

Marika Kuczynska

CCE measurement for diamond detector

15.08.2013

Previous Week

- CCE measurements depending on the location of the diamond
(no radiated diamonds:
 - 23851242
 - 23851253)
- look for a solution of the problem of over-CCE value.

still looking for solution...

- changing the width of the gate.
- Precise measurement of capacitance:

$$C = 11 \text{ pF}$$

- changing setup connection
- another calibration of device (with HV)

$$k = 42.378$$

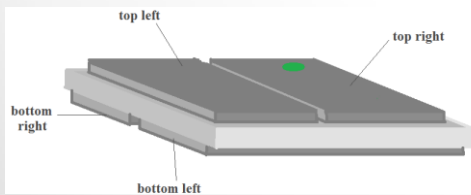
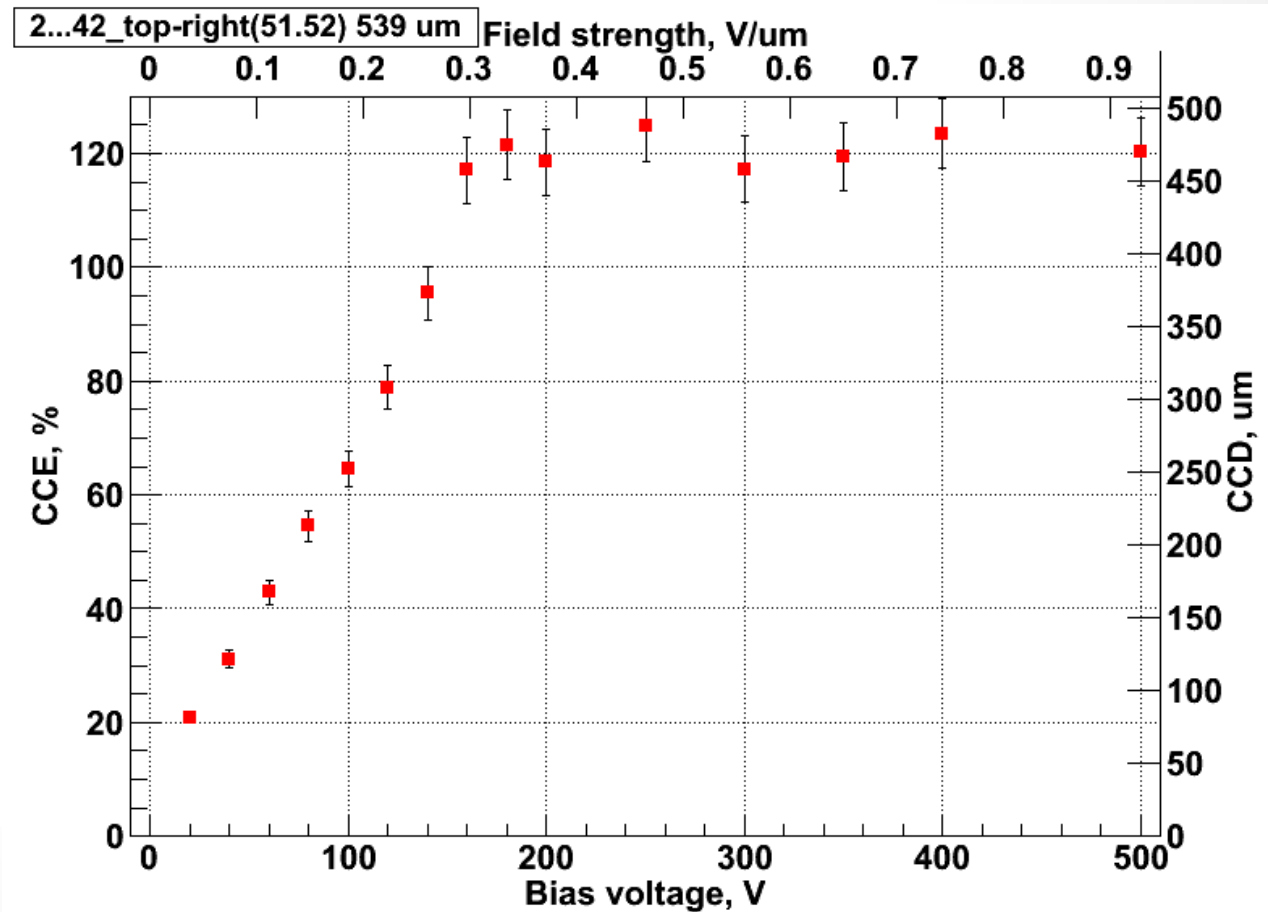
- another calibration of device (without HV)

