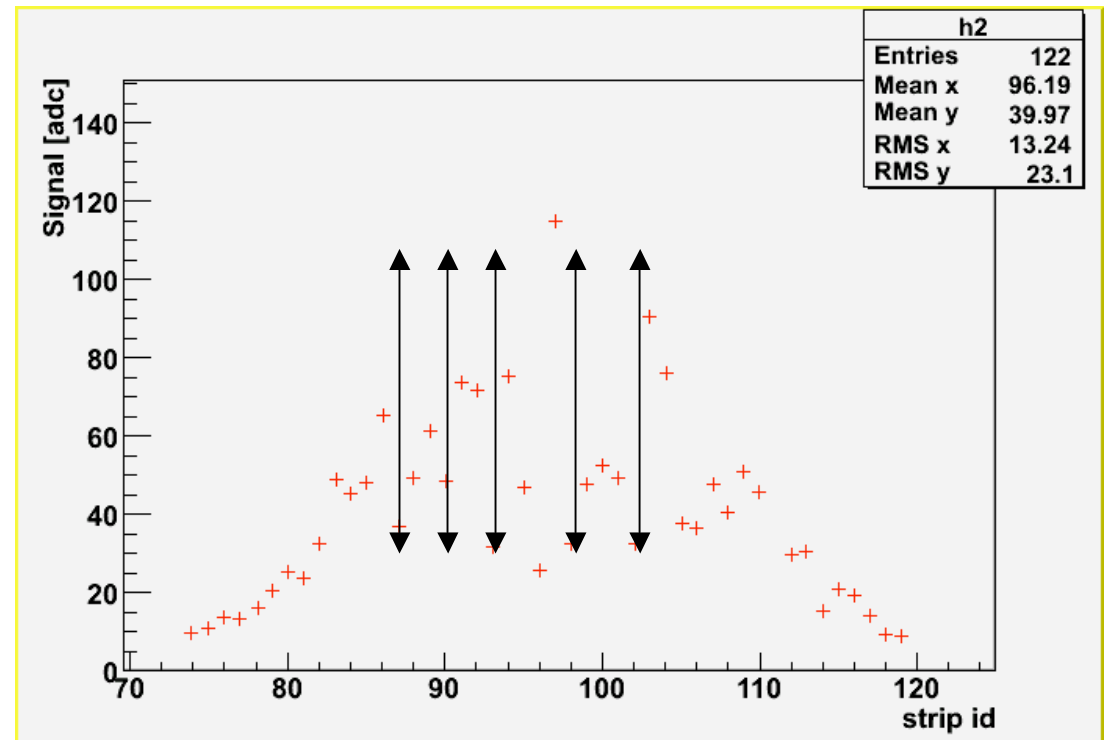
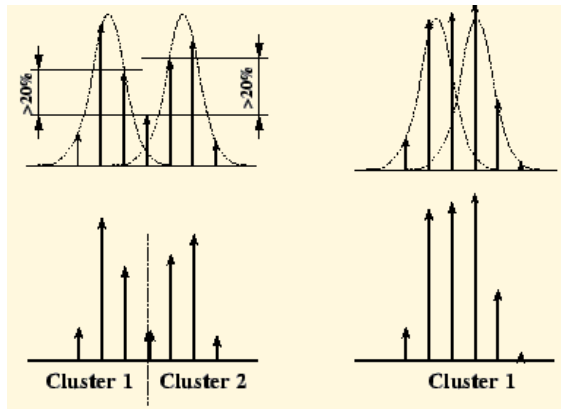


