INTT Sensor Test Result Check

NCU

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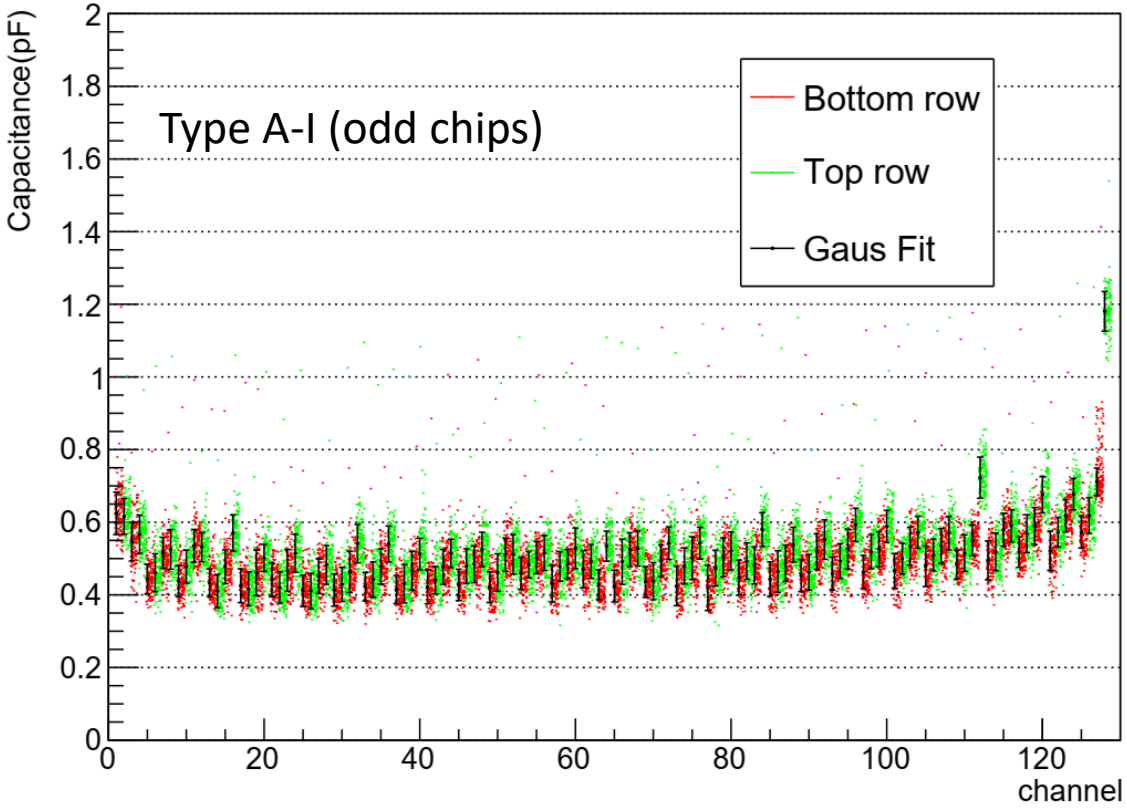
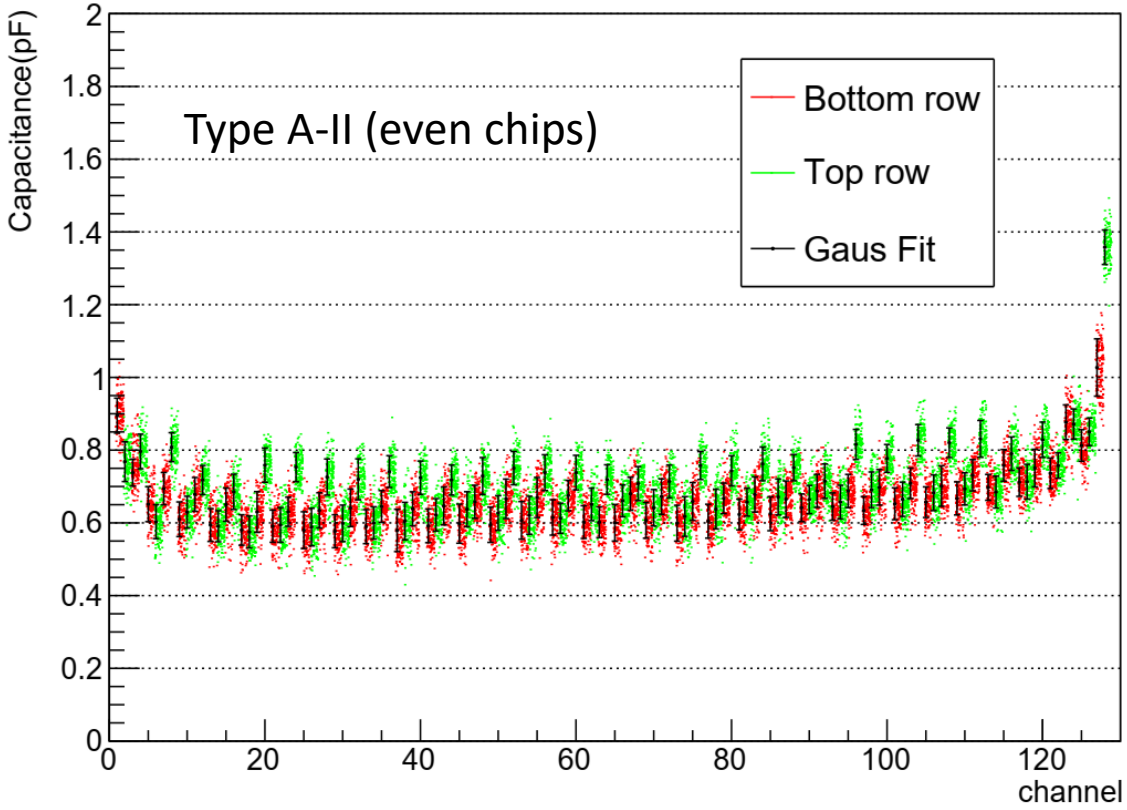
Capacitance Distribution of all Chips (Type A-1 & 2)

