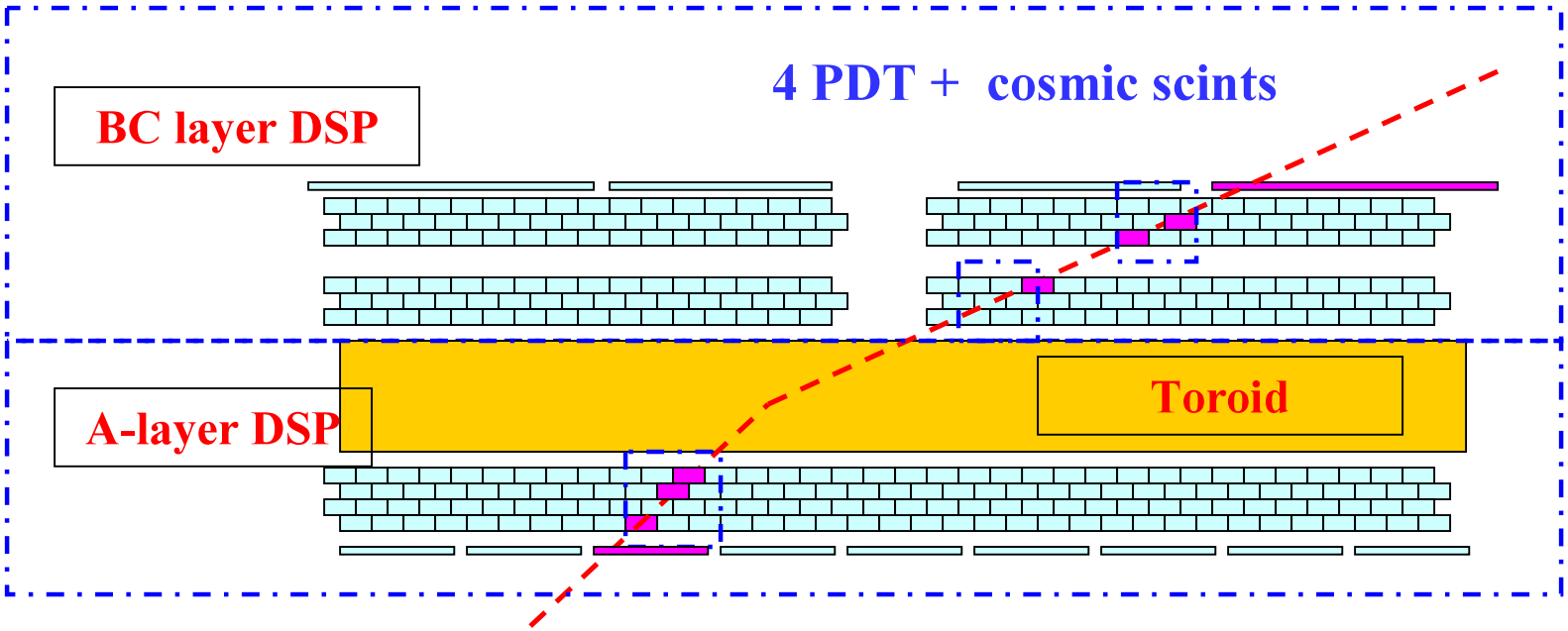
L2mu central efficiency

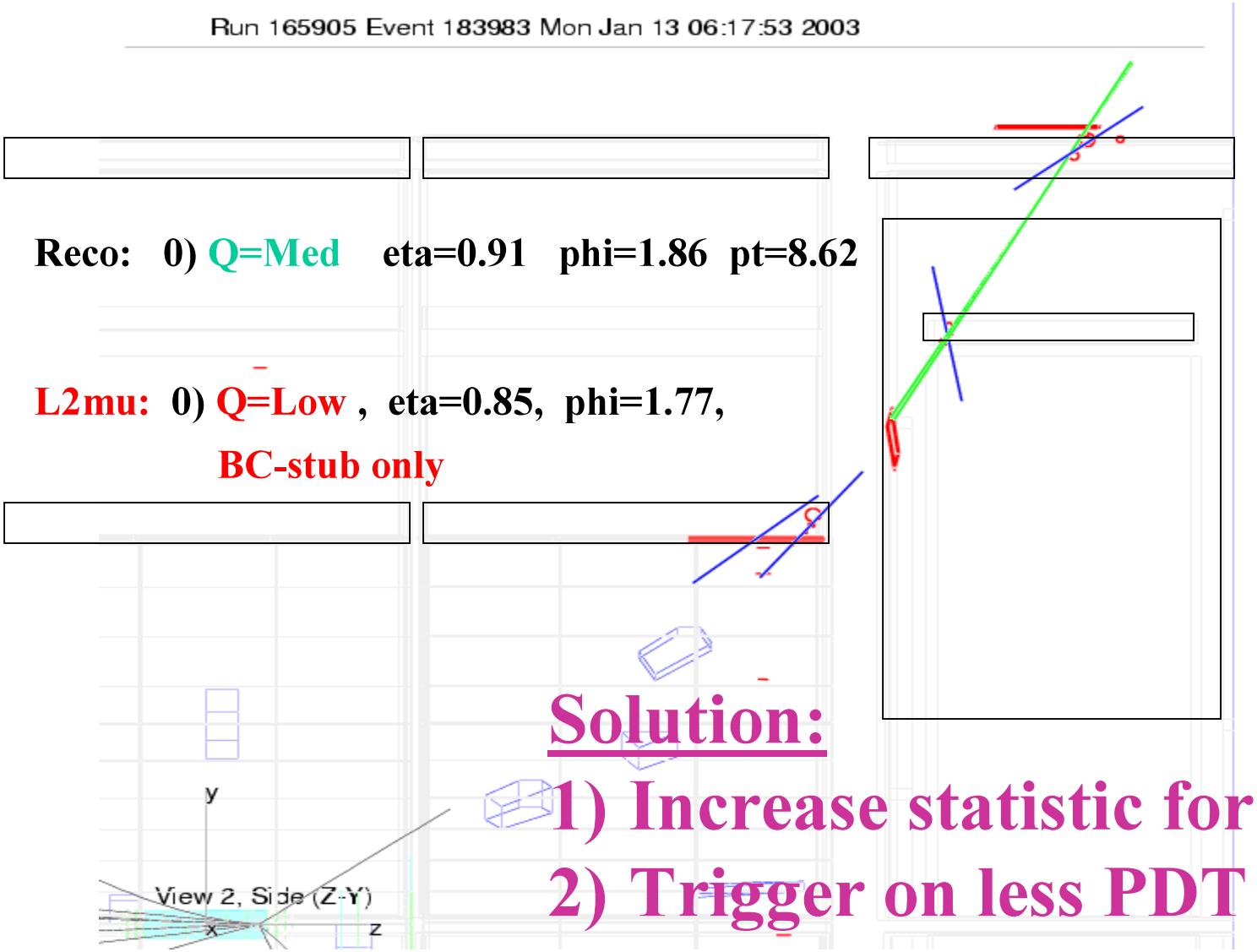
L2mu central medium definition



L2 Central medium muon now == at least 6 tabulated PDT hits

This requirement + lookup tables inefficiency
== 88% compare to Reco medium muons