$$k = 42.333$$

Measurements of diamond

23851242

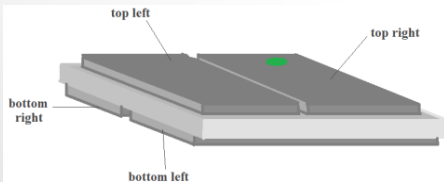
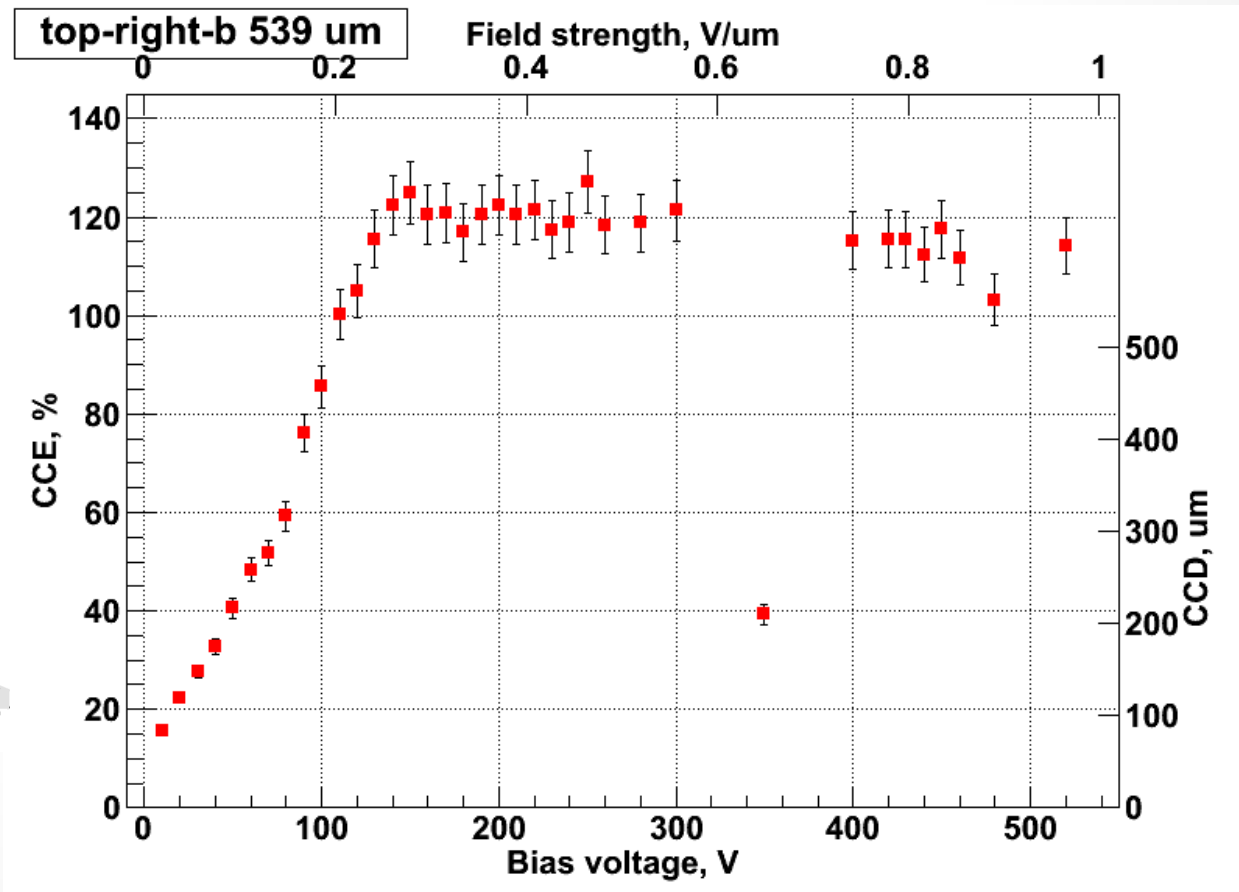
- separate measurements of pedestal and diamond signal.



