

Status of Diamond Sensors



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CMS Fcal Meeting
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What happened so far?

- 15 sCVD diamonds from E6
 - Optical characterisation is done
 - Are sent to Princeton for metallisation
- 8 pCVD diamonds from II-VI
 - Optical characterisation are done
 - Starting CCE measurements (one diamond is already measured)
 - After CCE we will do $I(t)$
- BCM1L diamonds
 - Started the $I(t)$ measurements
- BCM1F diamonds
 - For 6 diamonds CCE and IV are done
- 5 sCVD diamonds with new metallisation
 - Need to do CCE and IV



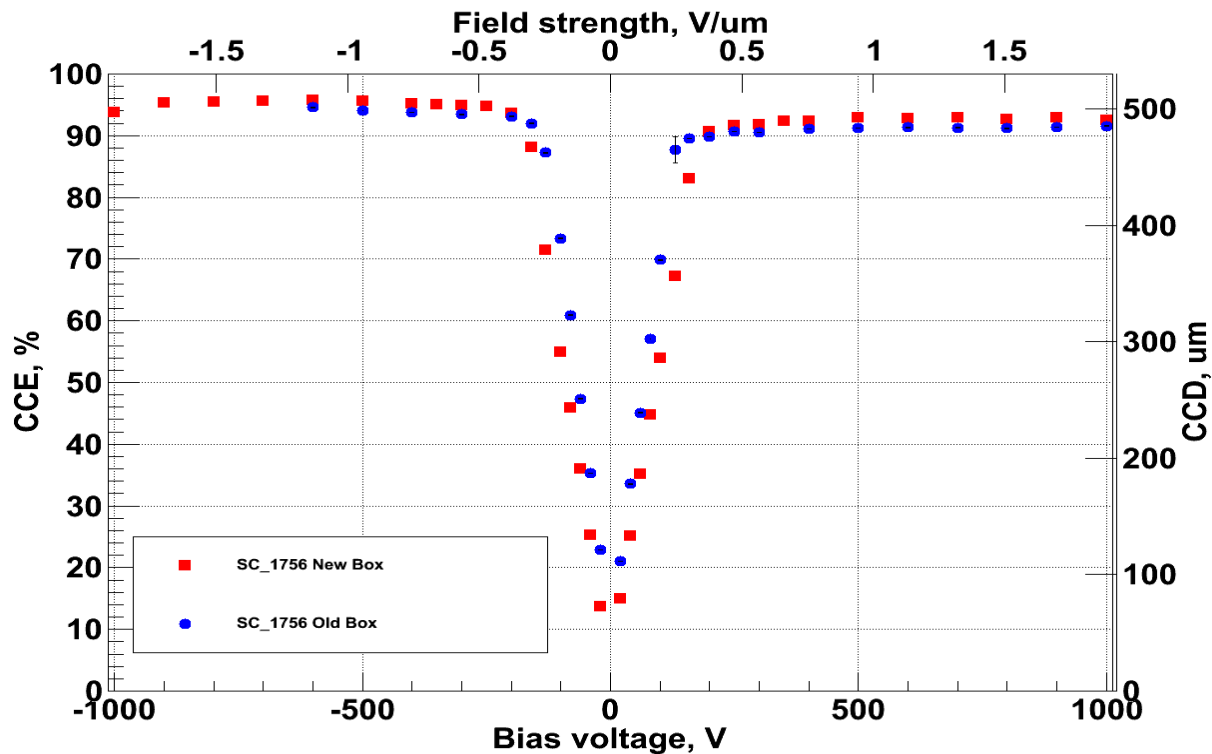
Plans for the next weeks

- 1. continue with BCM1L I(t)
- 2. continue with CCE of pCVD from II-VI
- 3. measure the last 2 BCM1F diamonds
- 4. start with the new sCVD diamonds (two pads)
 - CCE, IV and I(t)
- Other opinions?



Comparison of Old and New CCE Box

- Comparison between new and old CCE box
 - Cross check
- Check was done with sCVD 1756

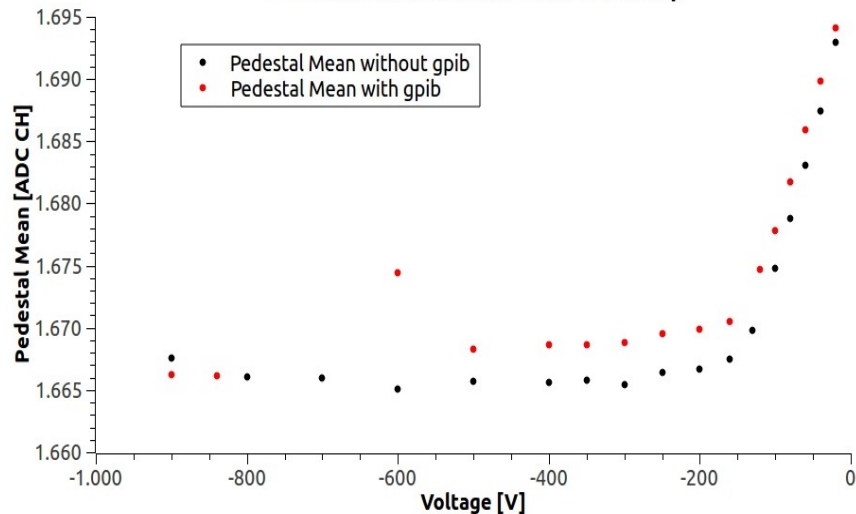


Pedestal Measurements of New CCE Box

- Measurements of pedestal
 - Idea: check the stability of pedestal
- Measurement was done with automated readout and without