- Update : ssd soft tuning
  - Cluster Maker

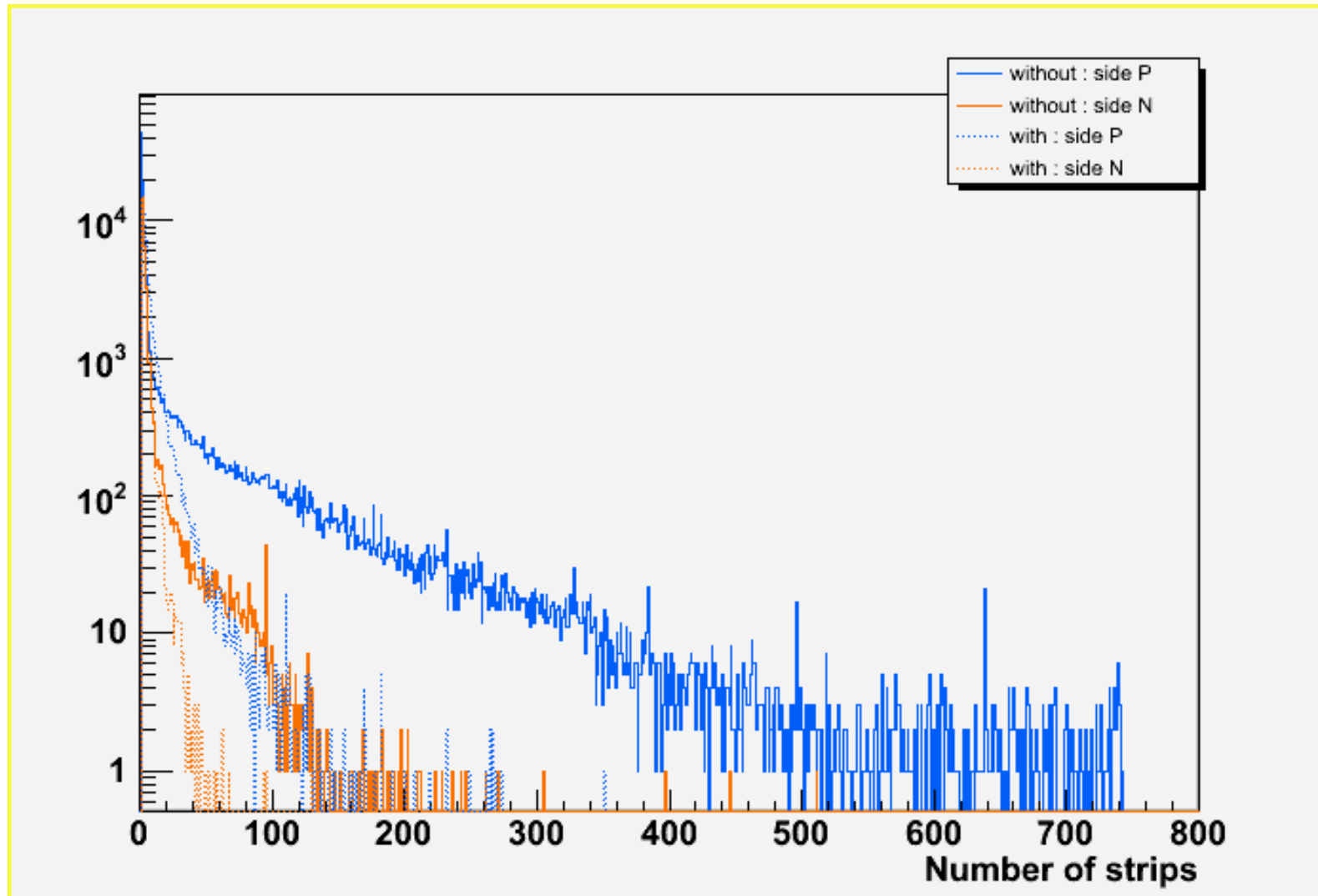
# Cluster Maker

- One major bug : after the search for the central strip, the soft only add consecutives strips
  - There is no others conditions
  - Found clusters with size  $> 400$  strips (half a wafer  $\sim 3\text{cm}$ )
- When a cluster is built, we try to split it (found the maximas and minimas)
  - There was another bug because the current strip after splitting was never updated.



