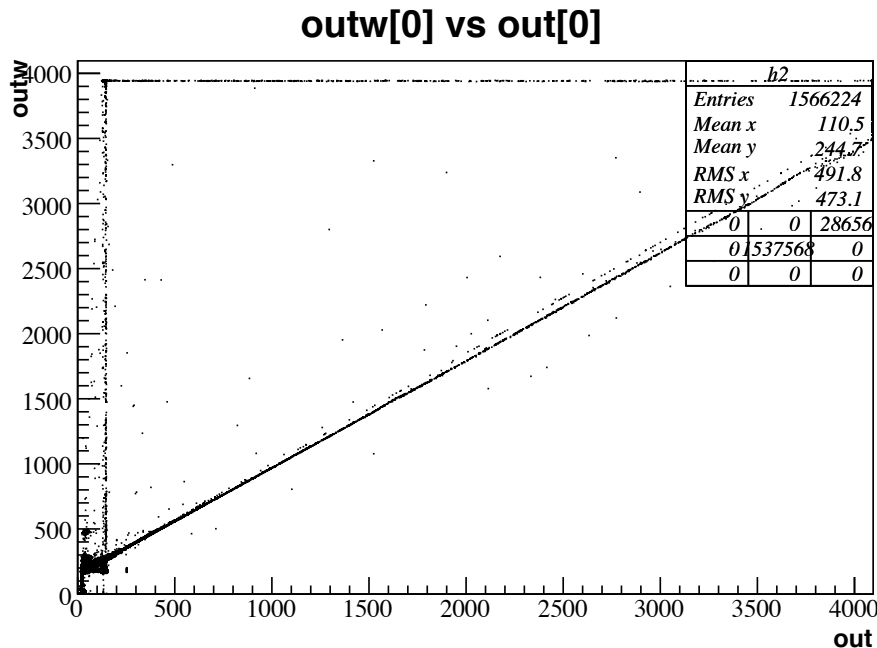


# outw vs out for a study of the second peak of pedestal

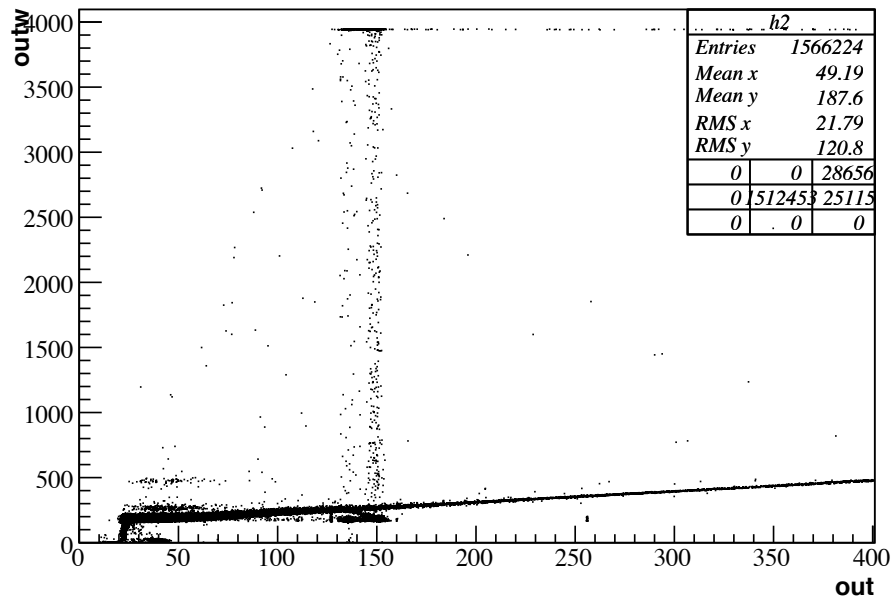
feature :

- the second peak width is too thin.
- there is some correlation between the second peak and X-ray mean channel.
- the pulser spectrum has this peak also.

