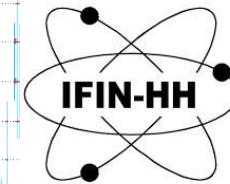


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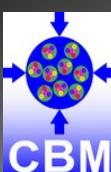
www.ifin.ro



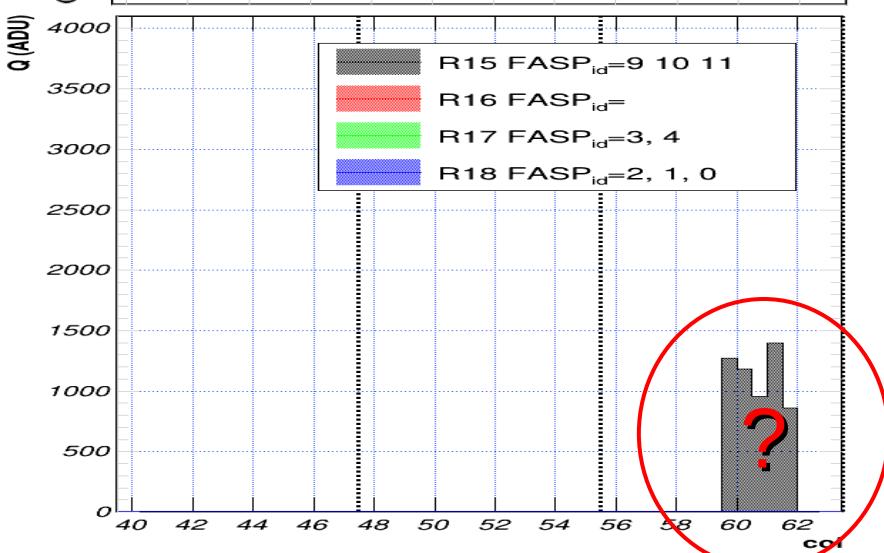
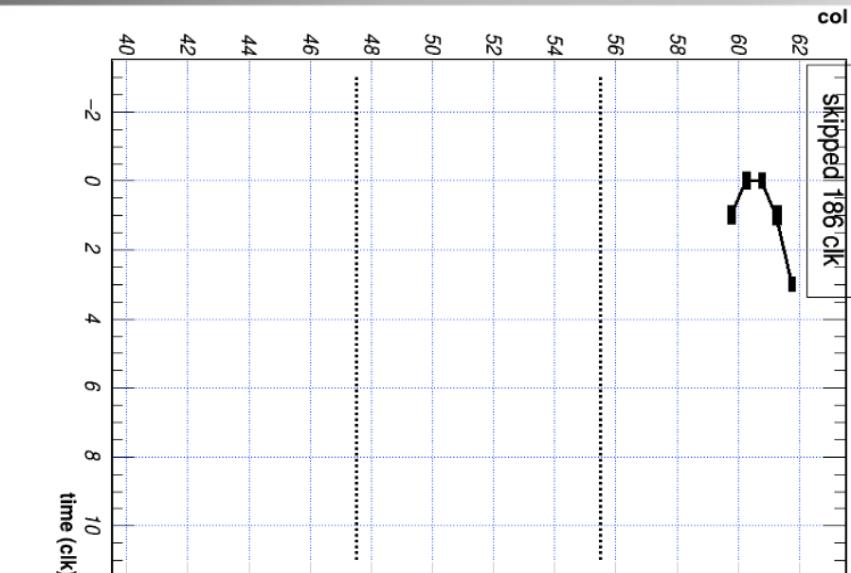
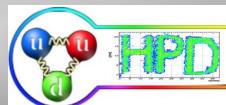
Trd2d Bug Fix in Read-out

Alex Bercuci and Claudiu Schiaua

*mCBM Data Analysis Meeting
14th June 2022*



Wrong PRF



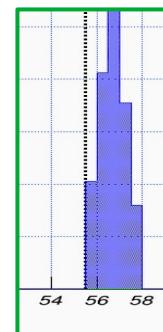
A. Bercuci, TRD summary ;39th CBM Collaboration meeting

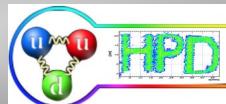
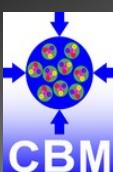
The observation

- Digi times OK,
- Cluster size OK
- Pulser (charge) tests OK
- **Pad Response Function (PRF) WRONG**

Consequences

- Heavily decreased position resolution
- Energy deposit reconstruction spoiled





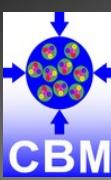
The problem and the fix

The ADC (LTC-2315-12) from each channel reported for a prompt trigger the previous value. Claudio could identify such a interpretation on the documentation

