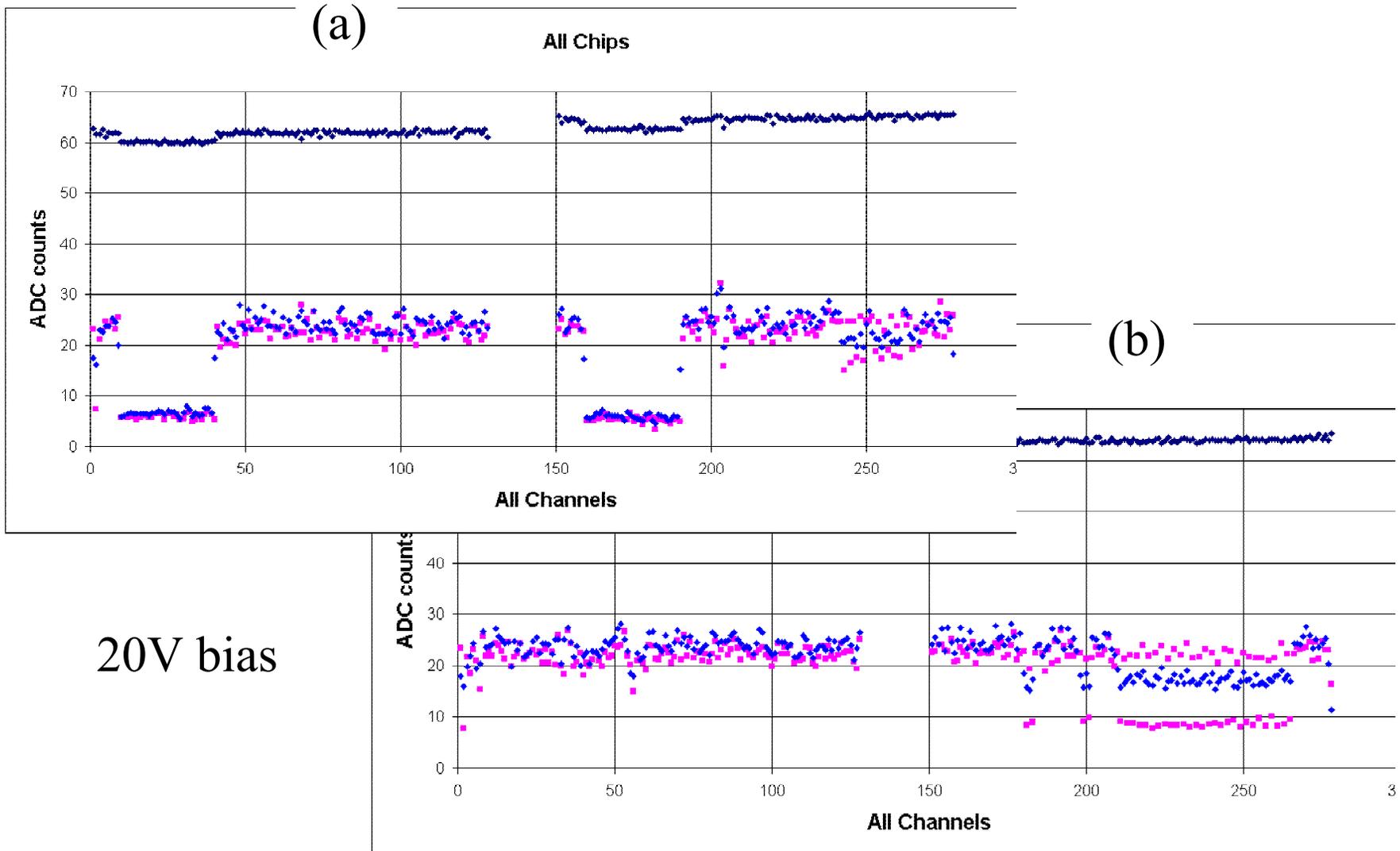


# First Result

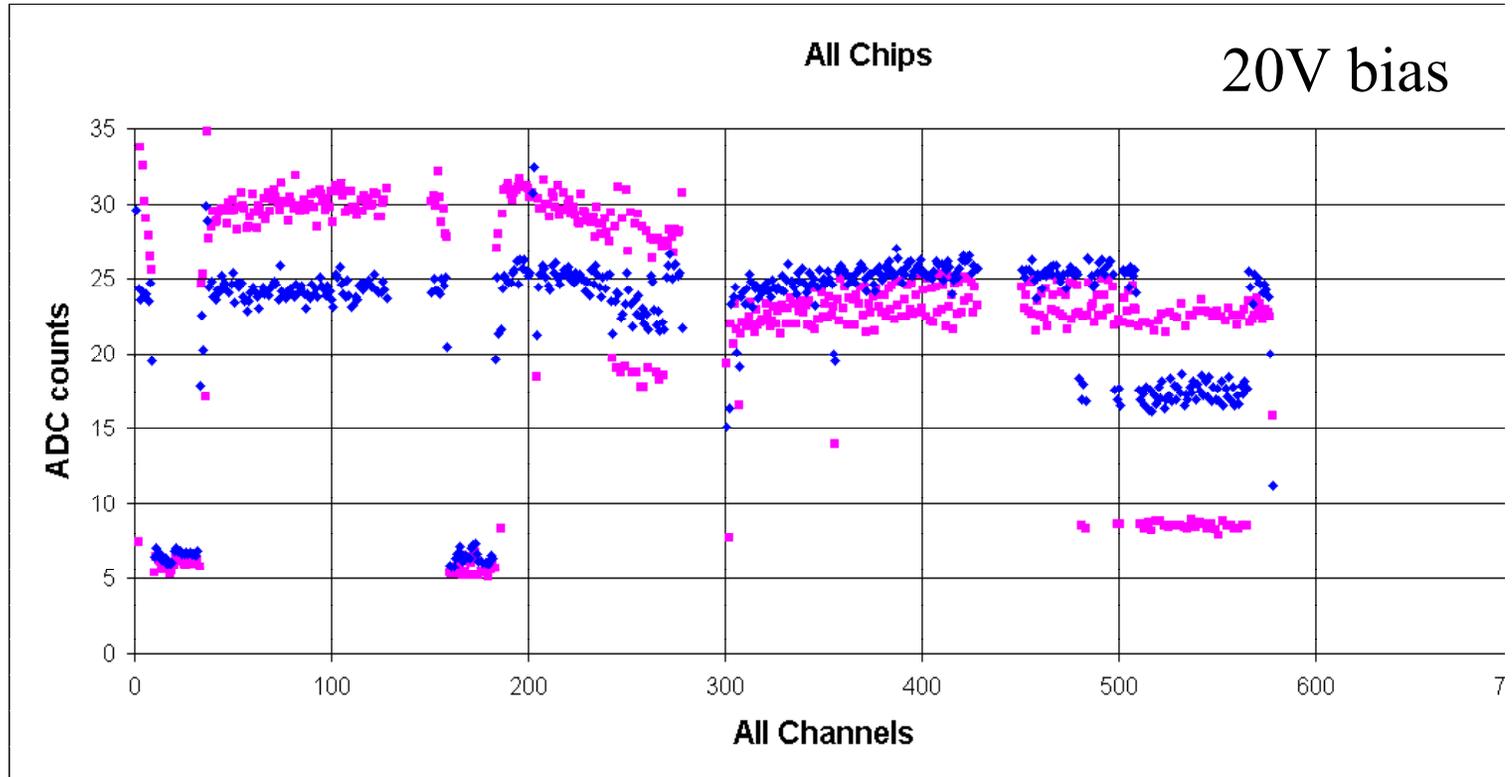


- No Faraday cage
- 20V (plot above) and 60V
- temperature stable @ $\sim 35^{\circ}\text{C}$  (may need cooling later)