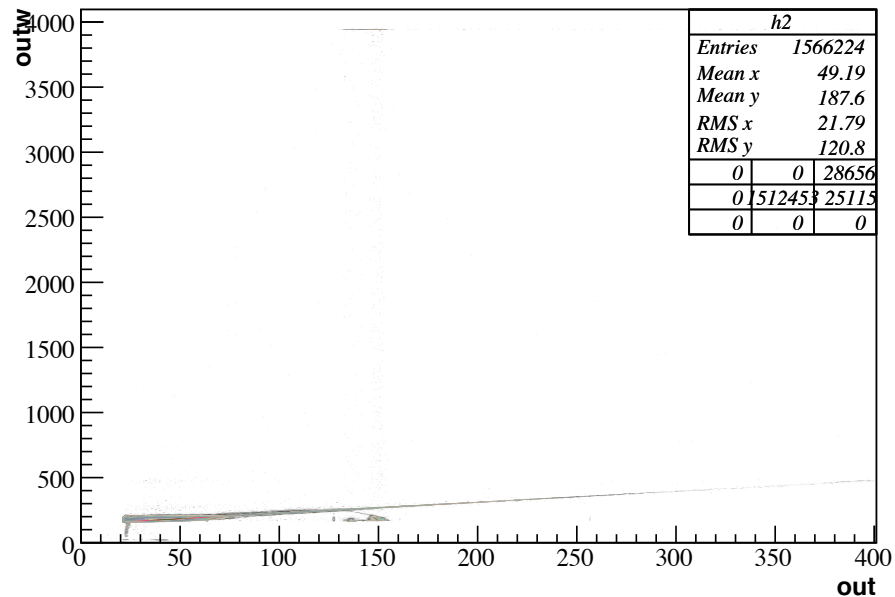


data : run 520  
sdd1 (outw[0], out[0])

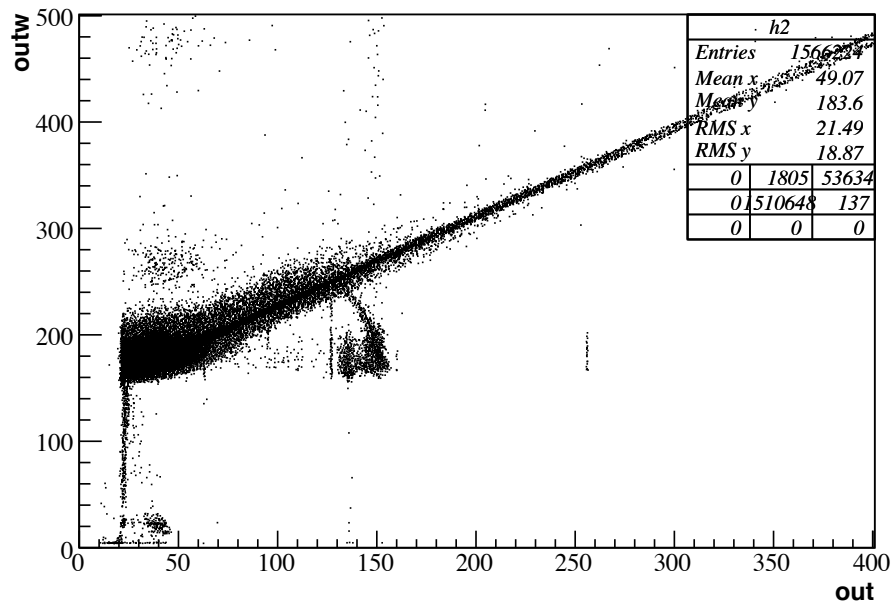
### outw[0] vs out[0]