Measurements of diamond

23851242 - clean

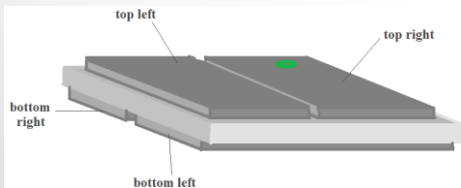
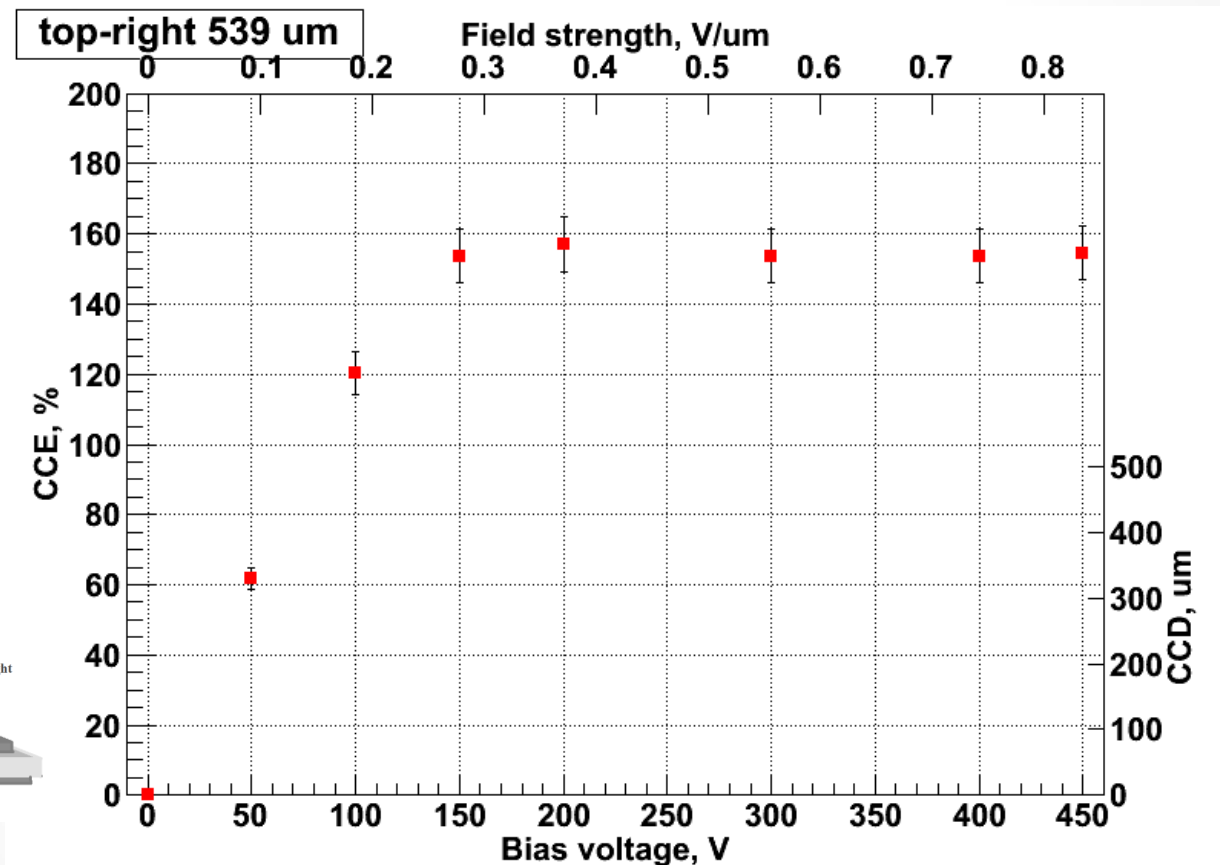
- separate measurements of pedestal and diamond signal.



