

Report from Montpellier 2005-12-14 :

0/ run 46 (Cocktail , 4-Range , 6*6)

using FP calibration for 6*6 logs

1/ compute multiplicity in each layers

Nadc(L,R) > 16*pedestalWidth(L,R) (~ 3 MIP in Range2)

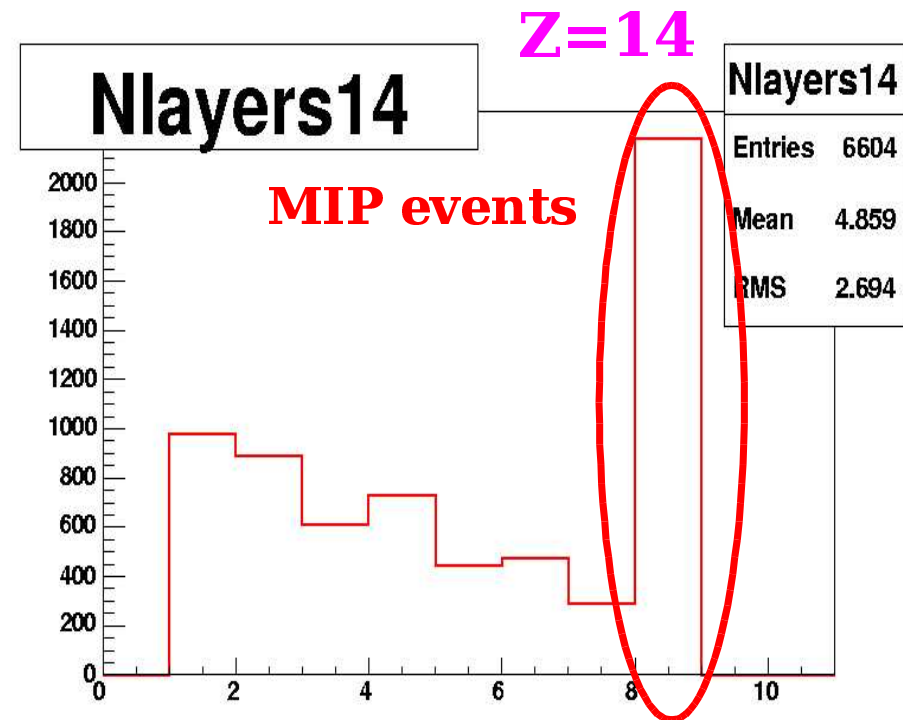
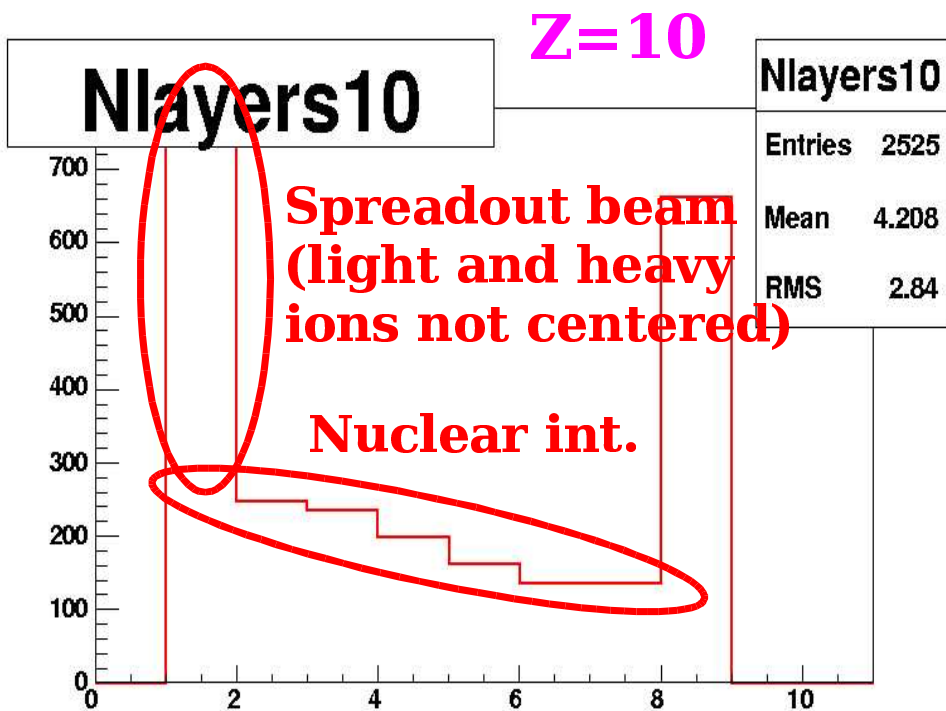
2/ compute **Nlayers** = number of consecutive hits with :