The splitting must give 7 clusters for this example

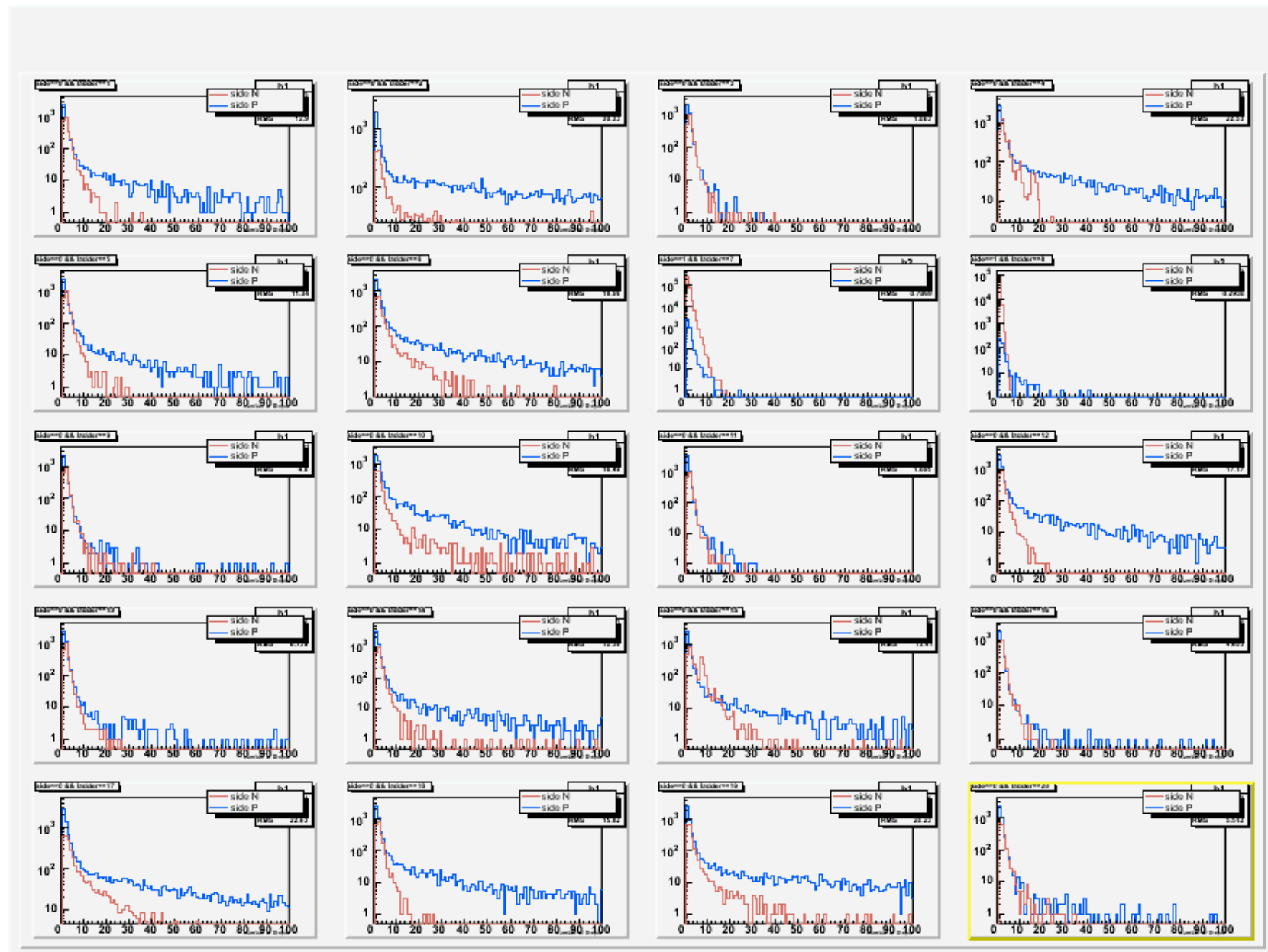
# Size of the clusters [# of strips]