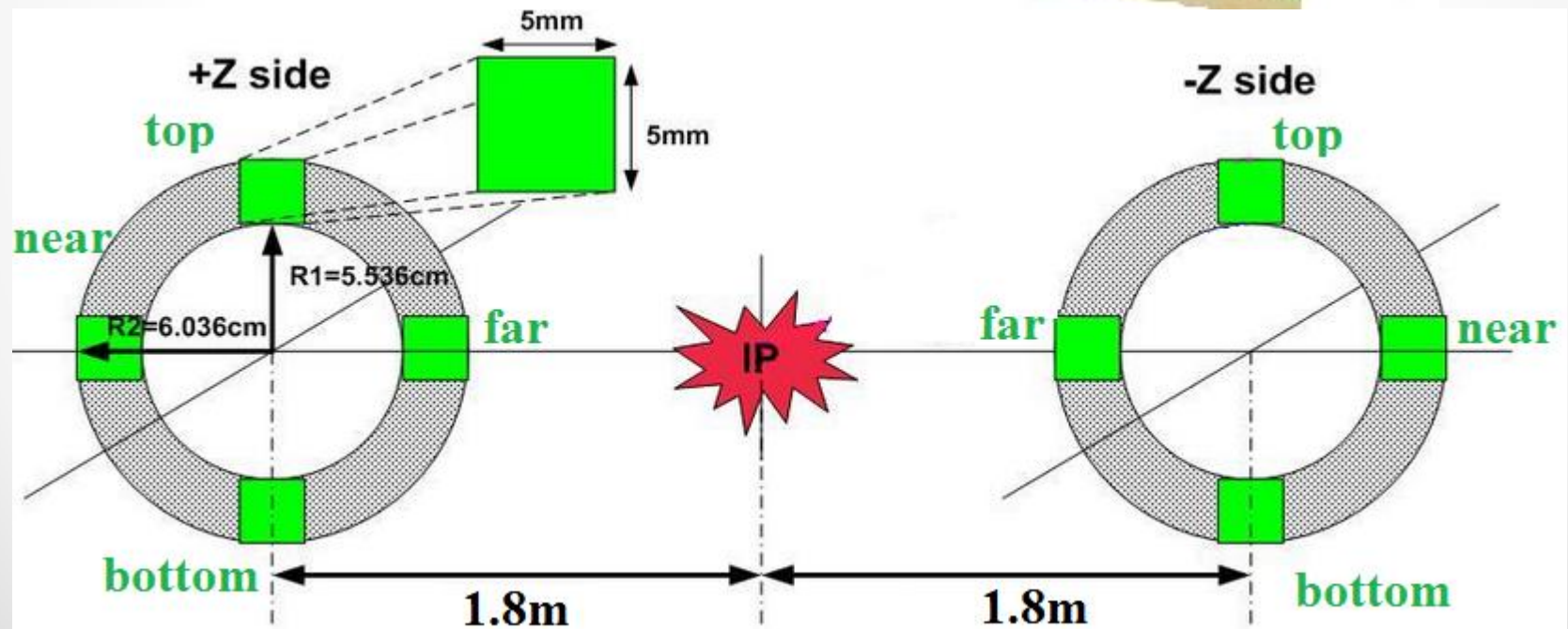
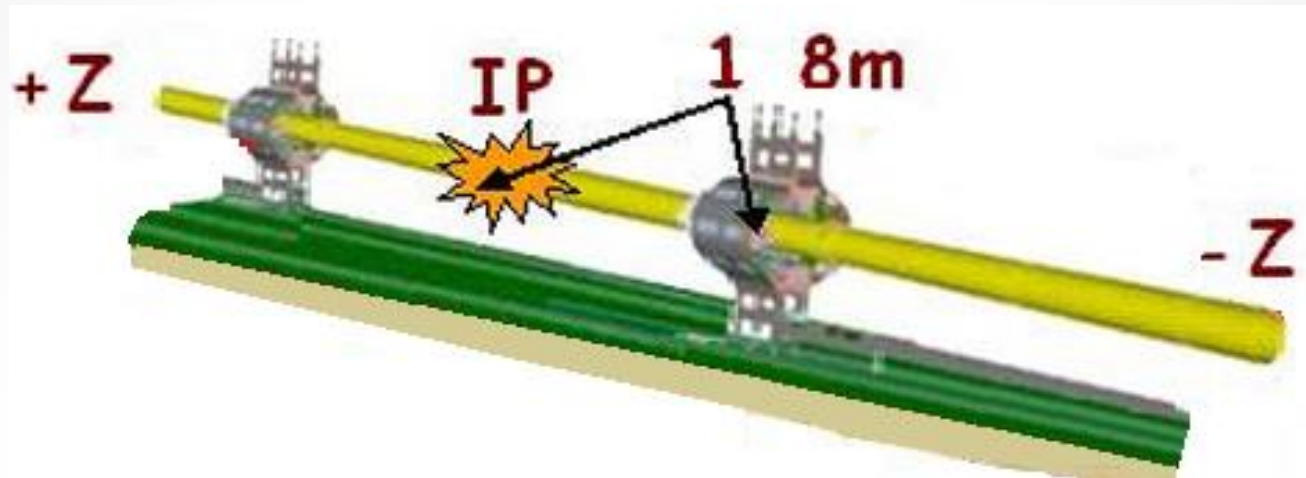
Measurements of diamond

23851242 – after changing settings



- separate measurements of pedestal and diamond signal.



