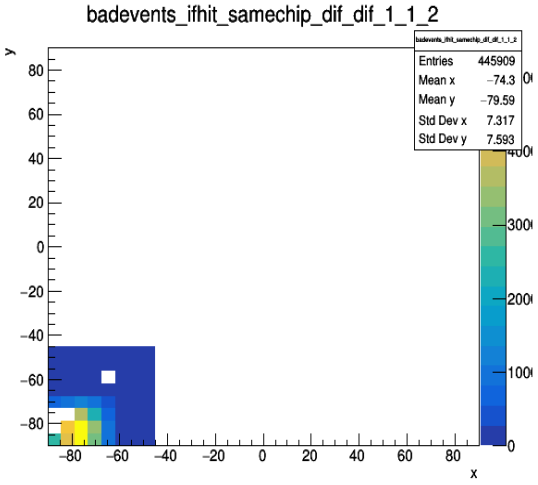
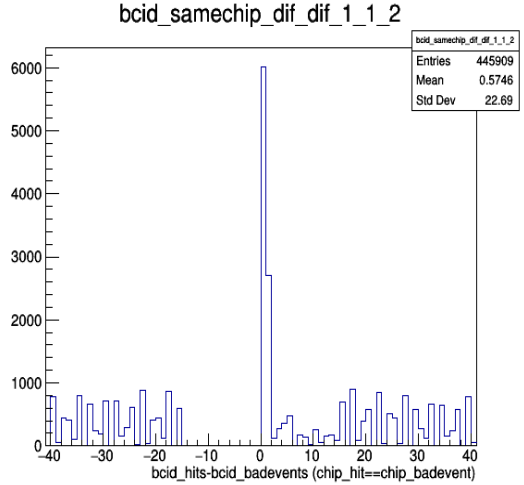
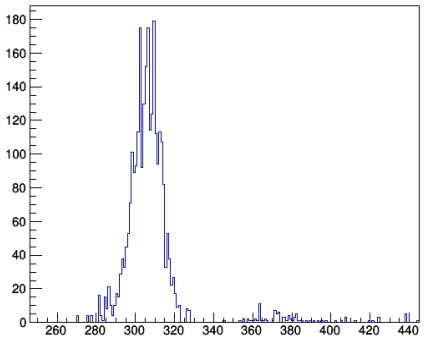
Retriggers vs plane events: when a good hit is present



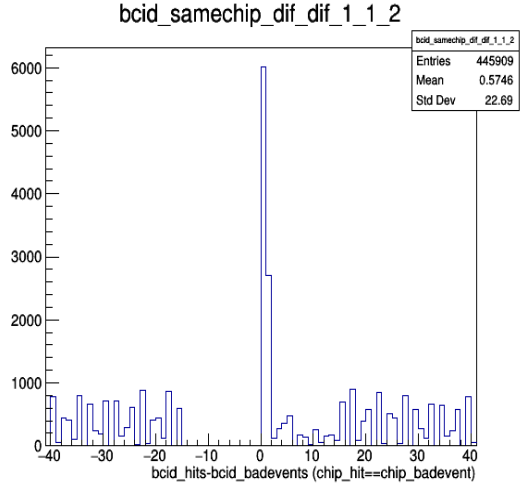


- Dif_1_1_2, grid00
- Selection:
  - Good hits are selected firstly.
  - Then, bad hits are search in **THE SAME chip, different channel** were the good hit was generated
  - Only chip15 for the good hit counting !!
  - bcid are compared (within a spill)
- Badbcid == retrigger and/or plane event
- In the same chip, there is no correlation between triggers and following retriggers