- multiplicity[ilay] = 1

- Log number = 6

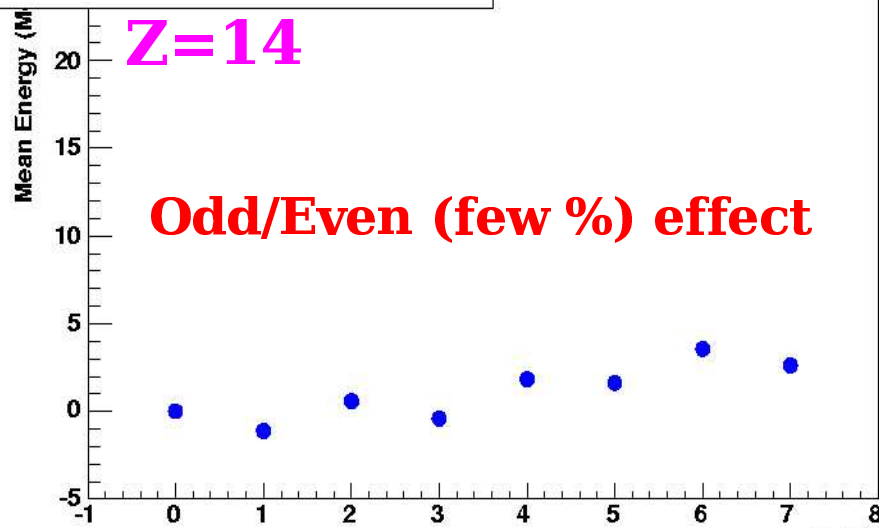
- $E_l < E_{dep} < E_h$ ($E_h/l = E_{Peak}(Z,ilay) \pm 3 \cdot \text{Sigma}(Z,ilay)$)

Nlayers>0 :

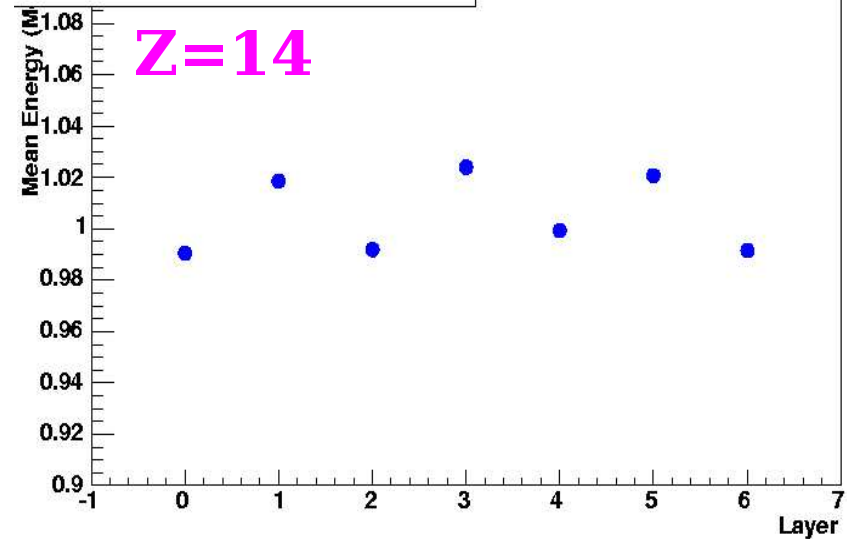


3/ Mean deposited energy (in % from Edep in layer 0) and Mean Edep(ilay+1)/Edep(ilay)