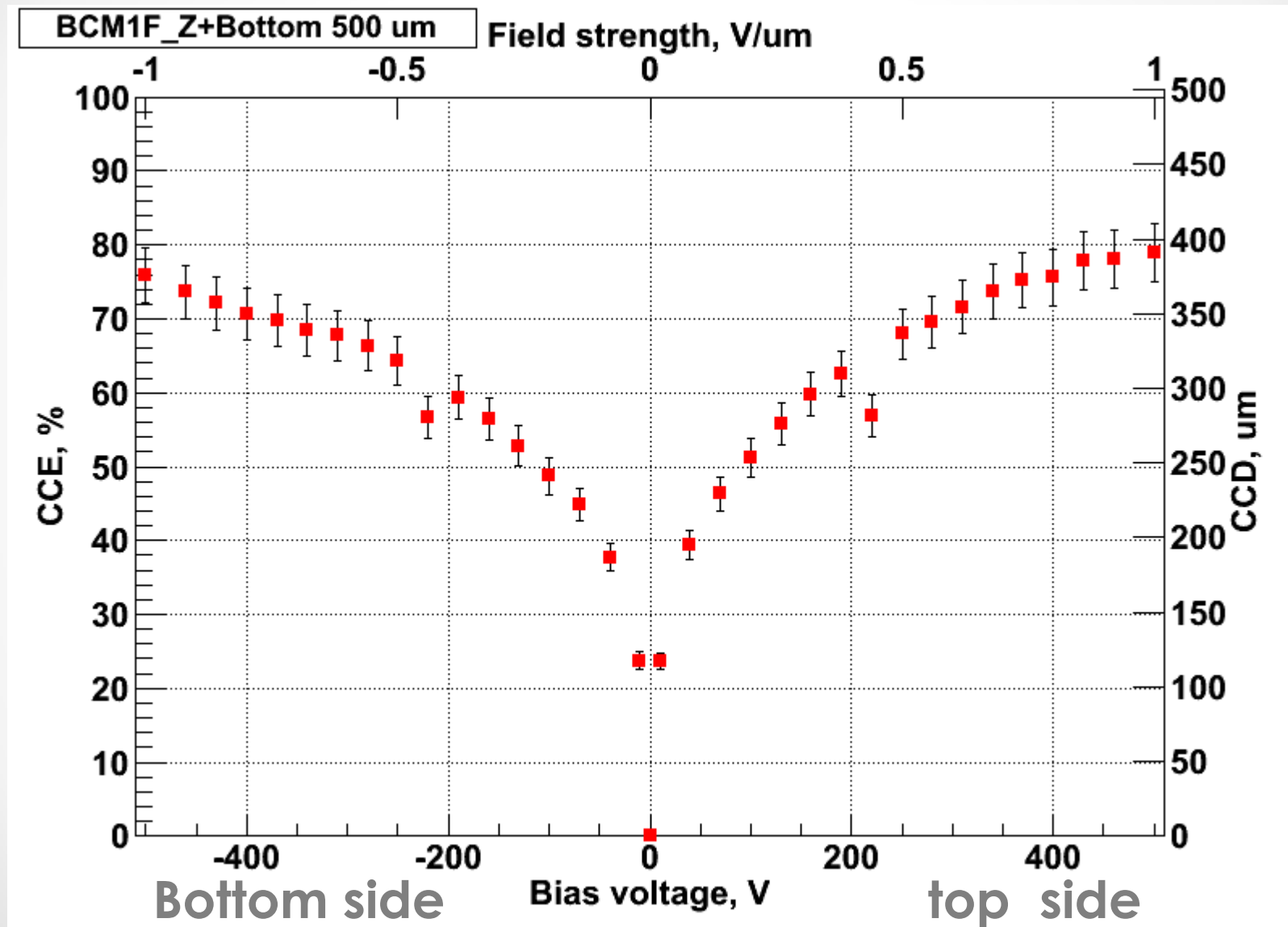
BMC1F sensors



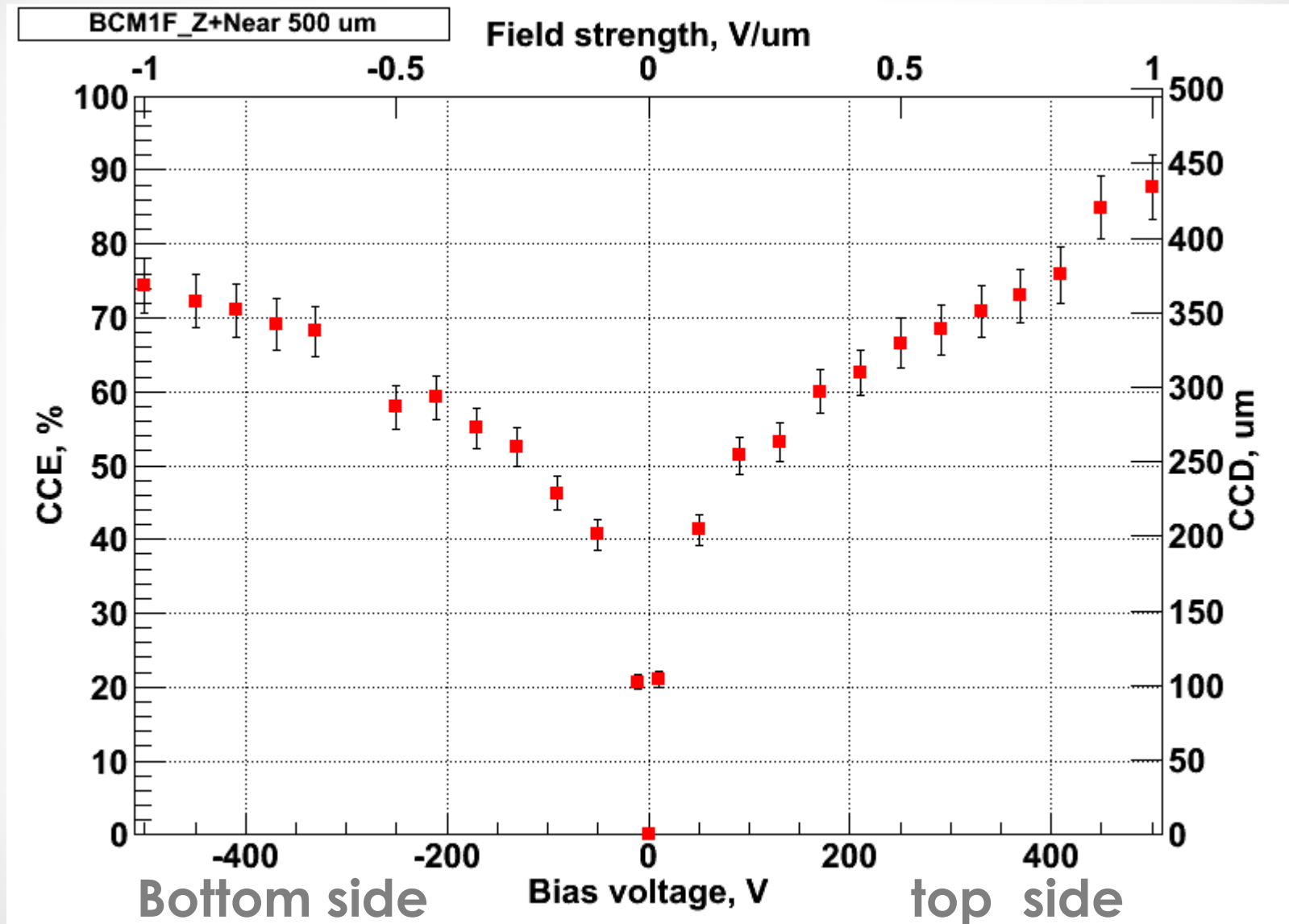
BCM1F diamonds

NAME	TOP SIDE	BOTTOM SIDE
+Z Bottom		
+Z Far		
+Z Near		
-Z Bottom		
-Z Far		
-Z Top		

