

NAIA and Isotopes



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Rich Reflected hits and Issue #95 (Merge #70)

Add the number of PMTs fired by reflected photons. In the master only the total number of photons used is stored in

```
short NHitsUsed = 0;    ///< Total number of Rich hits used for ring reconstruction RichRingR::getU
```

I have replaced this variable by this:

```
std::array<short, 2> NRingHits{0, 0}; ///< Number of hits used in the ring (direct, reflected)
```

so that both the number of direct and reflected hits are stored.

Also slightly changed the description of `RichCharge` to account the remarks I made in the issue [#95 \(closed\)](#) and fixed the possible bug on

```
short NAIA::RichPlusData::RichAdditionalData::RichPMTs
```

which I raised in the same issue. I still do not know if this is an actual bug so I can remove this "bug fix" before the merge.

Closes [#95 \(closed\)](#)

Z>2 data set

I have produced an Heavy Ion Skimmed Dataset of NAIA v1.1.0.

It contains all the event which pass loose Charge Greater Than 2 masks:

```
bool UTOF    = event.CheckMask(NAIA::Category::ChargeGT2_Tof);  
bool UTOFSt  = event.CheckMask(NAIA::Category::ChargeGT2_Tof_St);  
bool TRCK    = event.CheckMask(NAIA::Category::ChargeGT2_Trk);  
bool TRCKSt  = event.CheckMask(NAIA::Category::ChargeGT2_Trk_St);  
  
bool charge_selection = ( (UTOF) || (UTOFSt) || (TRCK) || (TRCKSt) );
```

You can find the dataset here:

`/storage/gpfs_ams/ams/users/erobyn/bo-ionsanalysis/batch/output/IonSkimming/v1.1.0`

Whenever I am able to use gfal I will transfer the dataset to

`/storage/gpfs_ams/ams/groups/AMS-Italy/ntuples/v1.1.0/ISS.B1236.ZGT2`

Please let me know if you have any problem using the reduced dataset

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