Comparing GSI data with Gleam simulations for Z=14

1/ Data sets

* **data: run 186** (cocktail , autorange, position 6*6)
* **calibration :** FP for 6*6 logs
                    SC for other logs
* **MC: Gleam v7r3p2 modified by TR to include GSI geometry**
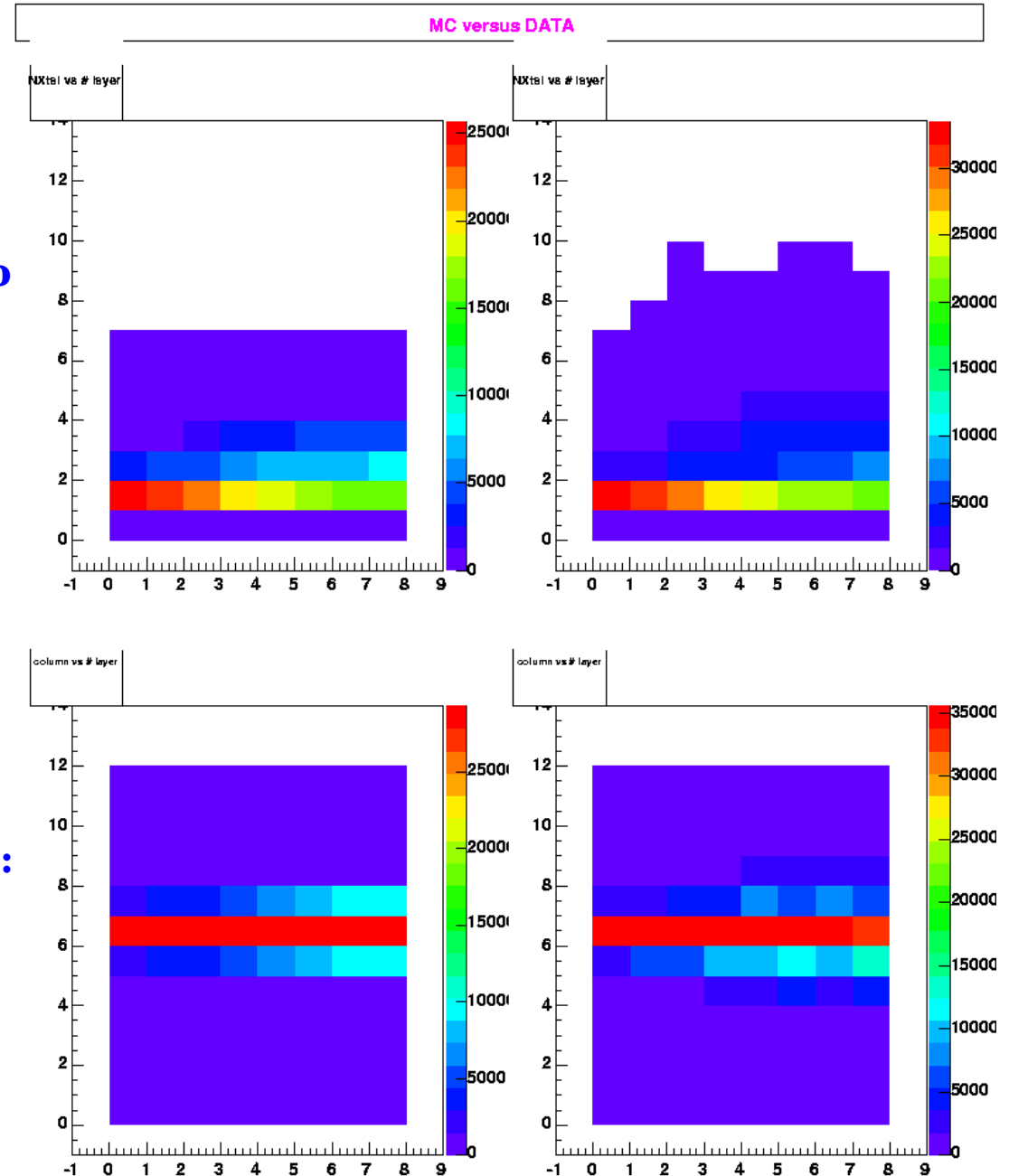
Rem: pencil beam or +-5mm beam give same results