Z+ Bottom



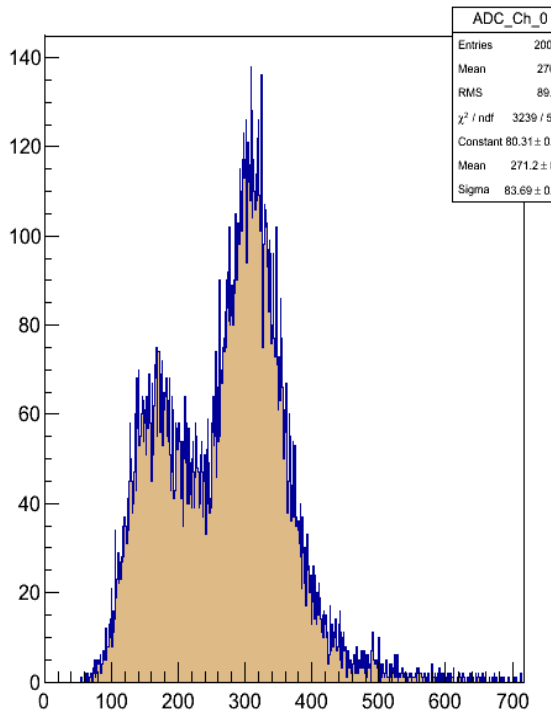
Z+ Near



Z+ Far (top side) - plots

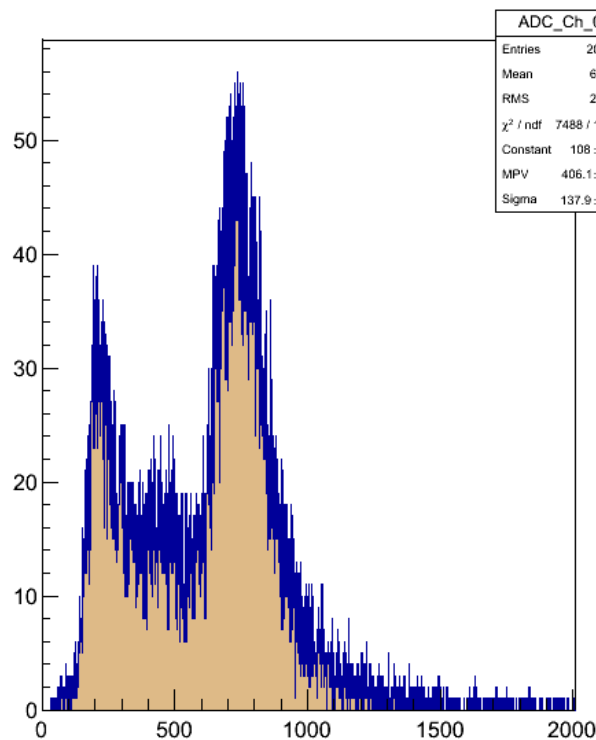
- 10V

PIZFar topPolar



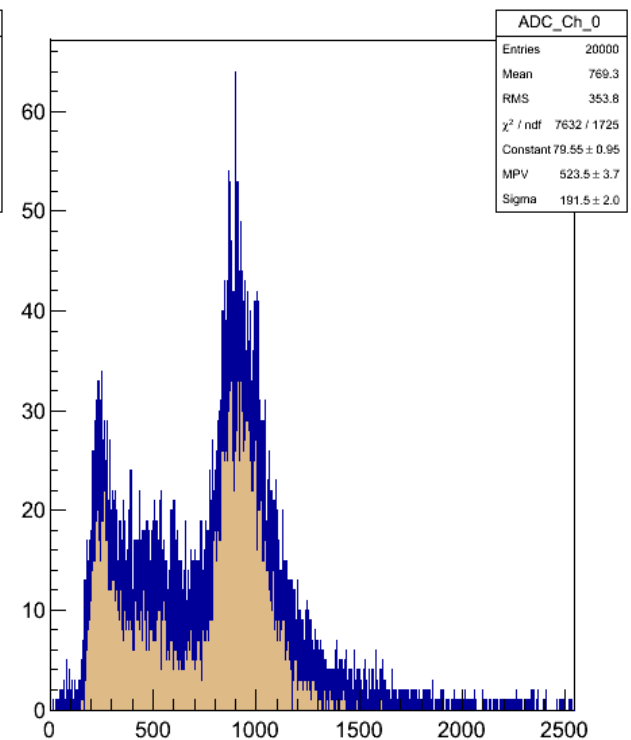
- 170V

PIZFar topPolar



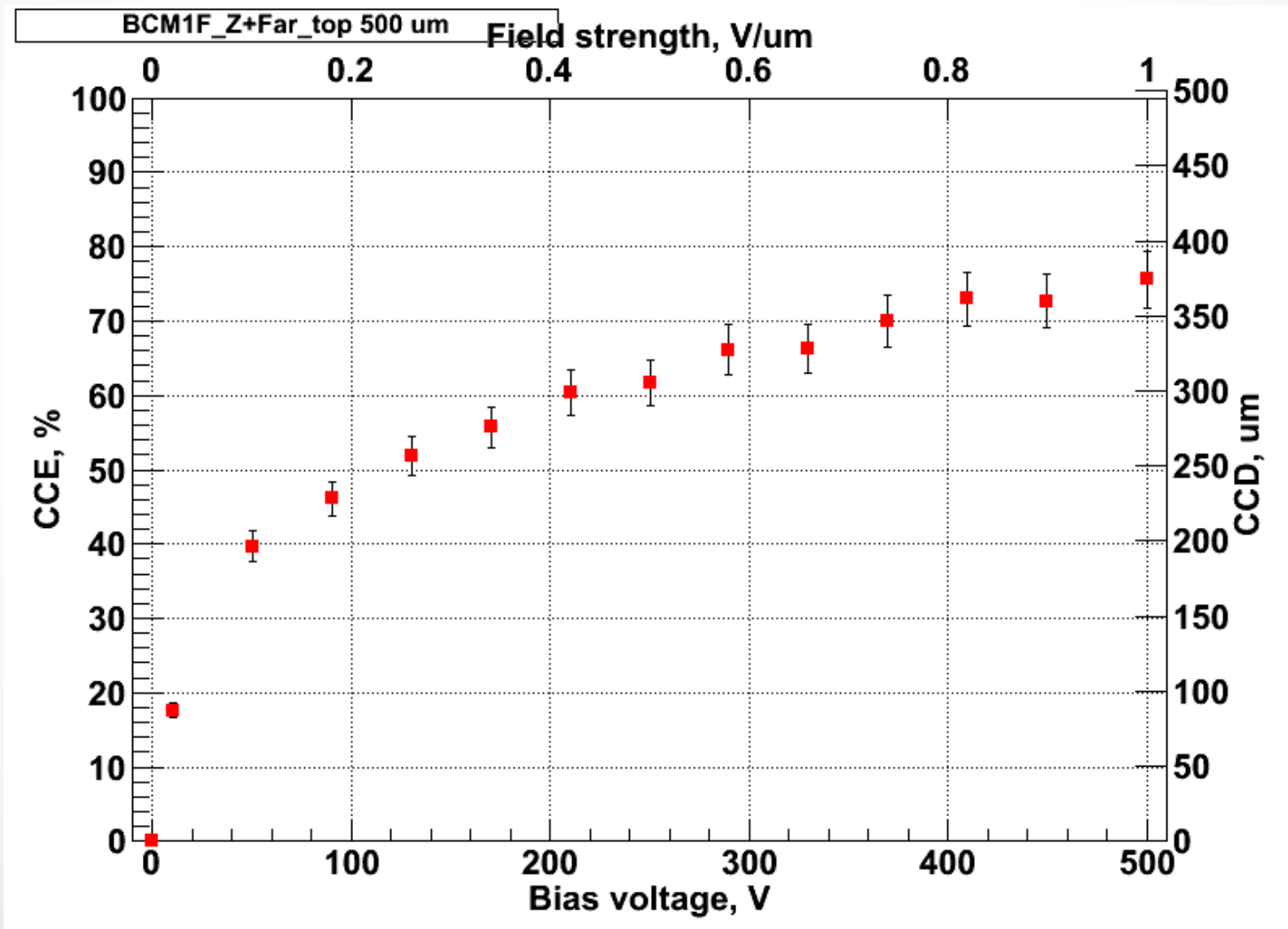