Retriggers vs plane events: when a good hit is present

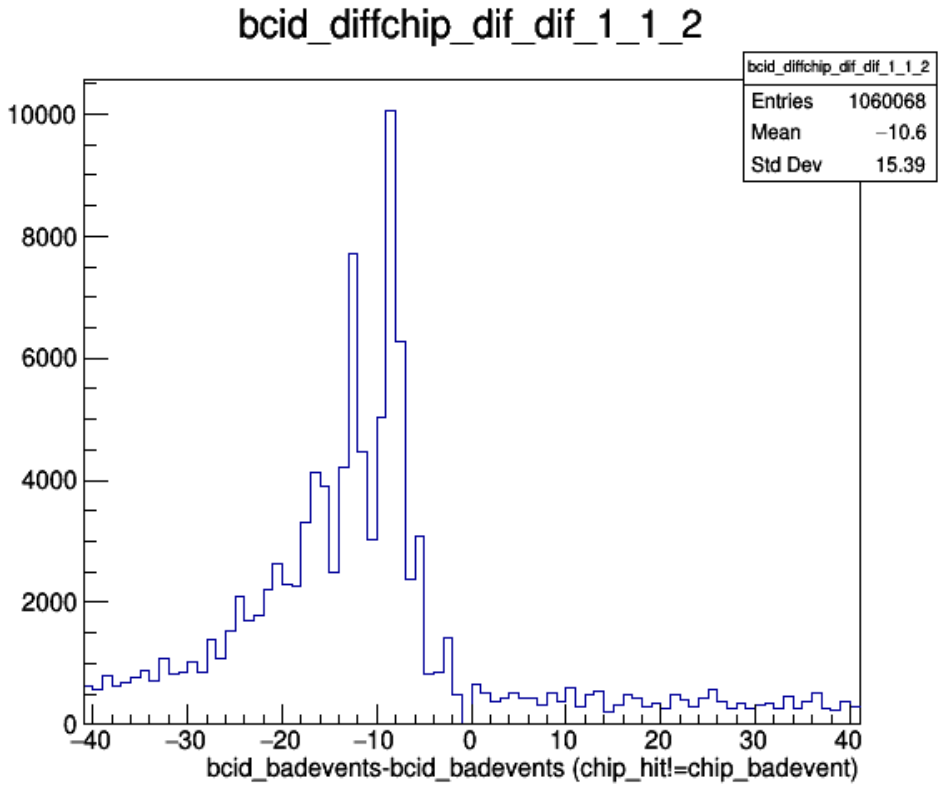


ADC distribution of bad events in the ~zero peak



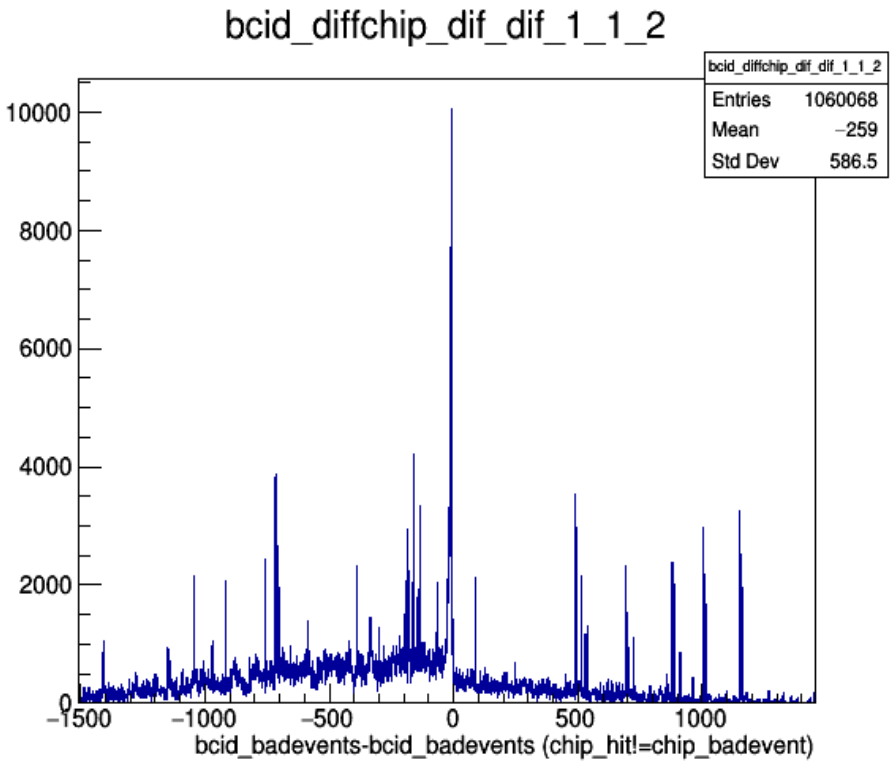
- The hit maps shows the bad events location if we had a good event in any other channel.
- The peak at zero looks like two electrons in the beam (?)
  - No because the ADC spectrum (leftmost plot) looks basically like pedestal (with very few entry in the MIP area)
  - ADC for all channels/sca
- BADBCID for these events is ~=3
- isca(bad)~=isca(good)-1
  - Just before (one bcid, one sca) a good hit, we have a retrigger entry in other channel in the same chip… how ??
- I suspect that I am still tagging some bad events as good events … NEED TO CHECK THE CONVERTER.