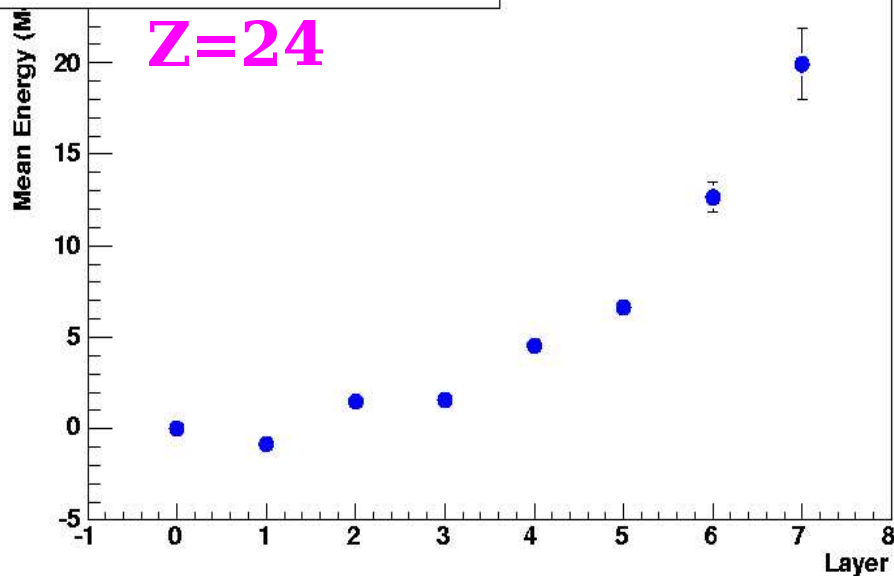
MeanEnergyPerLayerZ=14



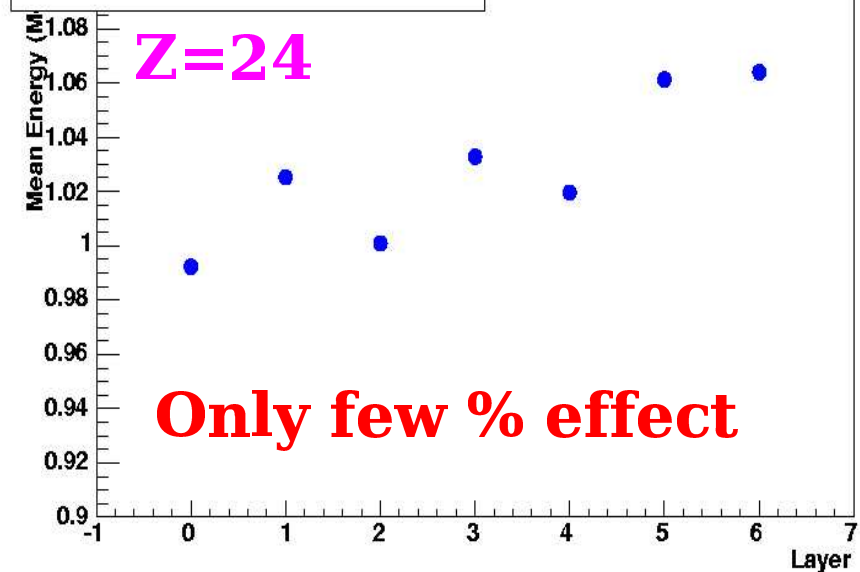