# Noise before installation

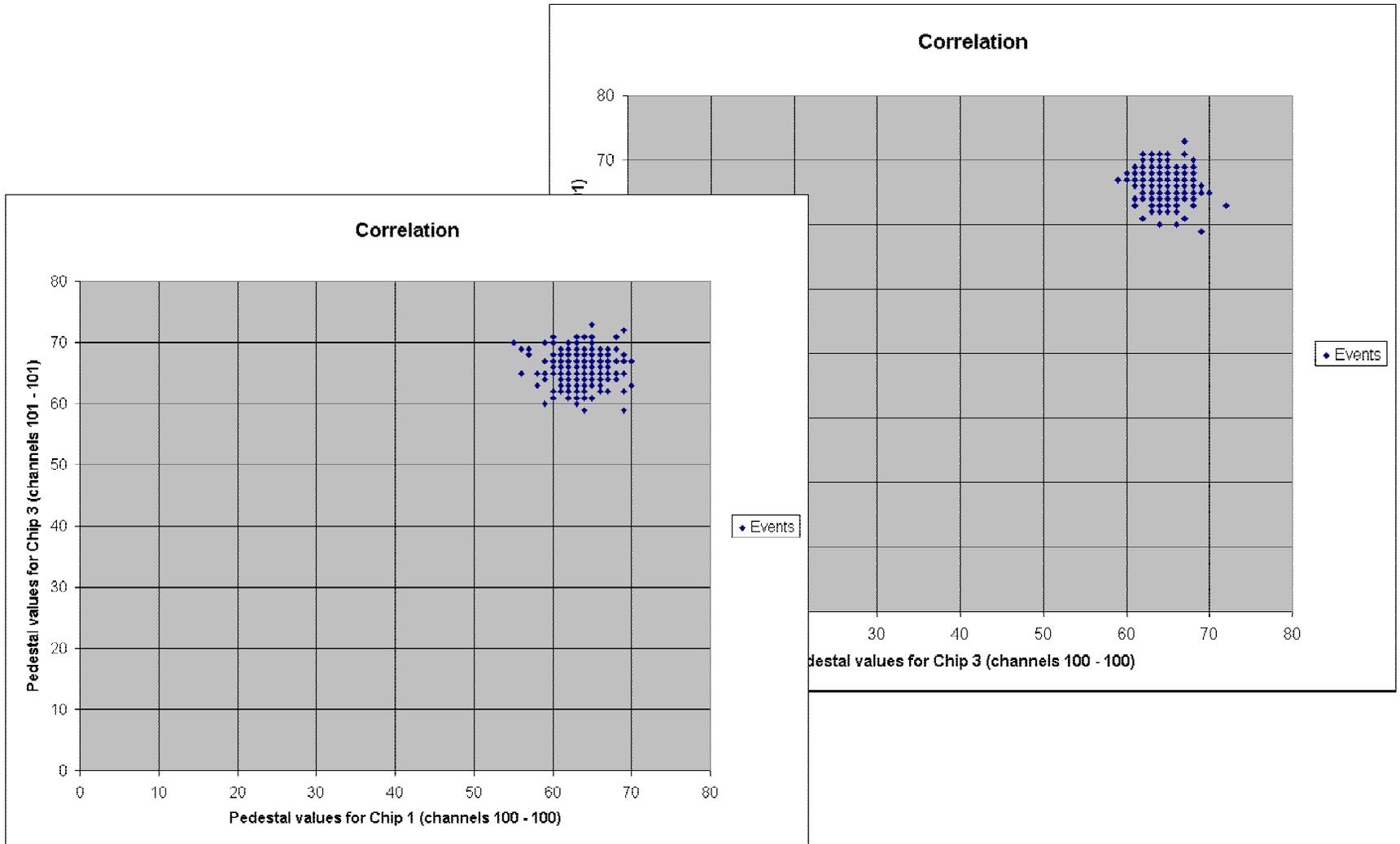


# Noise after installation



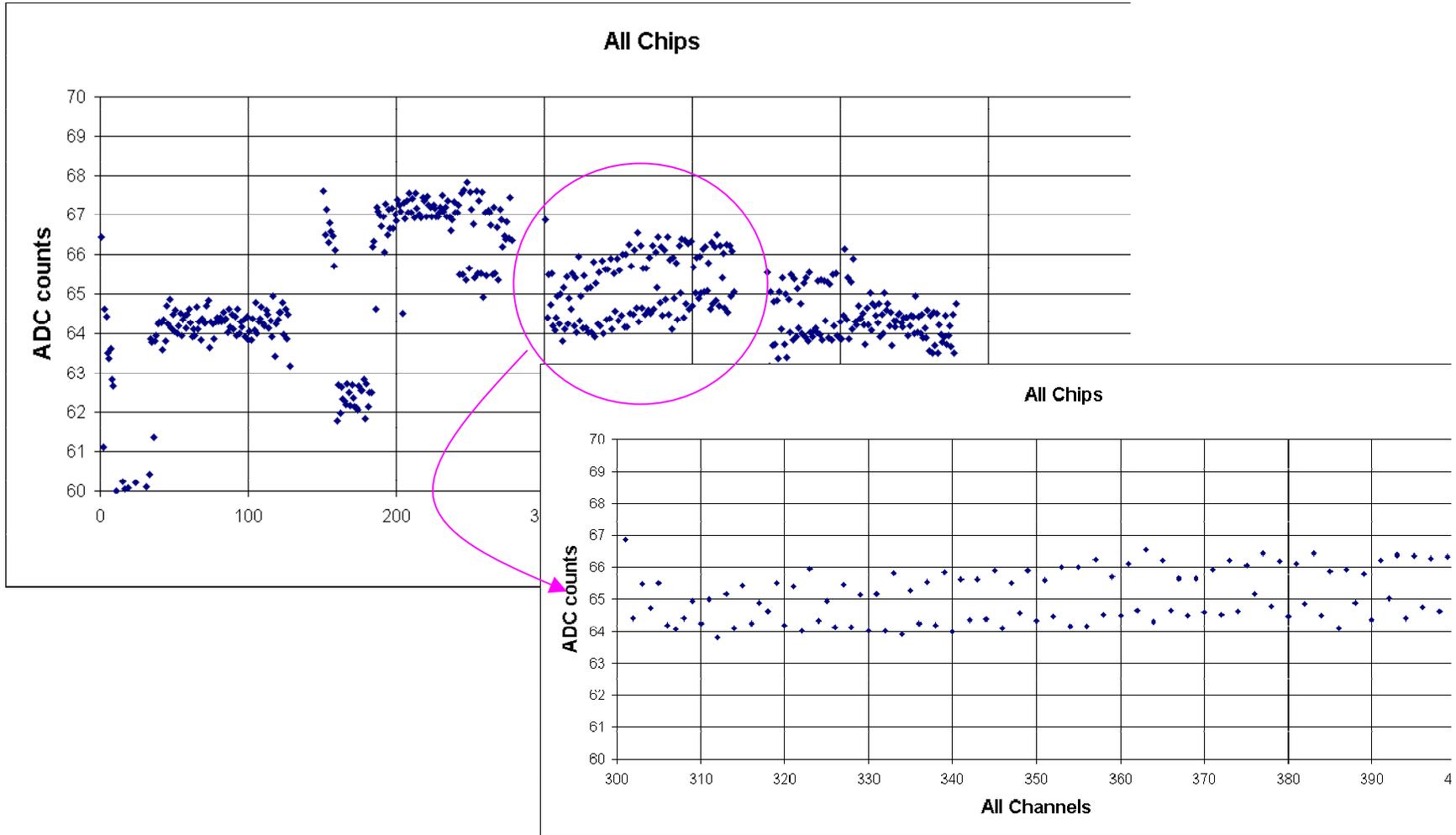
- Noise increase very small!!
- Only 0.5ADC count of common mode pickup in (a)  
← due to longer wires for grounding of hybrid (?)

# Noise correlation



- Correlation between two neighbors really small

# Even odd effect



- Significant in (b), analog cable nearer the structure with  $\sim 0.4-0.5\text{mm}$  spacer

# Plan

- Building 4 more modules with new hybrid, i.e. grounding pad on the back
- More noise study with external noise source
- Investigation of even-odd effect