Retriggers vs plane events: when a good hit is present



- Dif_1_1_2, grid00
- Selection:
  - Good hits are selected firstly.
  - Then, bad hits are search in A DIFFERENT chip were the good hit was generated
  - Only chip15 for the good hit counting !!
  - bcid are compared (within a spill)
- Badbcid == retrigger and/or plane event
- Clear Pattern: 3,6,9,12,15 bcids after a hit, we see retriggers in other chips

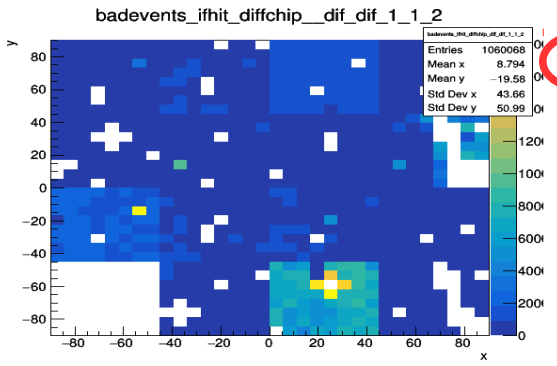
Retriggers vs plane events: when a good hit is present

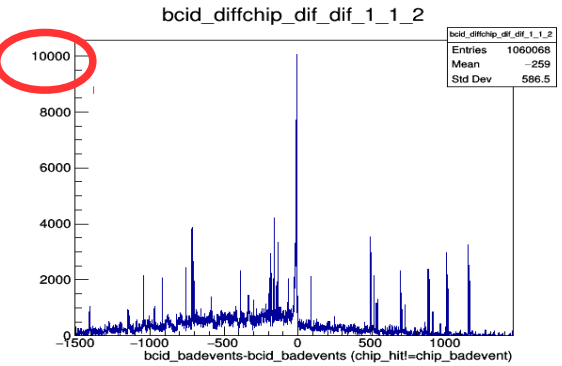


- Dif_1_1_2, grid00
- Selection:
  - Good hits are selected firstly.
  - Then, bad hits are search in A DIFFERENT chip were the good hit was generated
  - Only chip15 for the good hit counting !!
  - bcid are compared (within a spill)
- Badbcid == retrigger and/or plane event
- Unzooming:
- More complicated pattern !!

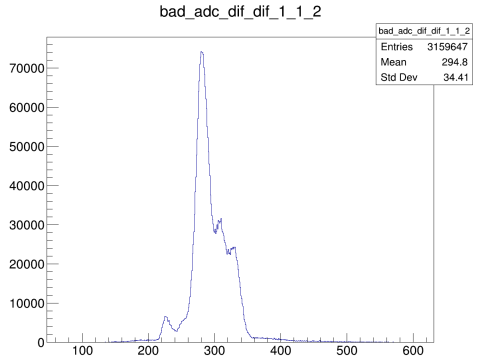
Retriggers vs plane events: when a good hit is present

- The bad events seem to be localizes in few channels (i.e. the cross in chip 11)