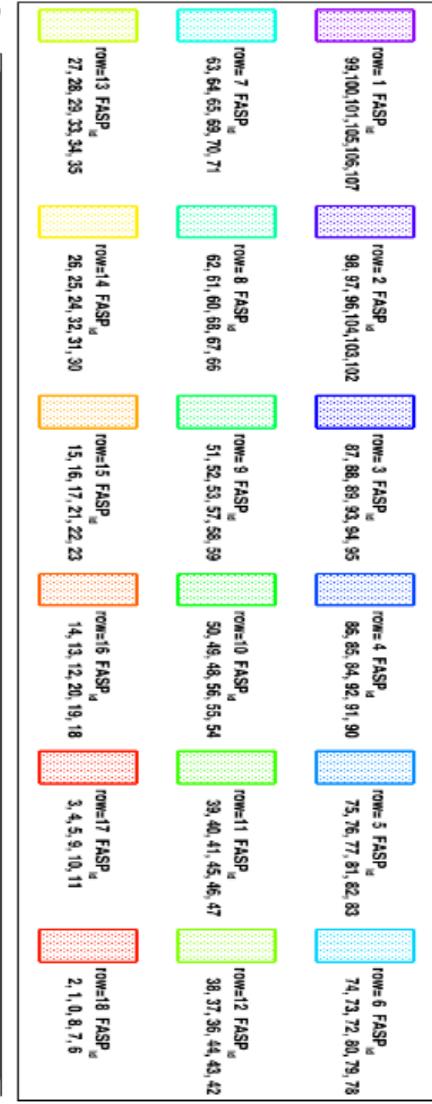
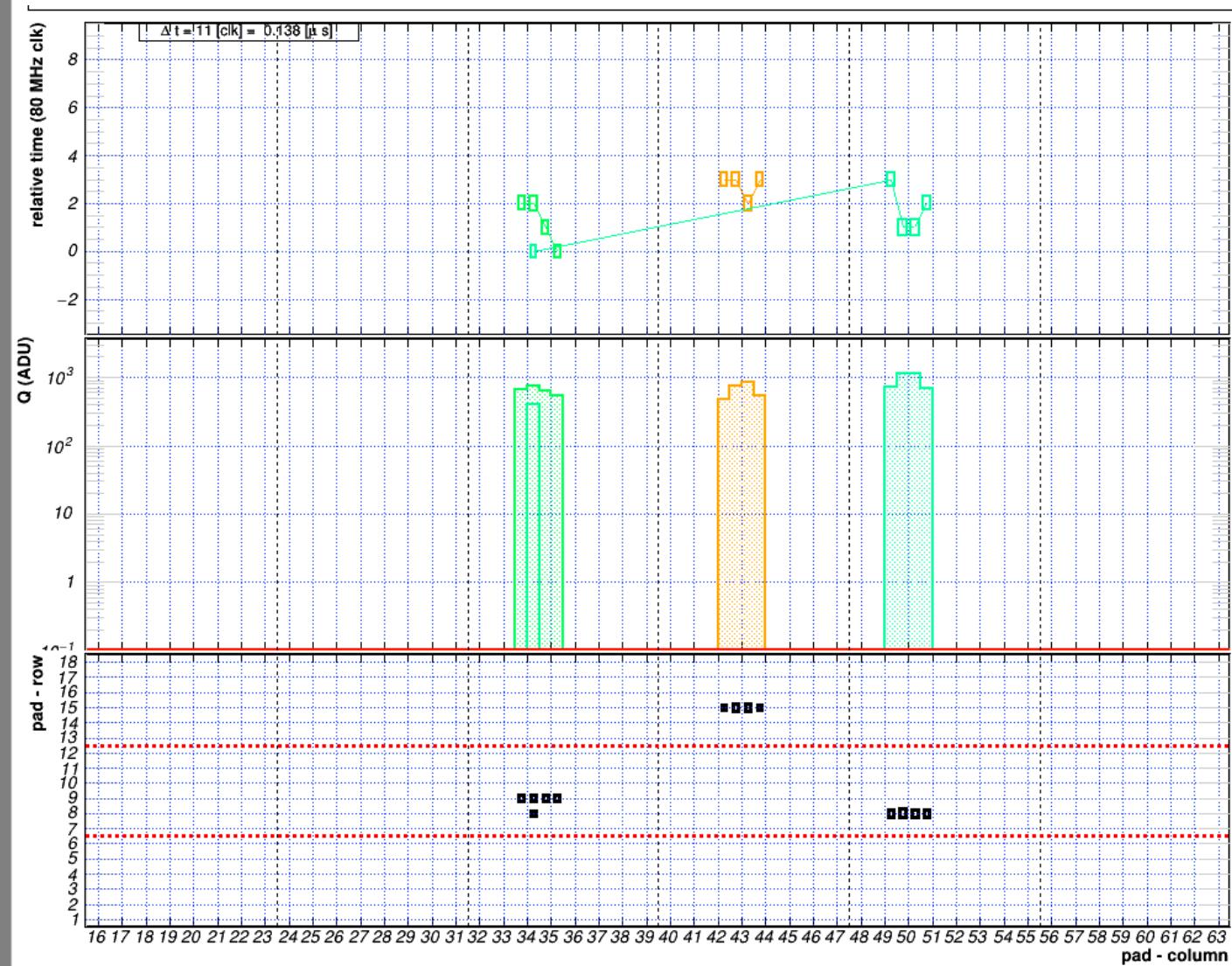
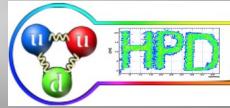
Consequences

