Corrections algorithm
Status

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Generalities

Goal:

- Adapt the code of Olivier to make it run on raw BGV data

Strategy :

- Create an algorithm in Gaudi that creates an mdf file with corrected ADC values
- In parallel, transform the raw mdf data to root file that can be read by Olivier for comparison later
- Using Gaudi (LHCb) environment explained because is the same as the simulation and allow to re-use (with modifications) the clustering algorithm

List of corrections

- Channel ordering ?
- Pedestal subtraction
- Header correlation
- Channel correlation
- Attenuator gain correction
- SiPM channel gain correction

Status

- Algorithm created : OfflineADCCorrections
- Data transformed to apply easier Olivier's code
- Pedestal subtracted from hand-made vector
- Corrected ADC stored in TES, not yet in mdf file
- Compiling and running with Boole (using Vetra ?)

Next step

To do in priority:

- algorithm to create pedestal file
- loading configuration files
- save to mdf
- implement header correction and common mode
- enjoy nice corrected data

Question : Do we have pedestal data ?

More questions

- How often to change pedestal?
- How often to check other corrections factors?
- Valdir: where to find your track reconstruction?
- Plamen: using modified ClusterMaker reasonable?

Short term goal

Implement the important corrections

Provide instructions to run the corrections and analyse them

When : End of next week, after I will be on vacations