# Current version

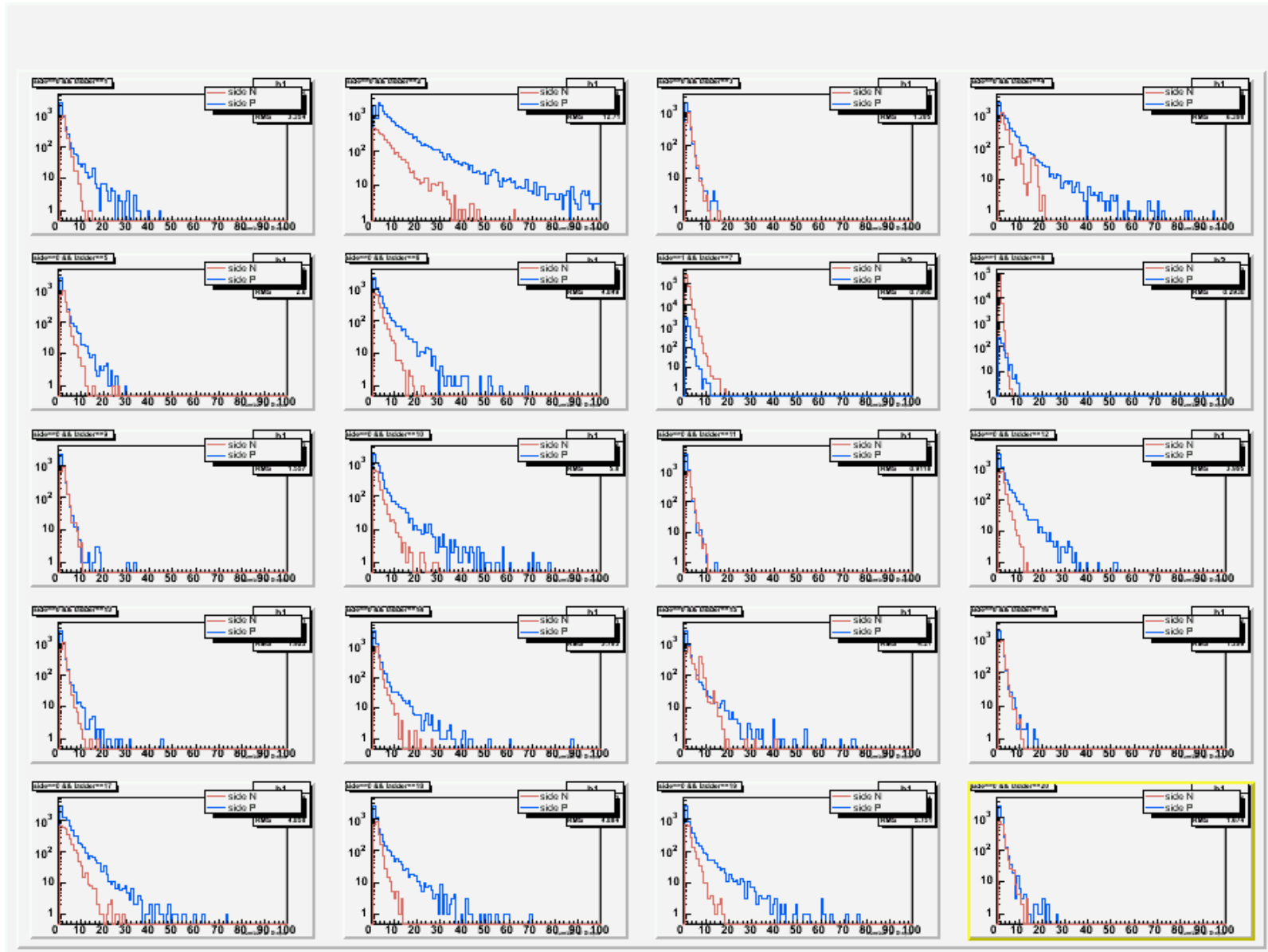
blue : ladders P side

red : ladders N side



# With correction

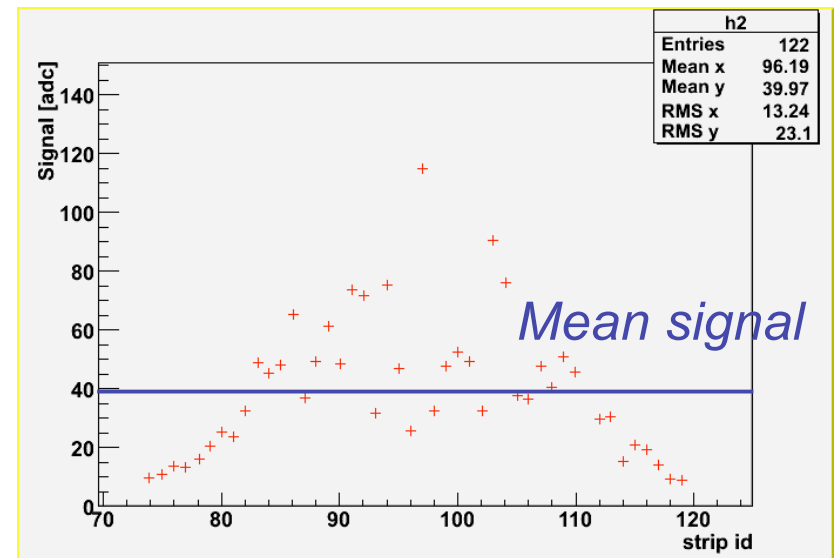
blue : ladders P side  
red : ladders N side



# Summary - outline

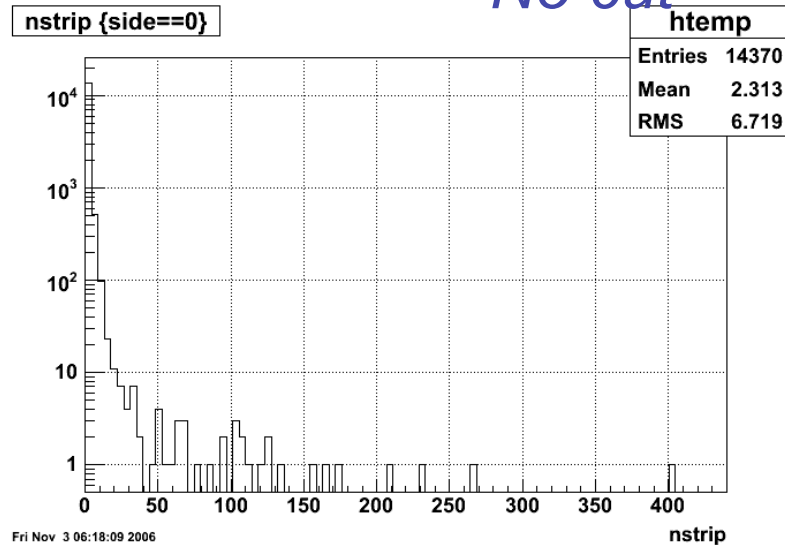
→ Decrease the size of clusters but need improvement :

- cut on the mean level of the strips signal in a cluster.
- With the tpc tracks projection, see if the reconstructed hit is a expected hit.
- Study the hit reco. vs the cut on the central strip :
  - ❑ Actually the cut is  $s/n > 5$
- Add another cut on the neighbourings strips