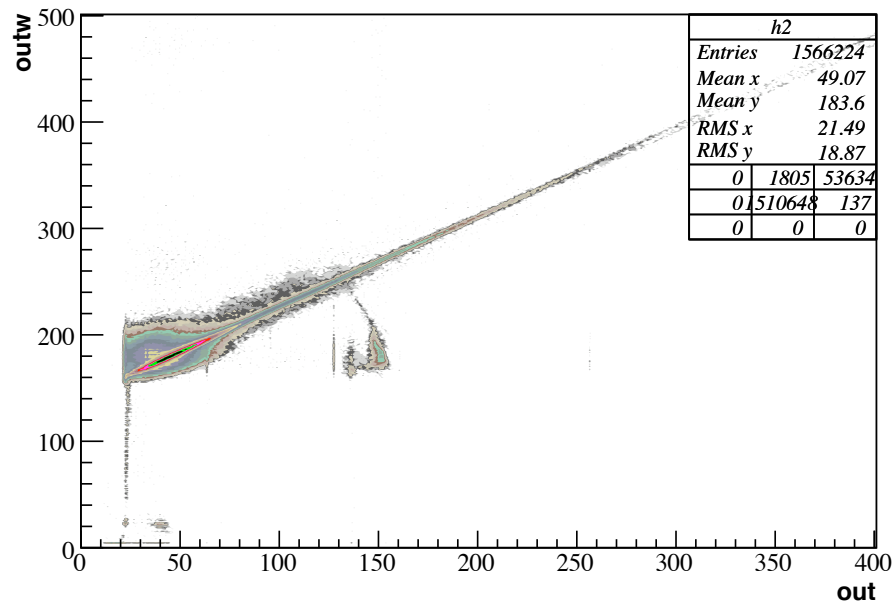
### outw[0] vs out[0] (logz)