MeanRatioEnergyPerLayerZ=14



MeanEnergyPerLayerZ=24

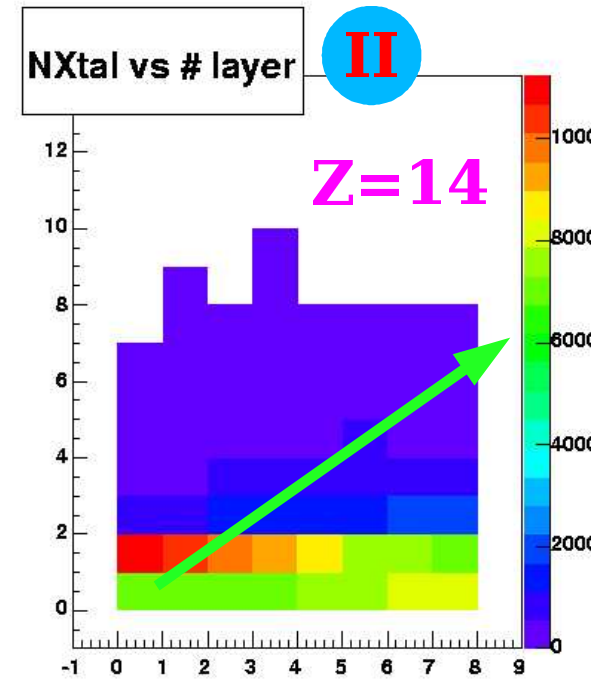
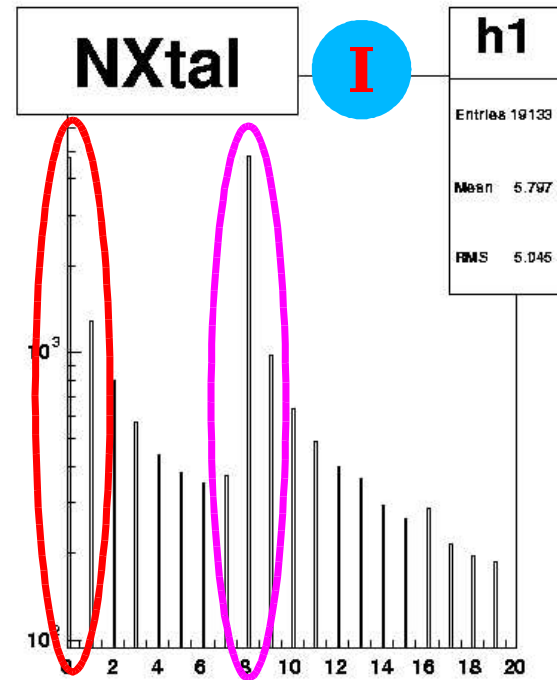