- The Mean value of A-I is lower than A-II, but the distribution also become to single gaussian.
- The Chip 13 of sensor 1147 need be re-measured. The value of all channels are higher, so there are some points out of range in left plot.
- The RMS of channel 127 in type A-I is little better than A-II, but still has wide distribution.





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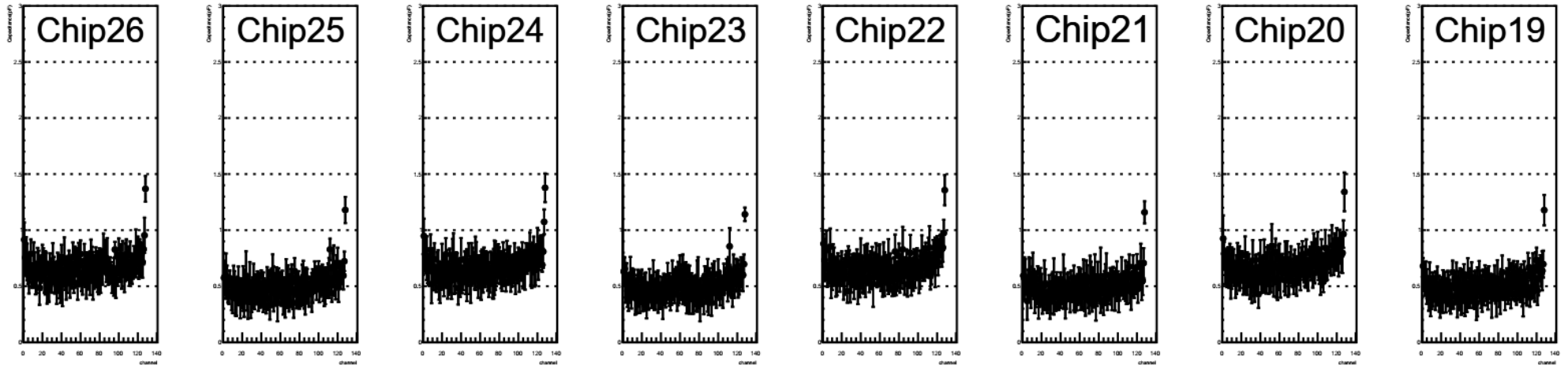
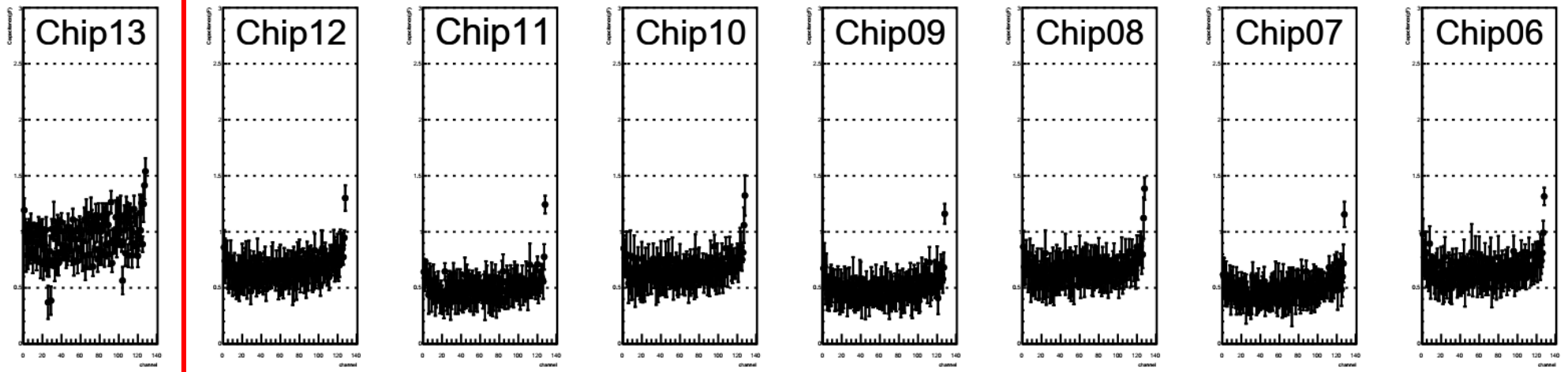
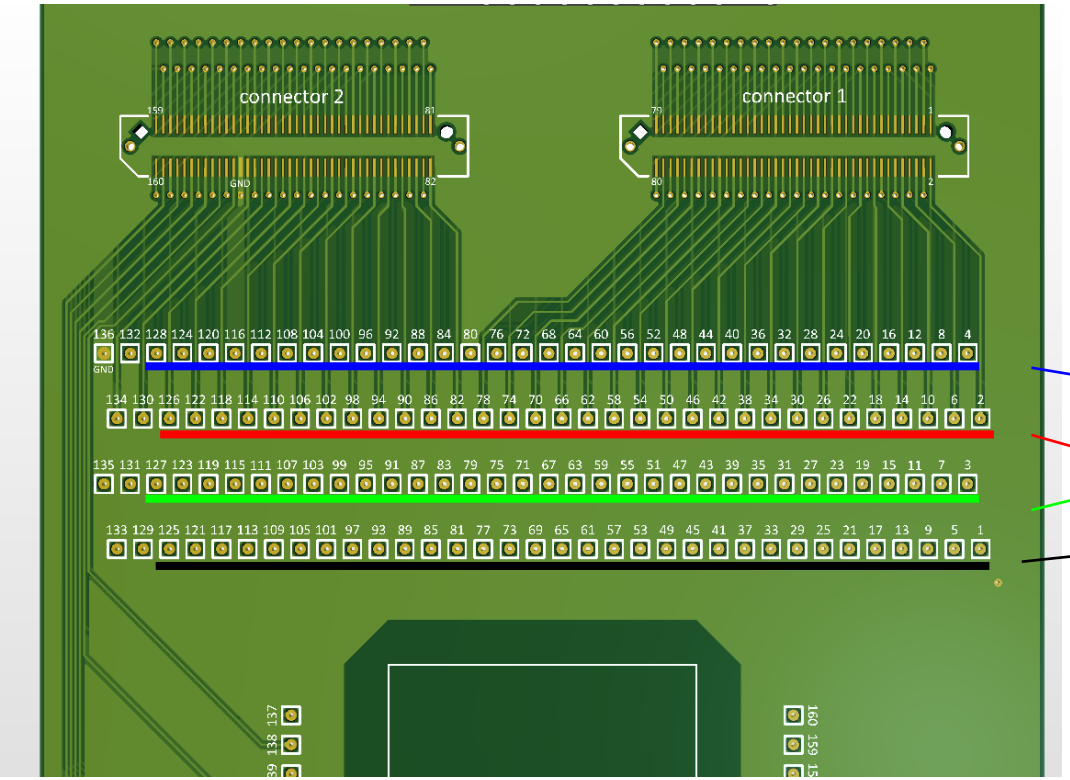