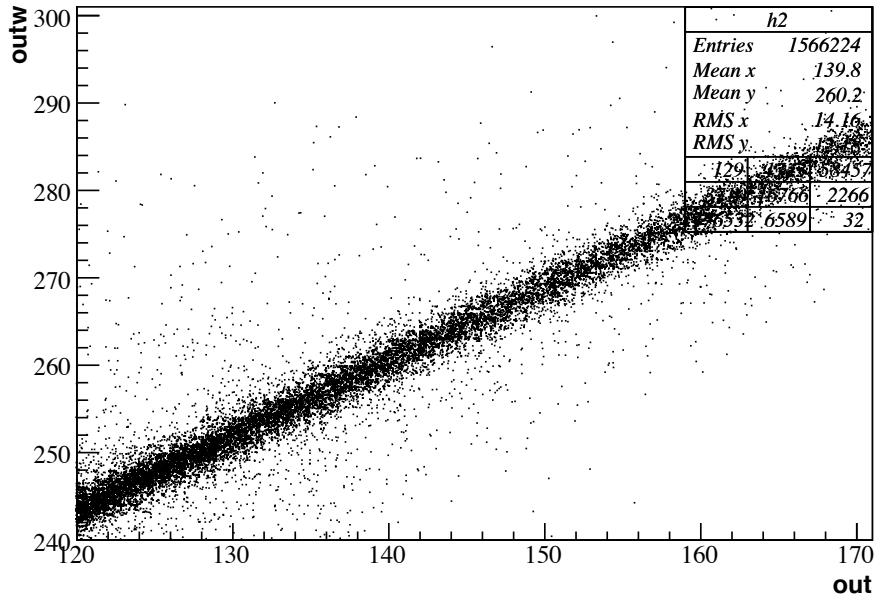
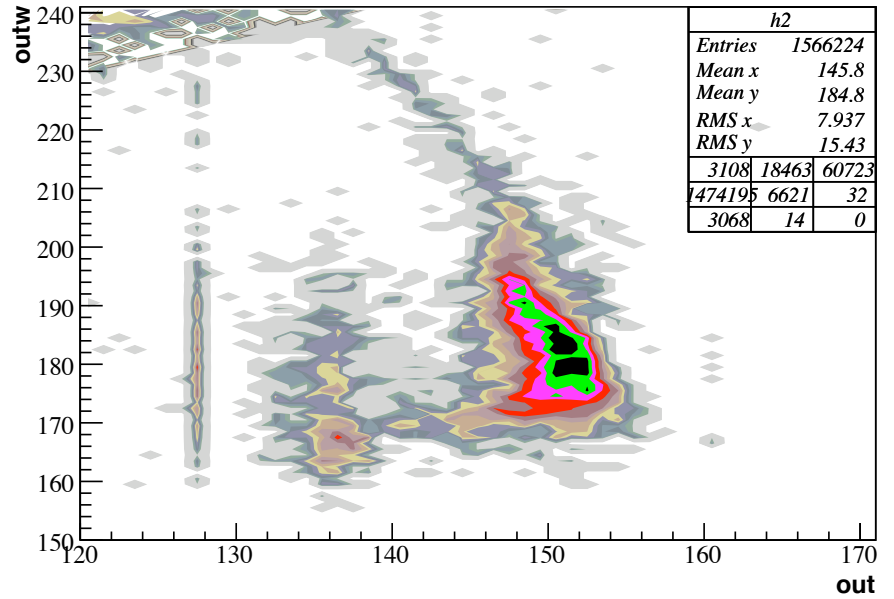
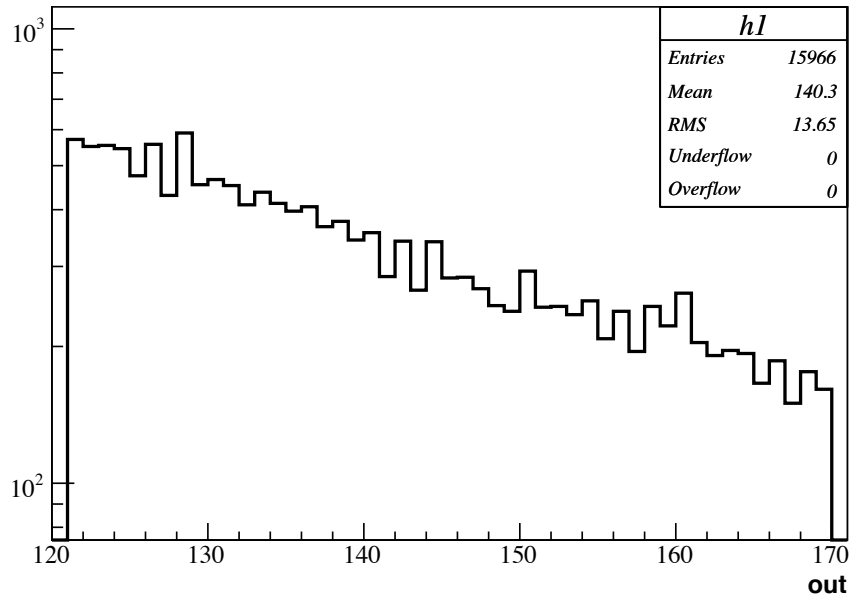
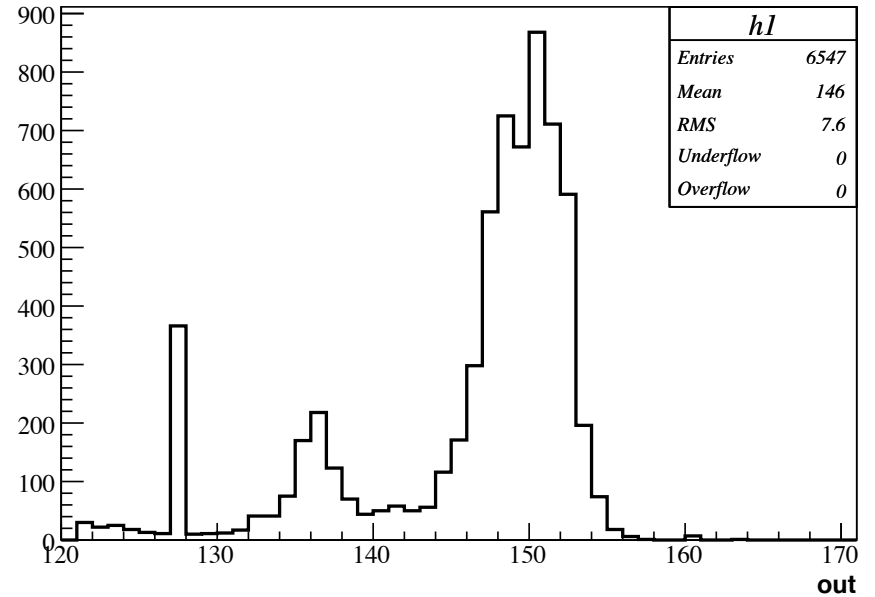