2/ Filtering procedure :

* **clustering**
1 cluster = consecutive hits > 120 MeV (i.e. far above HEX1 pedestal)

* **computes efficiency/layer and**
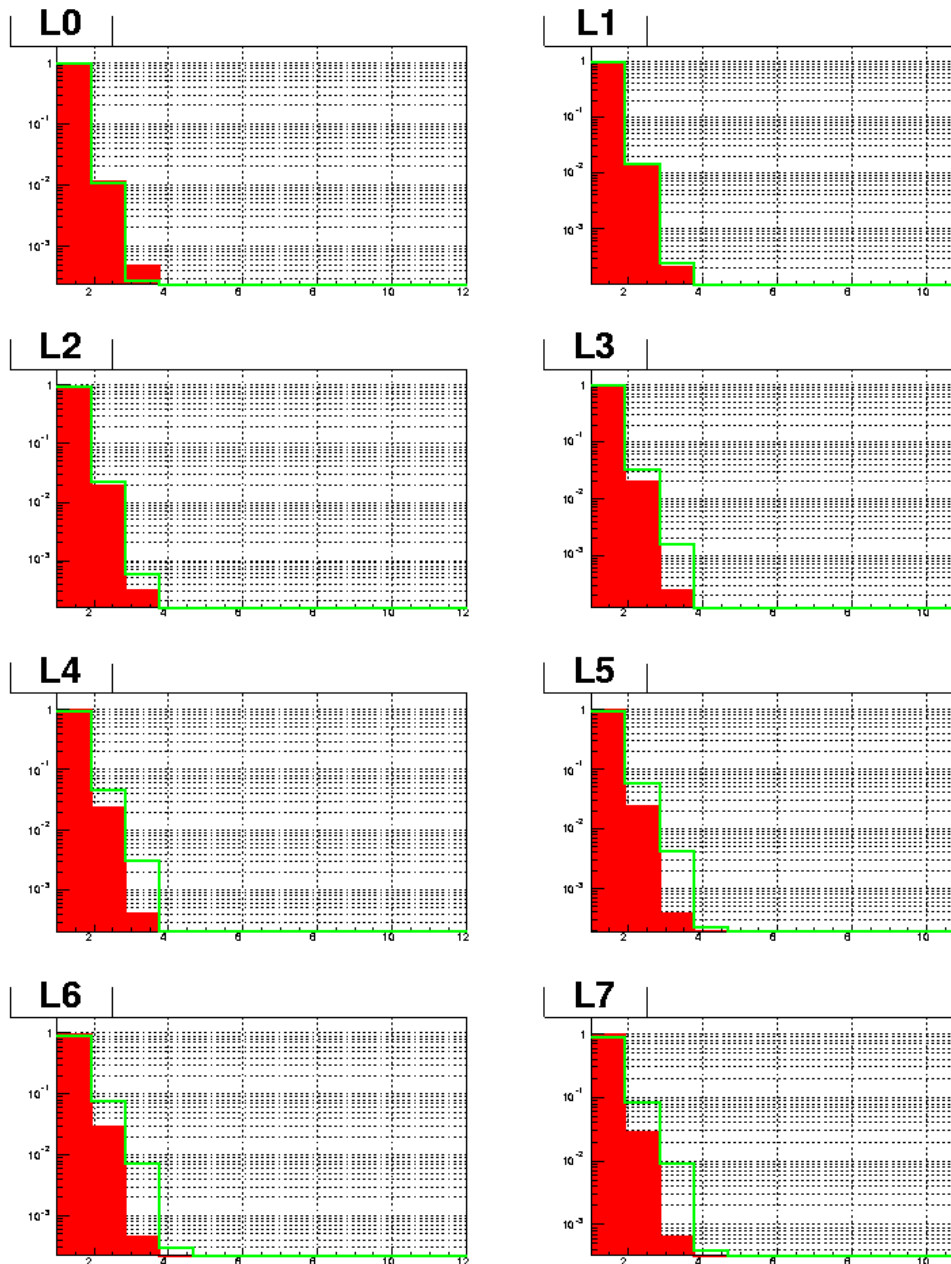**Nlayers = nb of consecutive layers with :**