MeanRatioEnergyPerLayerZ=24

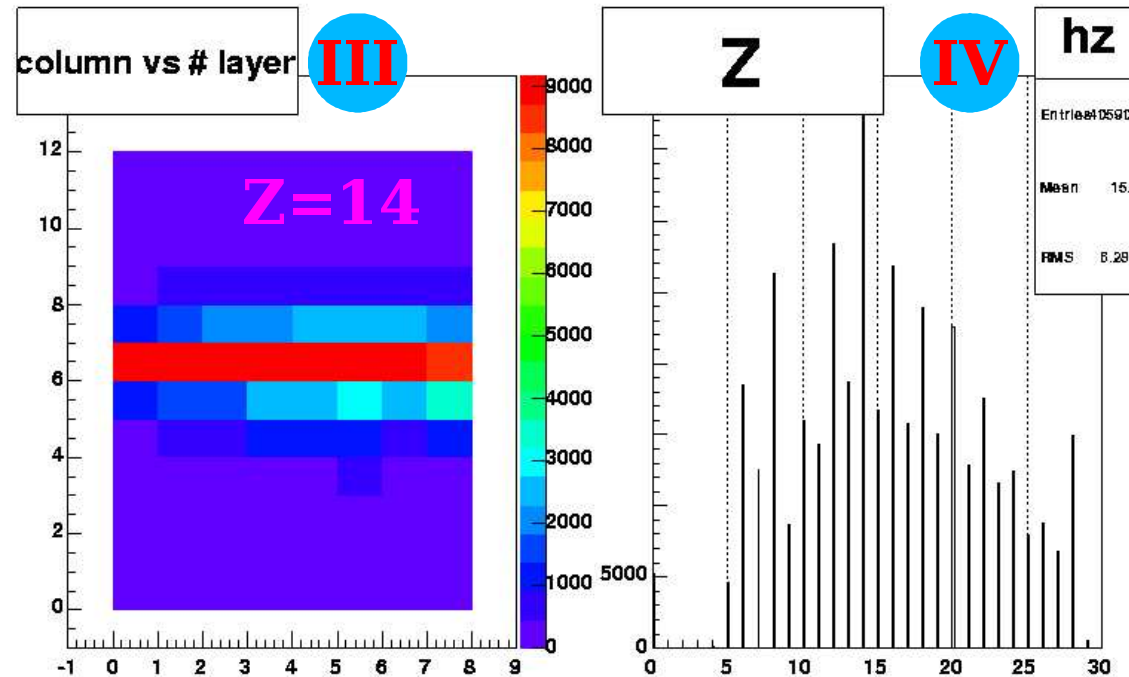


4/ Problem with Nlayers = 0 :

Run 46

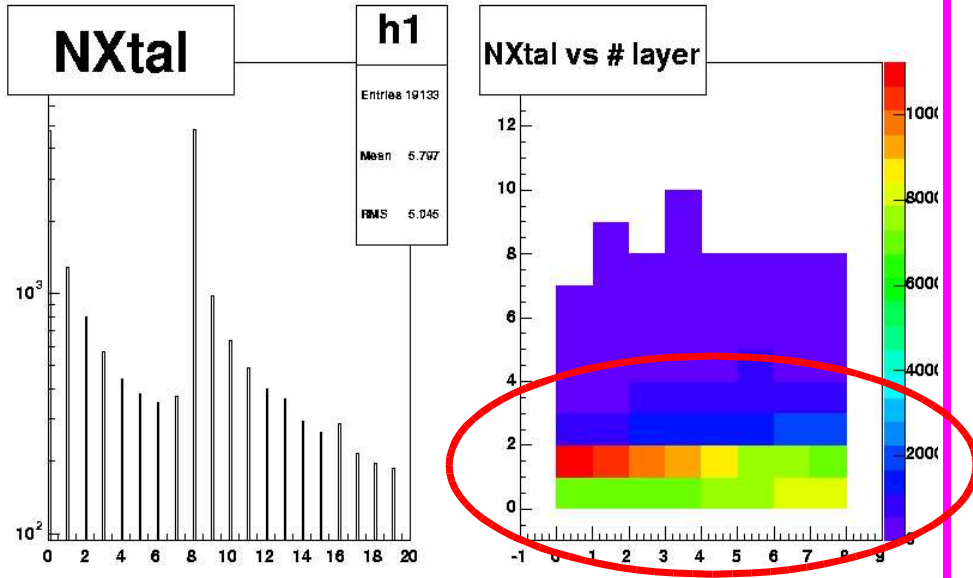


- ~ 30% of events have no signal in layer 0
- ~ 35% satisfy criteria
- ~ 35% do not