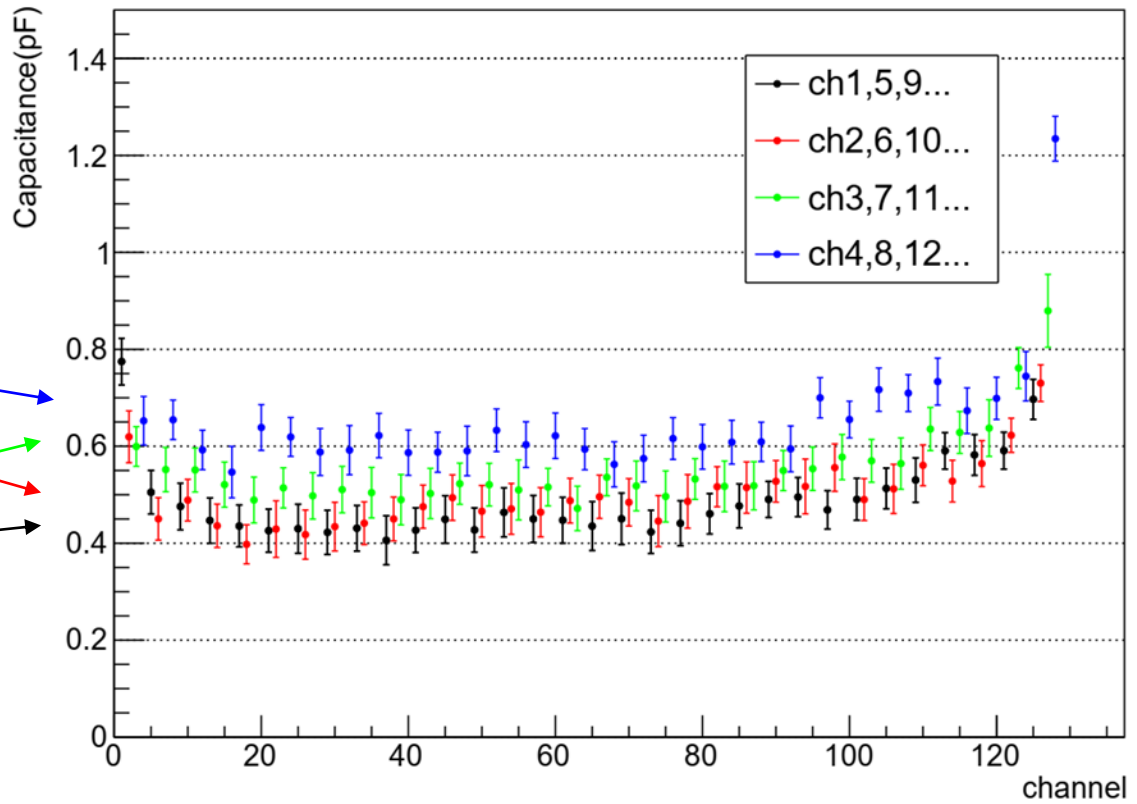
Type A Serial No.1147



Trend Analyzation

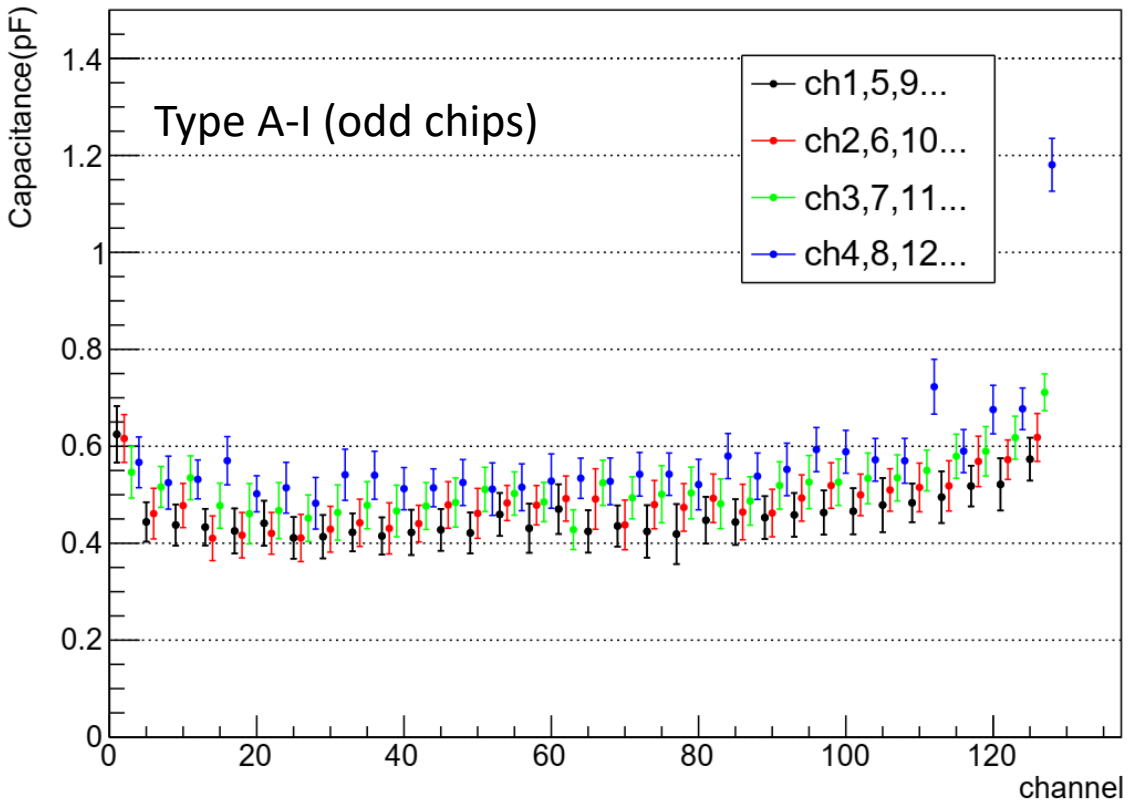
- I plot the capacitance of channels with four colors like the row of probe card. Each color correspond the different rows in the probe card.
- The probe card may contribute a part of difference between capacitance, but this contribution can't remove with background subtraction?
- However, this fluctuation is tinier than difference caused by broken.