  - **1 and only 1 cluster**
  - **<=2 hits in this cluster**
  - **Log number = 6**
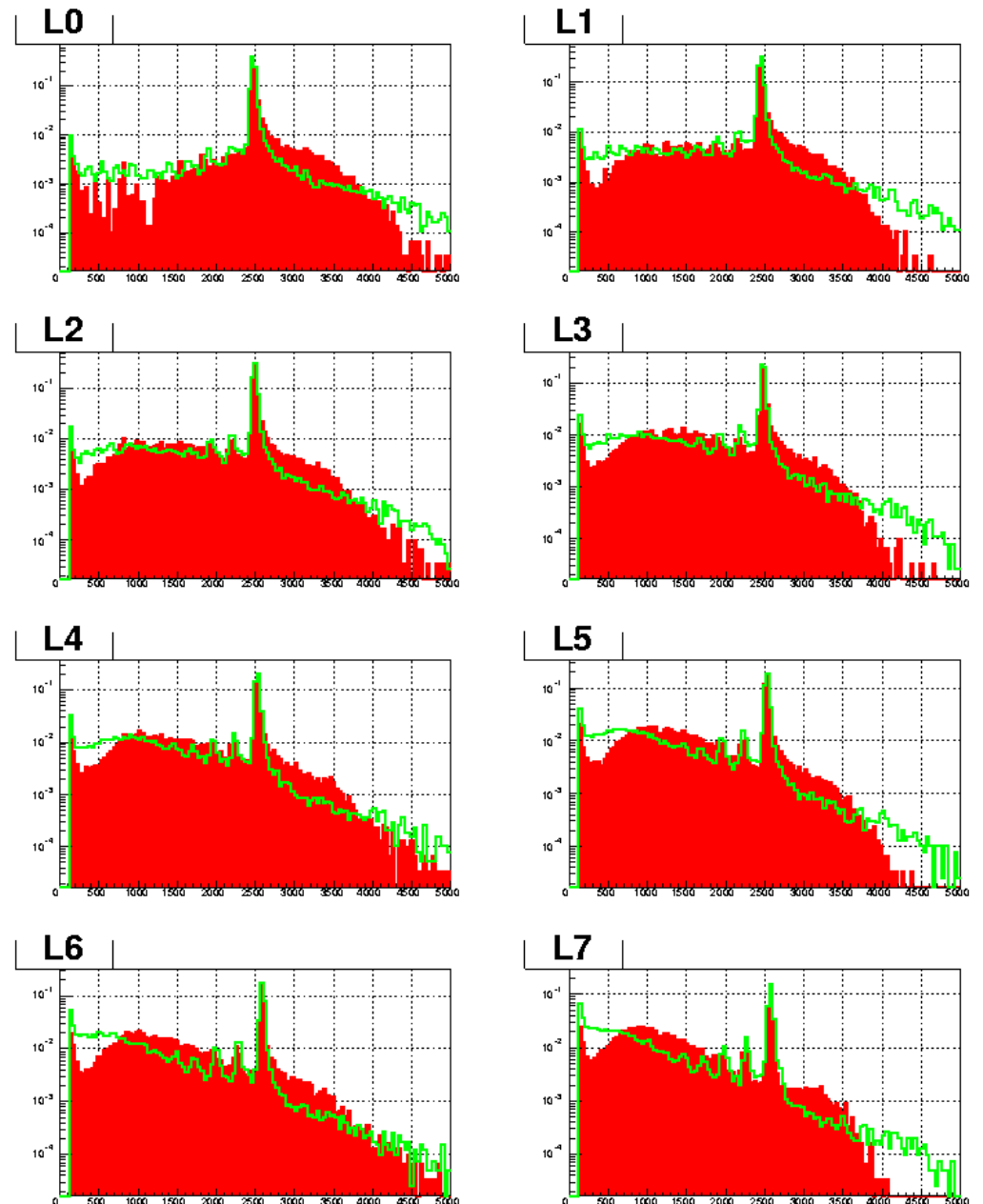 - **El < Edep < Eh with**