Event example – L2MU failed



Reco: 0) Q=Med eta=0.91 phi=1.86 pt=8.62

L2mu: 0) Q=Low , eta=0.85, phi=1.77,

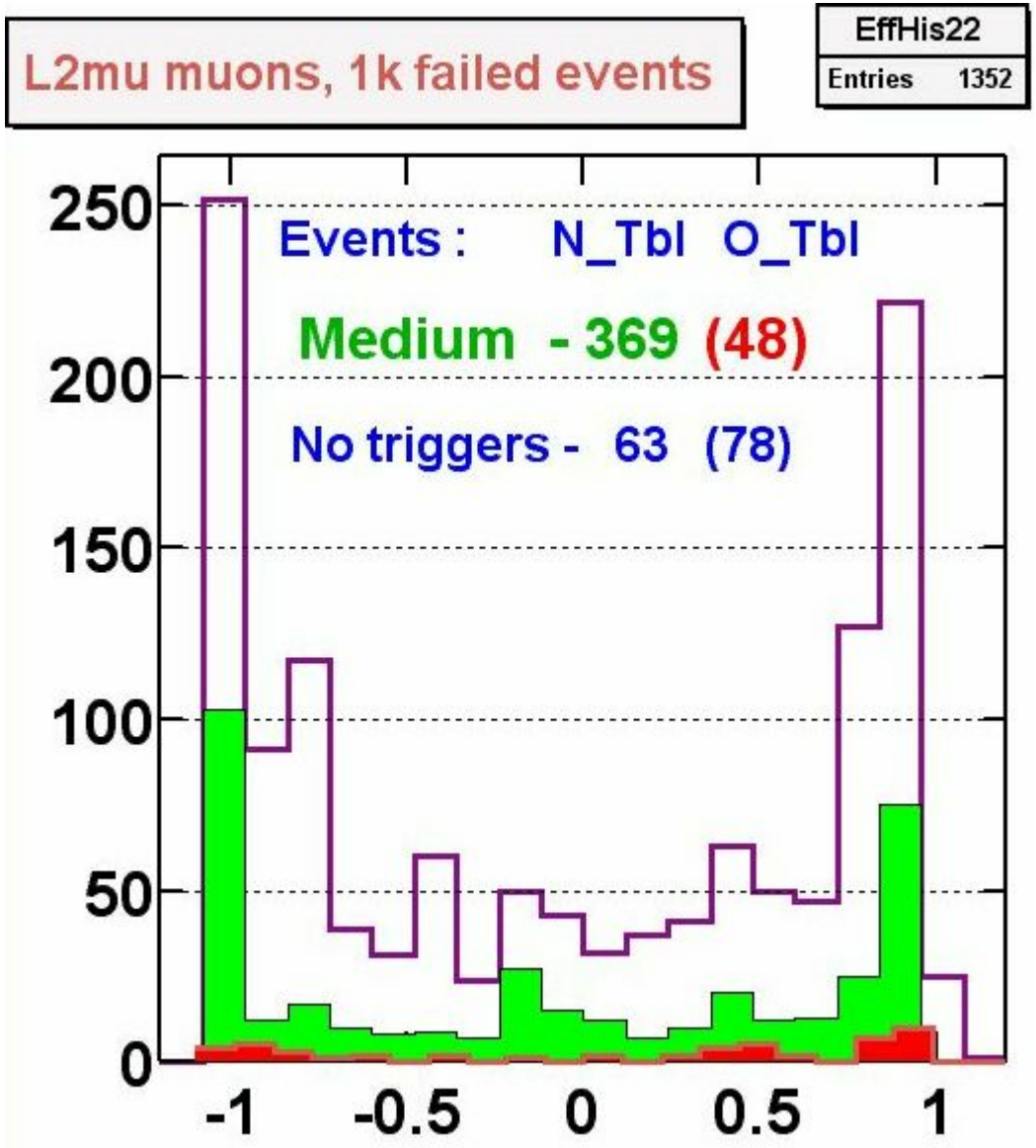
BC-stub only

Solution:

1) Increase statistic for LUT

2) Trigger on less PDT hits

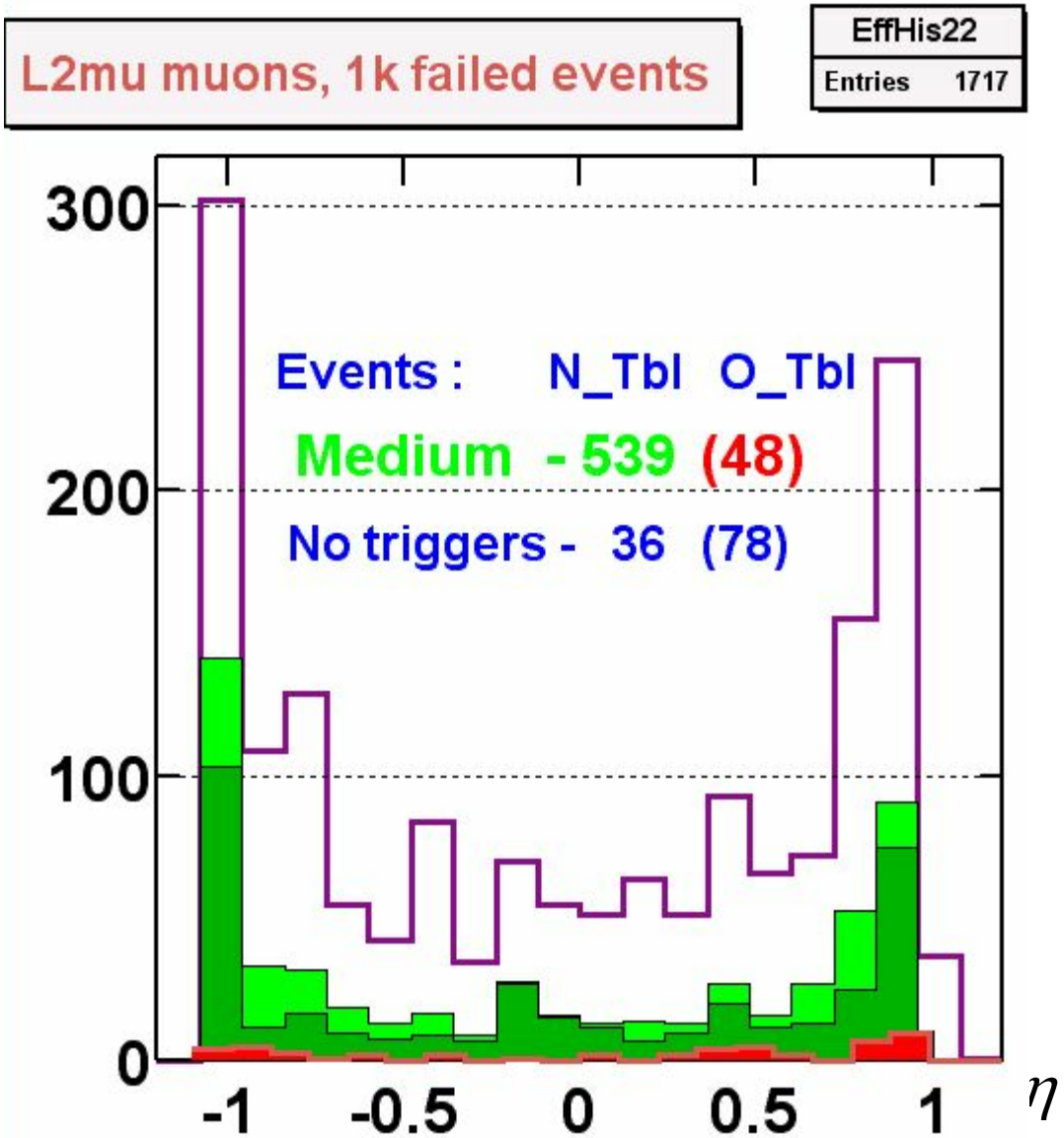
L2mu failed events studies - New LUTs



Decrease Central L2mu inefficiency by

~30 %

L2mu failed events studies - 4 PDT hits



Decrease Central L2mu inefficiency by

~50 %

Qs:
Rejection -?
Time -?

Summary

What was done :

-More statistics for lookup tables - (1M events– A-layer; 1.5 BC)
(factor of 2 in size, expected 25% slowing in algs perfomance)

- Central algorithms – now can trigger with less PDT hits .

Expected result:

Central inefficiency decrease on *30% (50%)*