- 450V

PIZFar topPolar



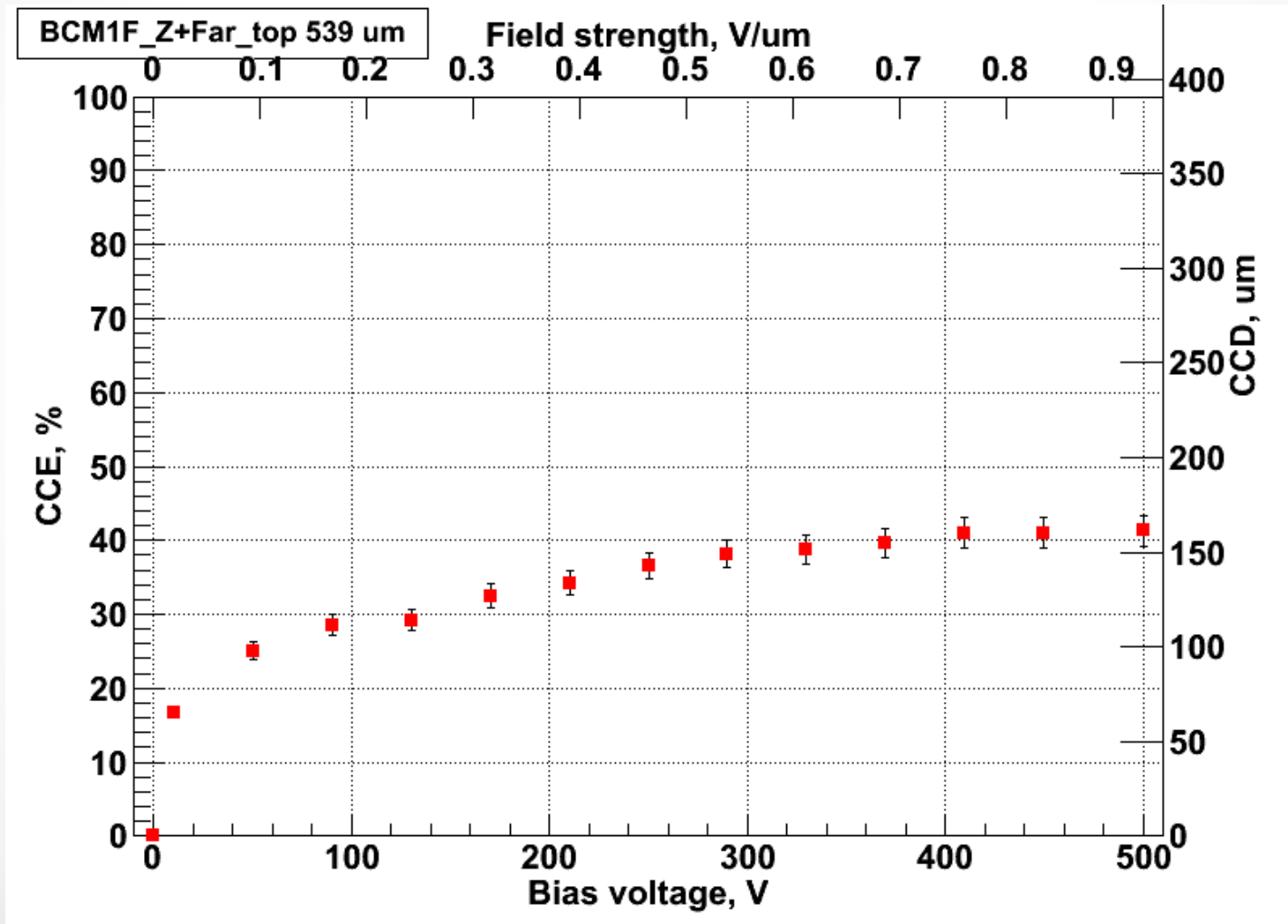
Z+ Far (top side) - CCE

Second peak



Z+ Far (top side) - CCE

First peak



The plan for this week:

- CCE measurements for remaining BCM1F diamonds with old setup