Eh/l=EPeak(Z,ilay) +- 3*Sigma(Z,ilay)

GSI data / Gleam simulations

Number of clusters per layers

Deposited energy in clusters

GSI data / Gleam simulations

GSI data / Gleam simulations

Deposited energy in clusters with 2 hits
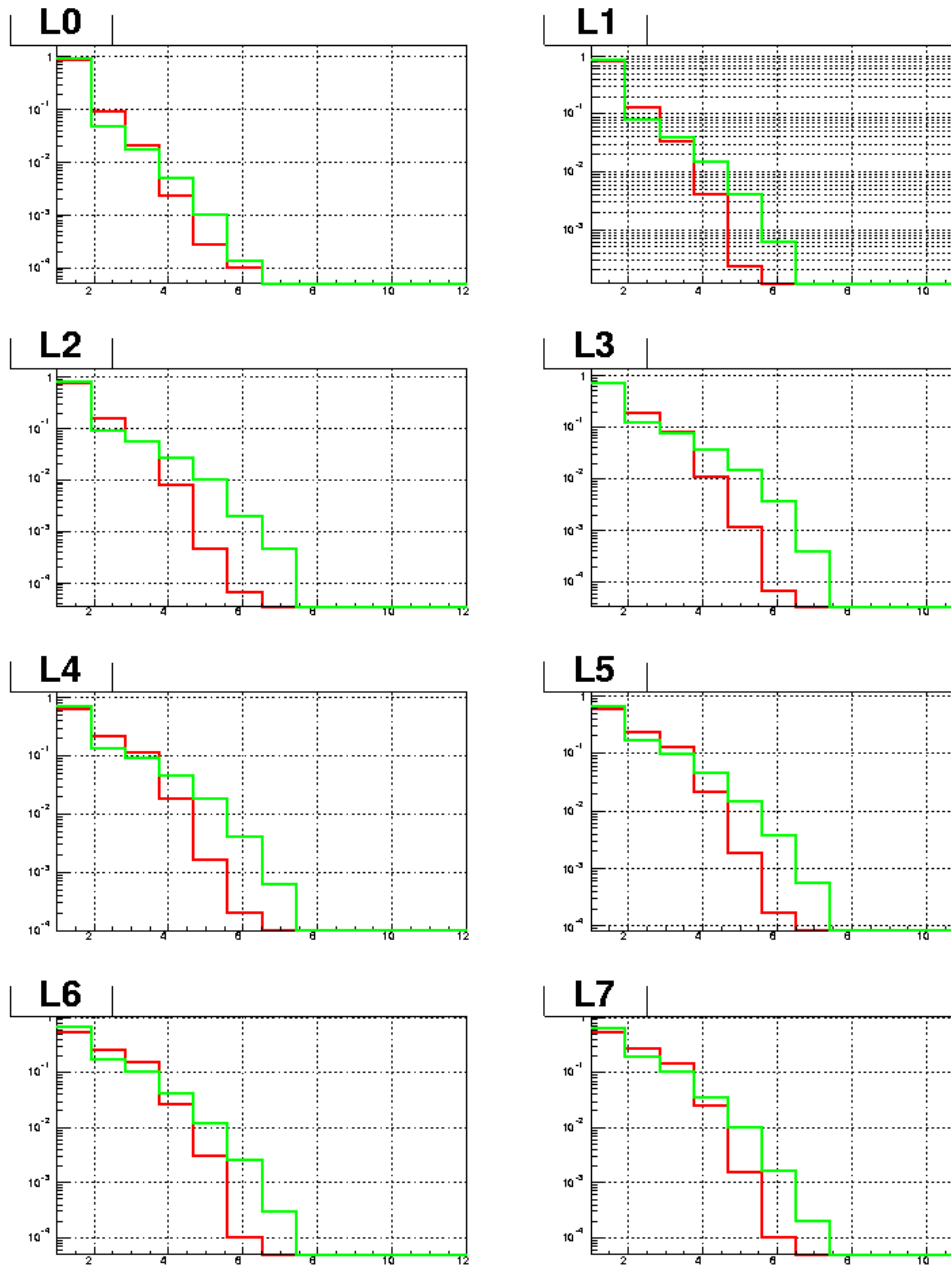
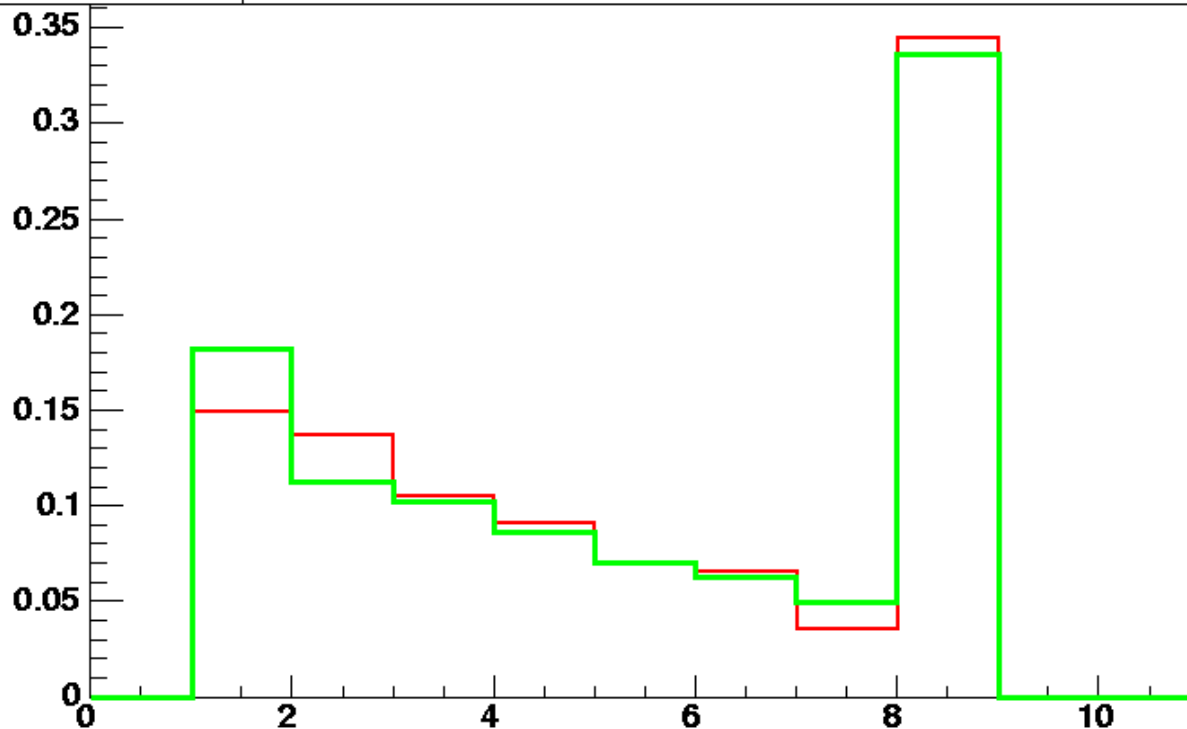Deposited energy in clusters with 3 hits
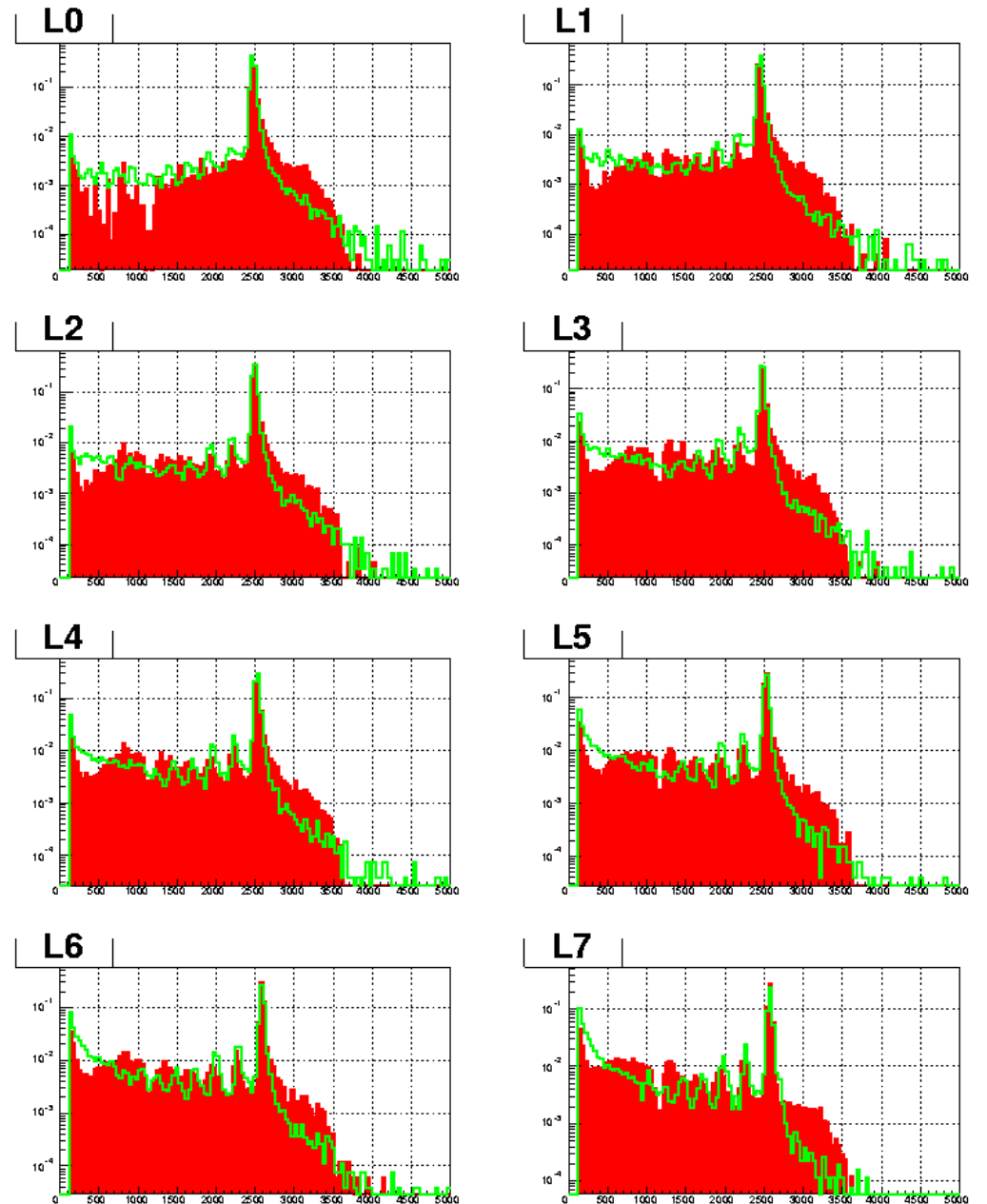
Efficiencies (computed on events with Nlayers>0)

For each layer:
efficiency = nb of events with Z=14 in the peak after selection /
total nb of events with Z=14

Layer	run186	MC
0	0.80	0.74
1	0.65	0.63
2	0.56	0.53
3	0.48	0.45
4	0.41	0.38
5	0.36	0.33
6	0.31	0.28

GSI data / Gleam simulations