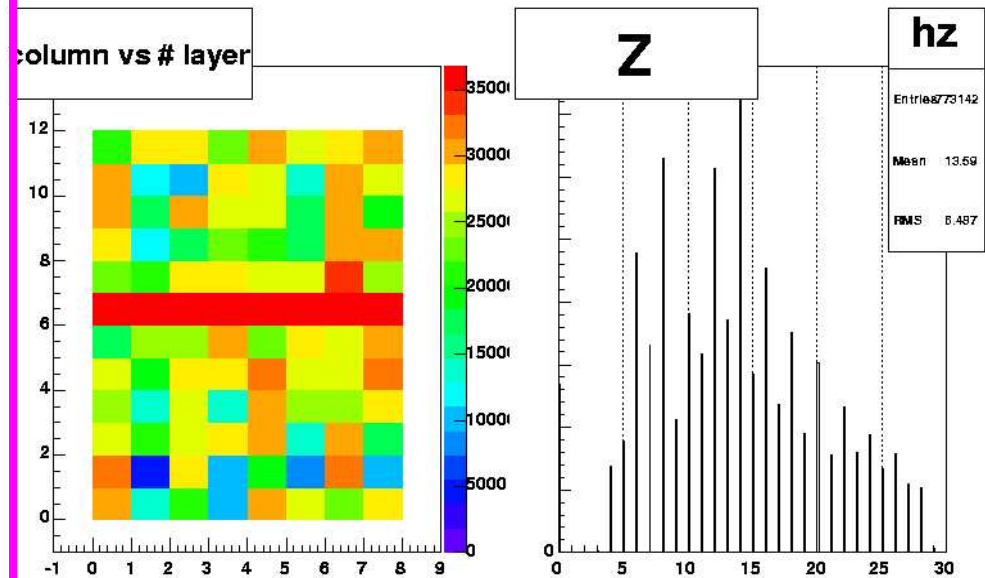
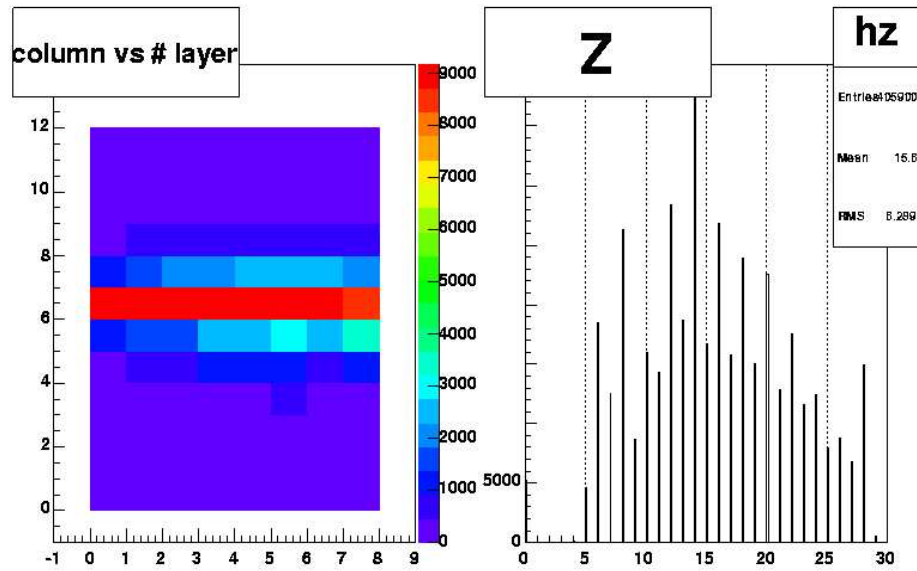
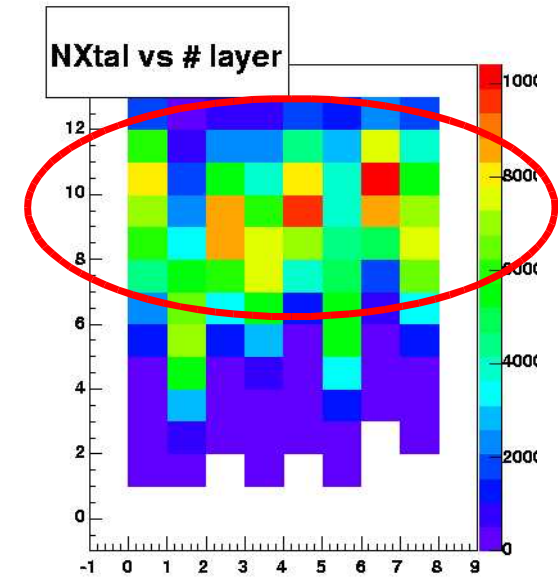


And run 186 ?

Run 46 Z=14



Run 186 (Same criteria)



Results for Efficiency and Purity (with Nlayers>0) :
Run=46, Z=14

	Efficiency	Purity
Layer 0	0.61	0.92
Layer 1	0.52	0.96
Layer 2	0.41	0.96
Layer 3	0.36	0.97
Layer 4	0.27	0.97
Layer 5	0.24	0.97
Layer 6	0.20	0.97

Next step :

- > switch to Sacha calibration of the EM**
- > study multiplicities in run 186, spectra**
- > keep other logs than 6*6**