### outw[0] vs out[0]



### outw[0] vs out[0] (logz)

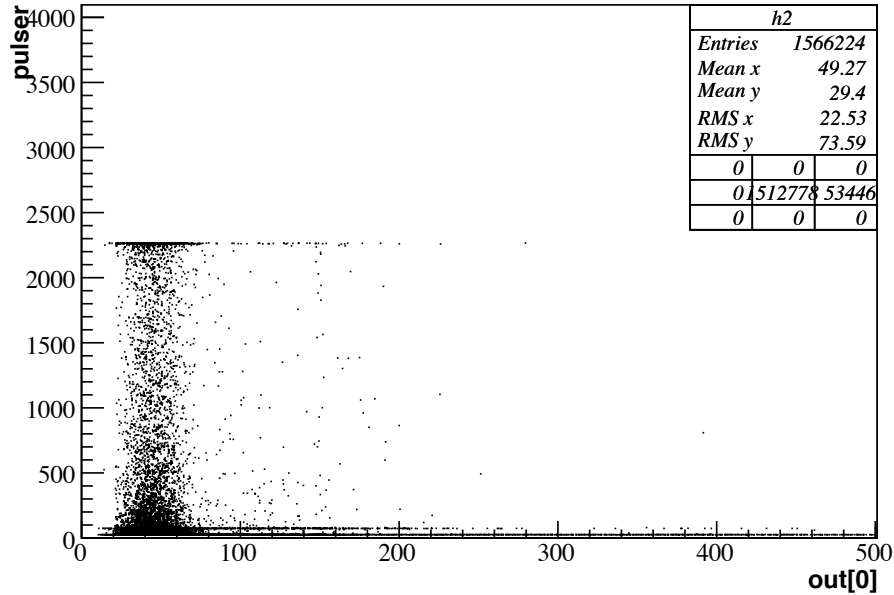


**outw[0] vs out[0]****outw[0] vs out[0] (logz)****out[0] (120<out[0]<170, 240<outw[0]<300)****out[0] (120<out[0]<170, 150<outw[0]<240)**

conclusion :

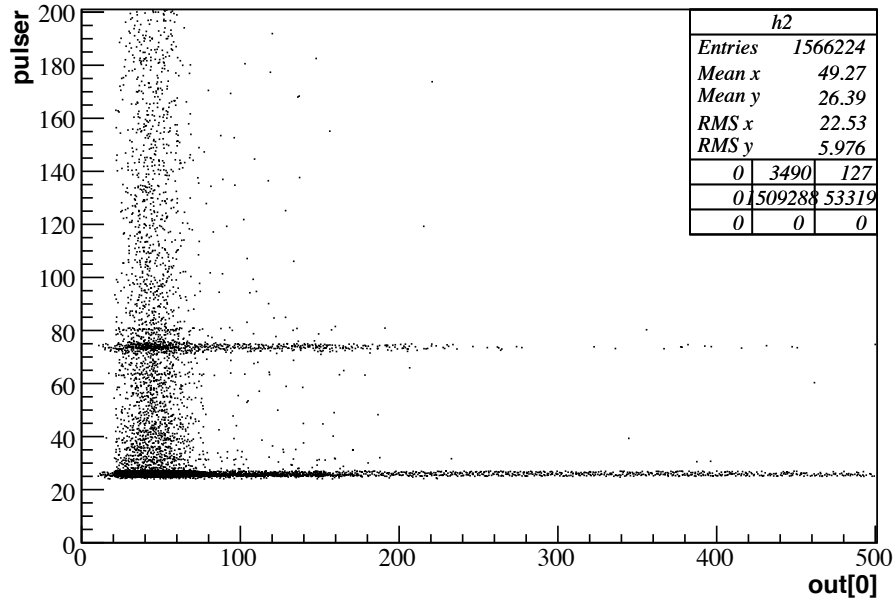
- the second peak is not on the correlation between outw and out. For Wilkinson type PH-ADC, the peak of out is within its pedestal region. So, the peak is localized by an unknown hardware process only for out.

**pulser vs out[0]**



there is no correlation between pulser and out, because the pulser data taking system is independent of the SDD system (preamp, shaping amp and ADC channels).

**pulser vs out[0]**



**pulser vs out[0] (logz)**