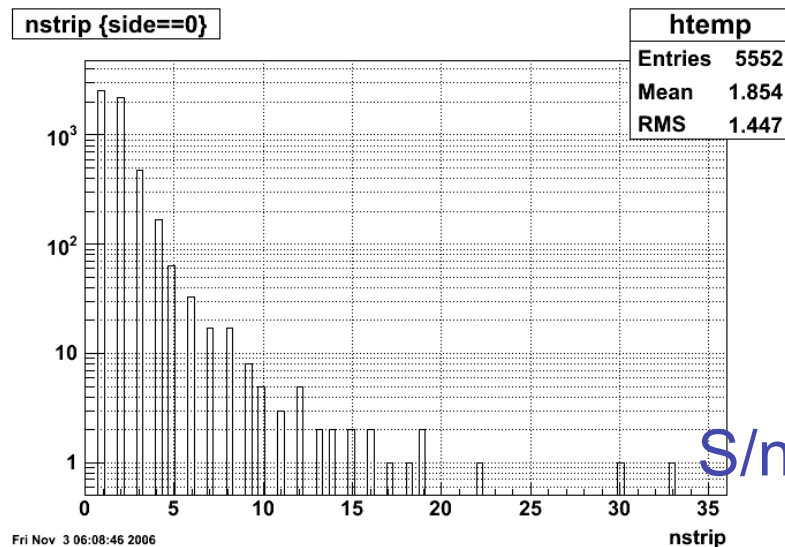
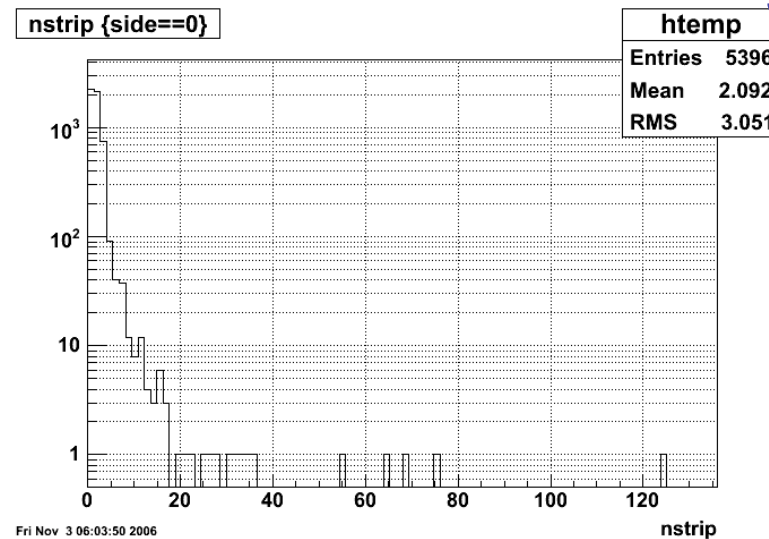


# Cut on the signal to noise ratio of neighbourings strips

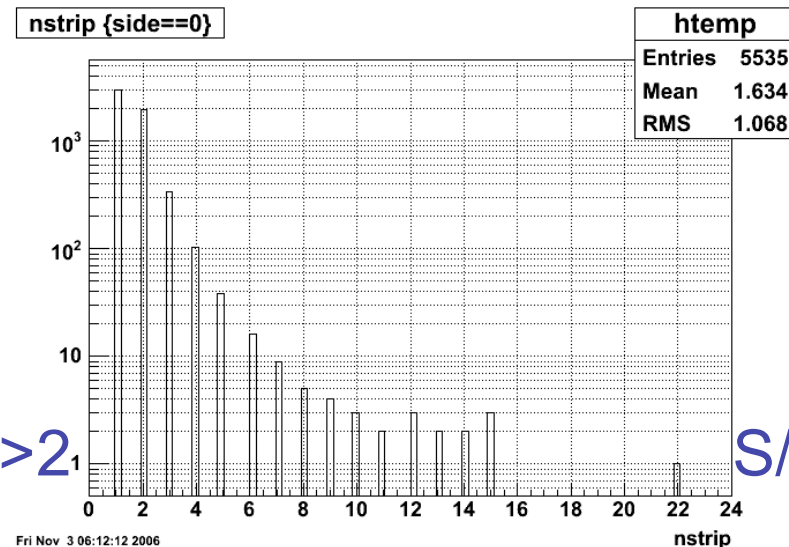
*No cut*



*S/n > 1*



*S/n > 2*



*S/n > 3*