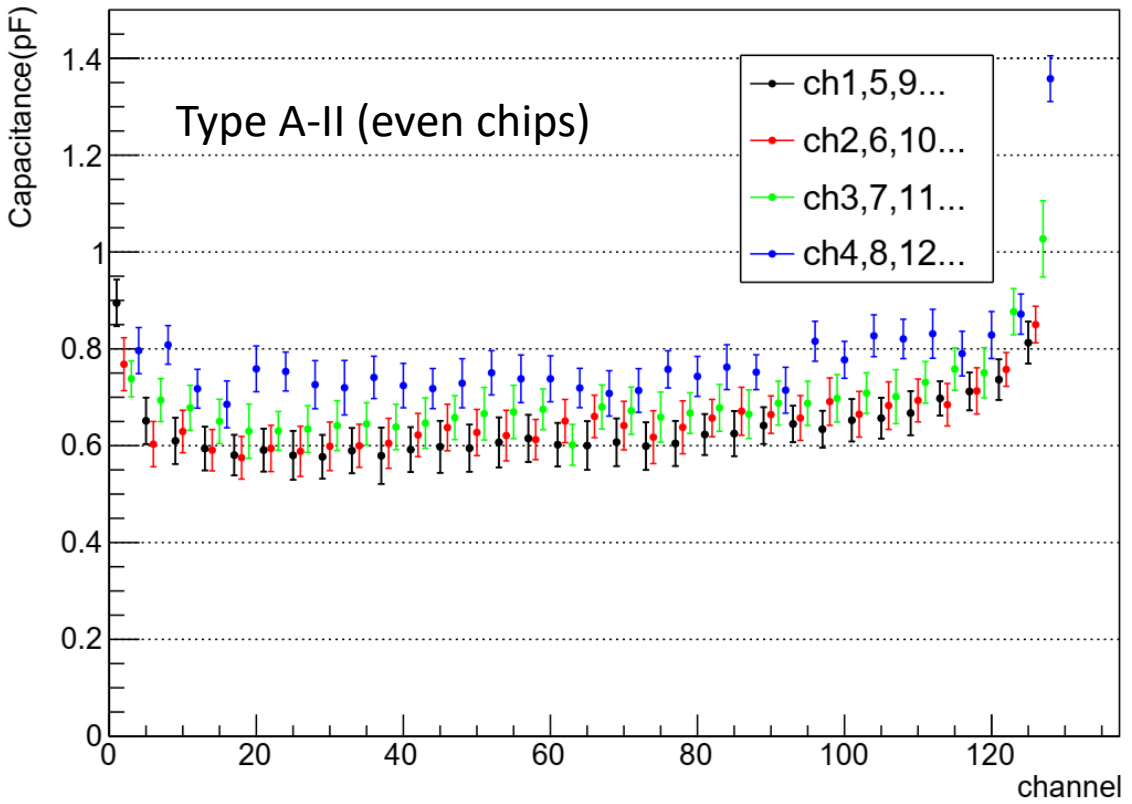




Trend Analyzation

- Type A-I still have the probe card effect, but the difference between each rows are smaller than A-II.





Summary

- The method2 can get single gaussian distribution in type A-I and A-II probe cards. However, the pedestal is different in each cards.
- The ideal of calibrate it:
  - Try the background subtraction, but I guess it can't have oblivious effect.
    - In quickly check (9 sample), the background of A-I and A-II is same level.
  - Use another sensor that have large pad to probe all probes on the same pad. Maybe can give the reference of fluctuation.
    - Large pad means large capacitance, so does this fluctuation is the same with INTT sensor?
    - The reference capacitance only can get by single probe.
- The type A-I re-measuring of 1134-1149 are finished (only chip 13 of 1147 need be re-measured). Now, we going to measure the type B of 1134-1149.
- About PostgreSQL, I had succeeded to save the data in local PostgreSQL (in NCU server). Now, I try to find the method to synchronize the database between RACF and NCU.