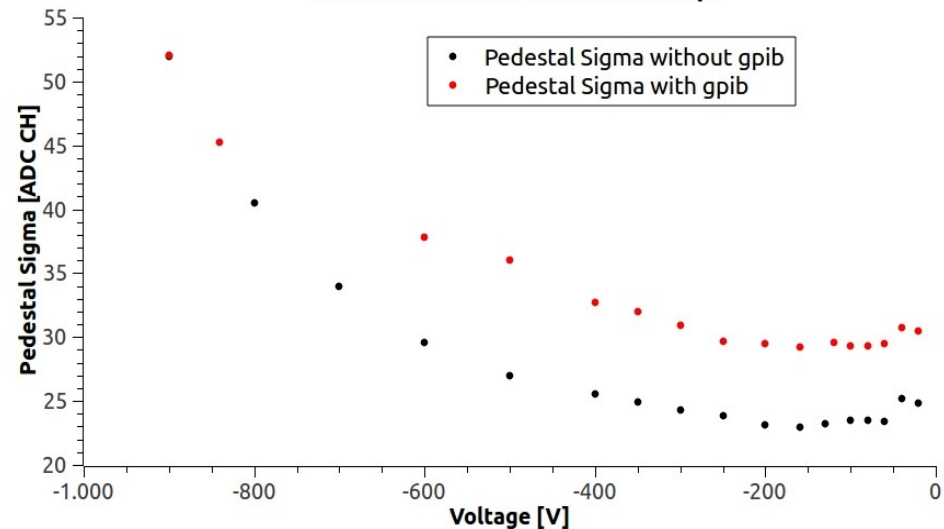
Pedestal Mean

Pedestal Stabilization of New CEE Setup



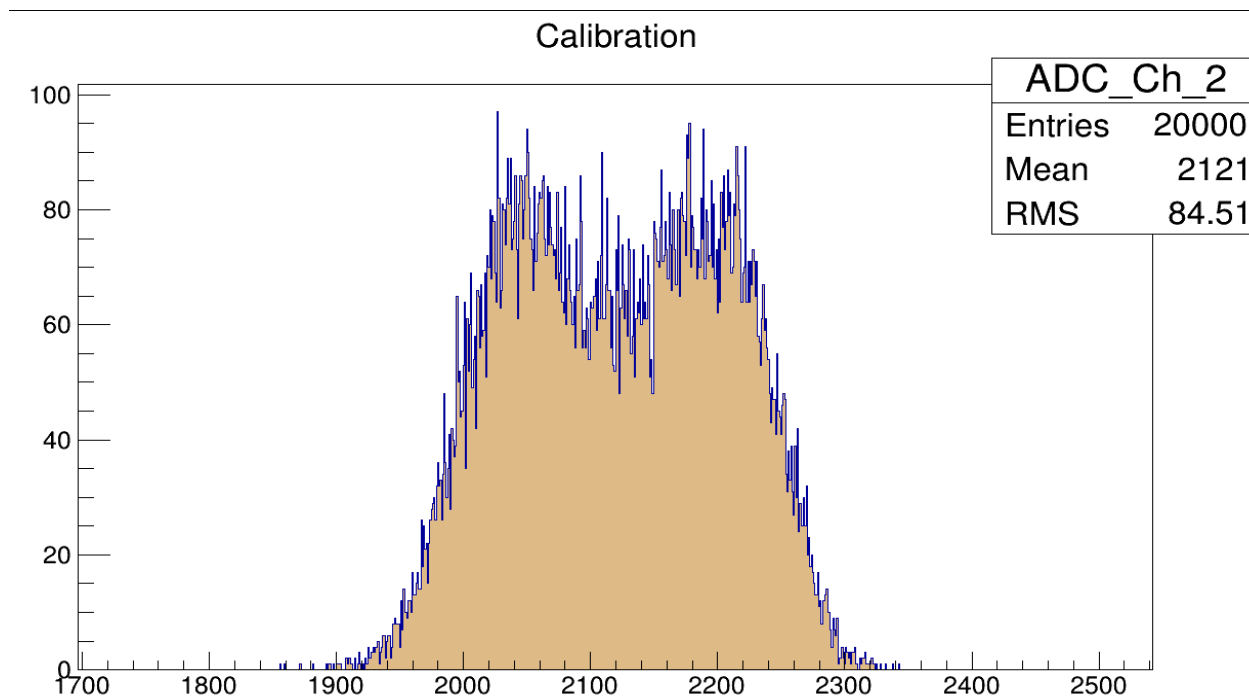
Pedestal Sigma

Noise Behavior of New CCE Setup



Problem of New CCE Box

- Tried to redo calibration
- Observation of double with automated readout
- Grounding problem
 - No solution found yet



Problem of New CCE Box

> Redid calibration again

- Manual settings, no automated readout

> Measurements are fine

> Will continue with CCE measurements but without the automated readout