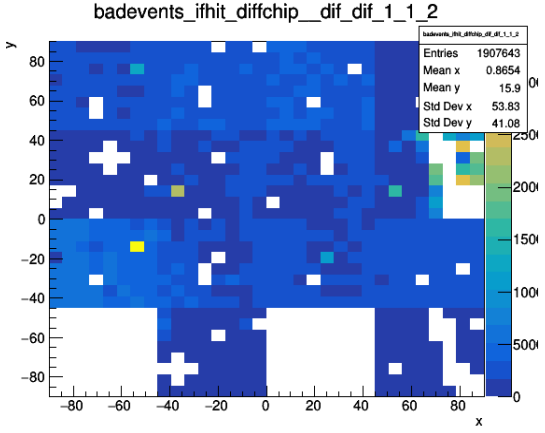


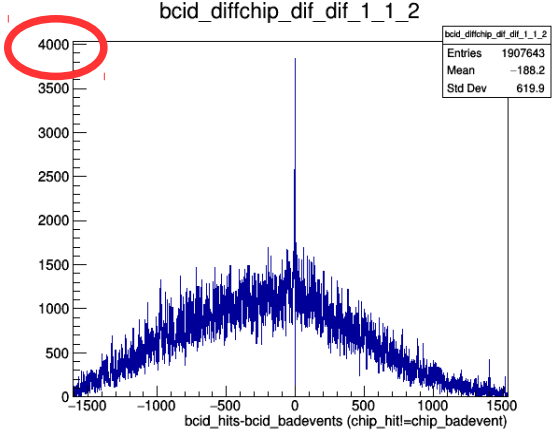


ADC distribution of bad events

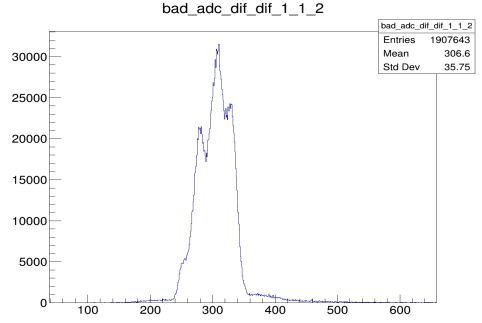


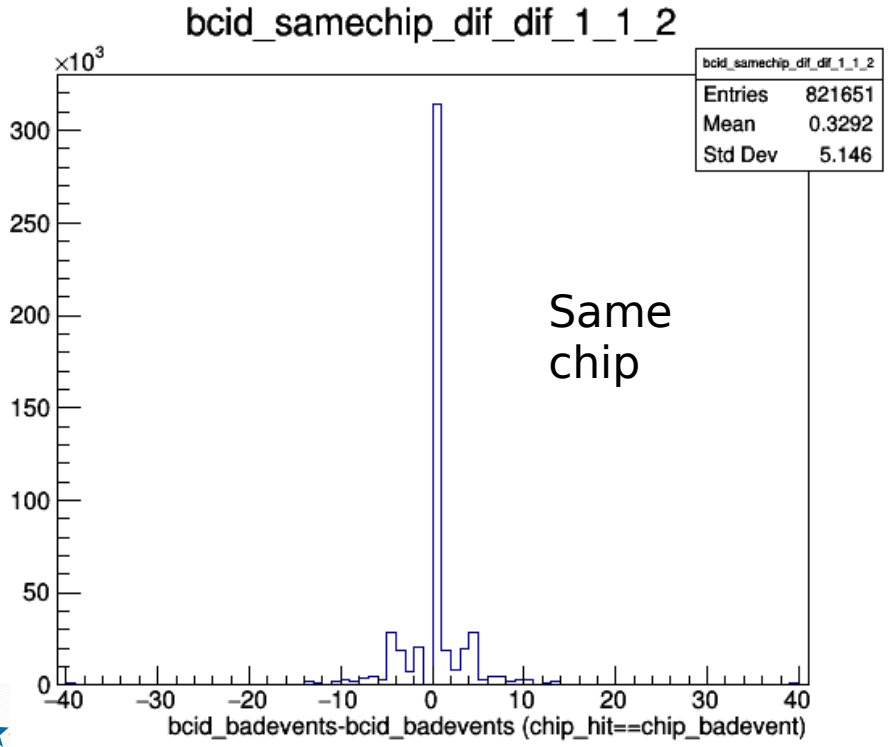
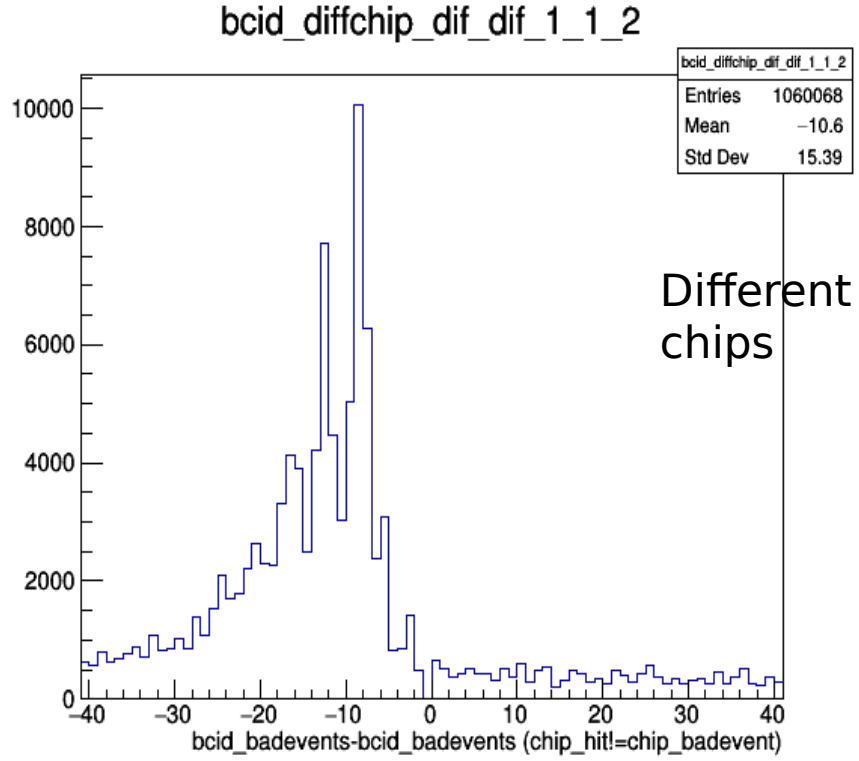
- What if we exclude chip 11?





ADC distribution of bad events



Retriggers vs plane events: when a BAD hit is present

- Same than before, but compare bad events with bad events. For same chip and different
  - including all chips, not only 15