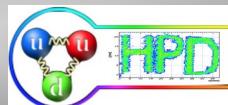
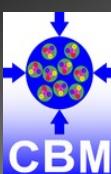
- The “problem” is fully recoverable, all data (since 06-21) taken with TRD2D are correct
- Unpacking has to be redone with a version containing the commit

<https://git.cbm.gsi.de/a.bercuci/cbmroot-mcbm/-/commit/9748e7fd0f2e69673a298585035c72b6c1d77c75>



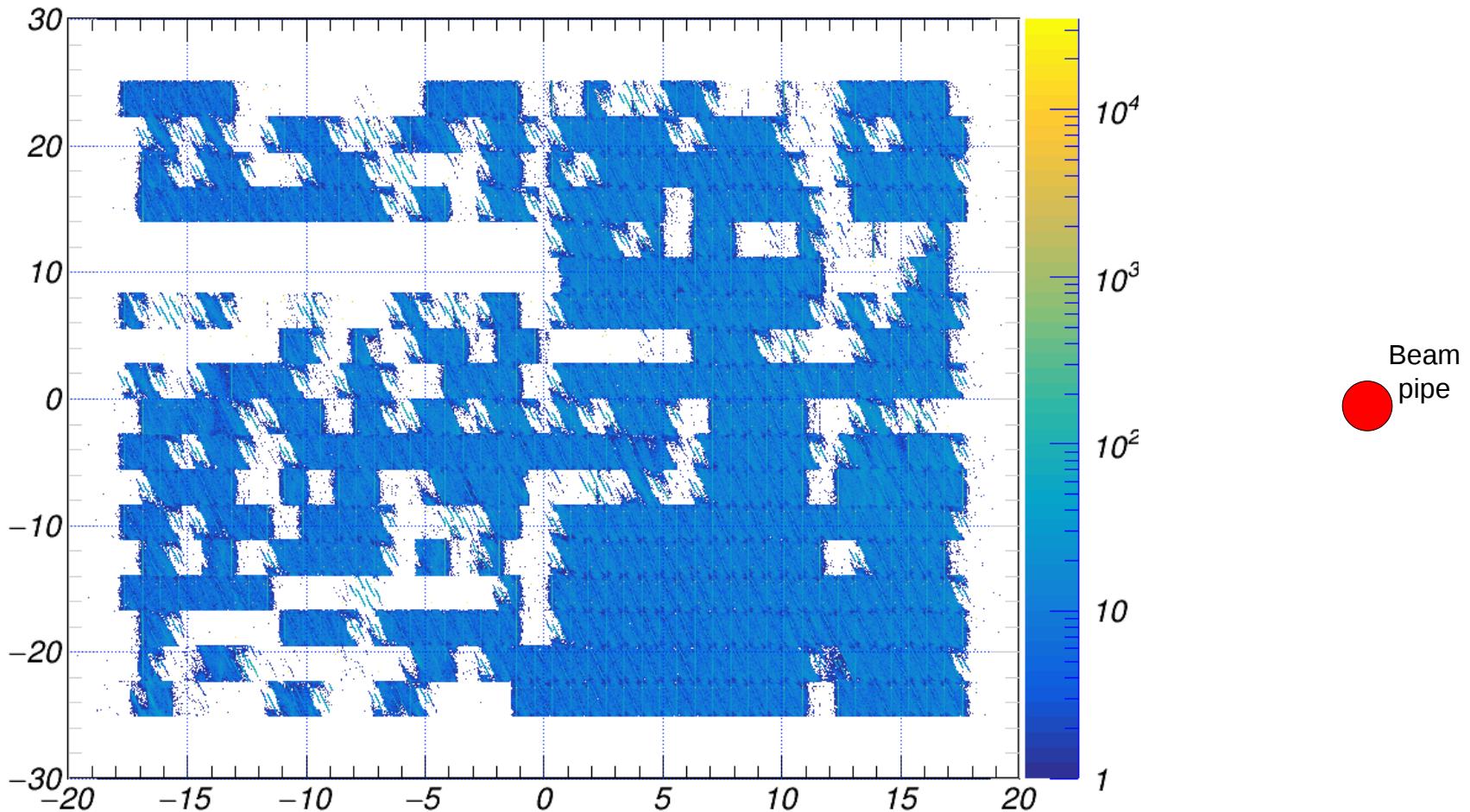
Correct PRF in run 2365





Trd2d position

-TrdHit.fY:TrdHit.fX {TrdHit.GetClassType()==1}



Thu Jun 9 16:04:07 2022