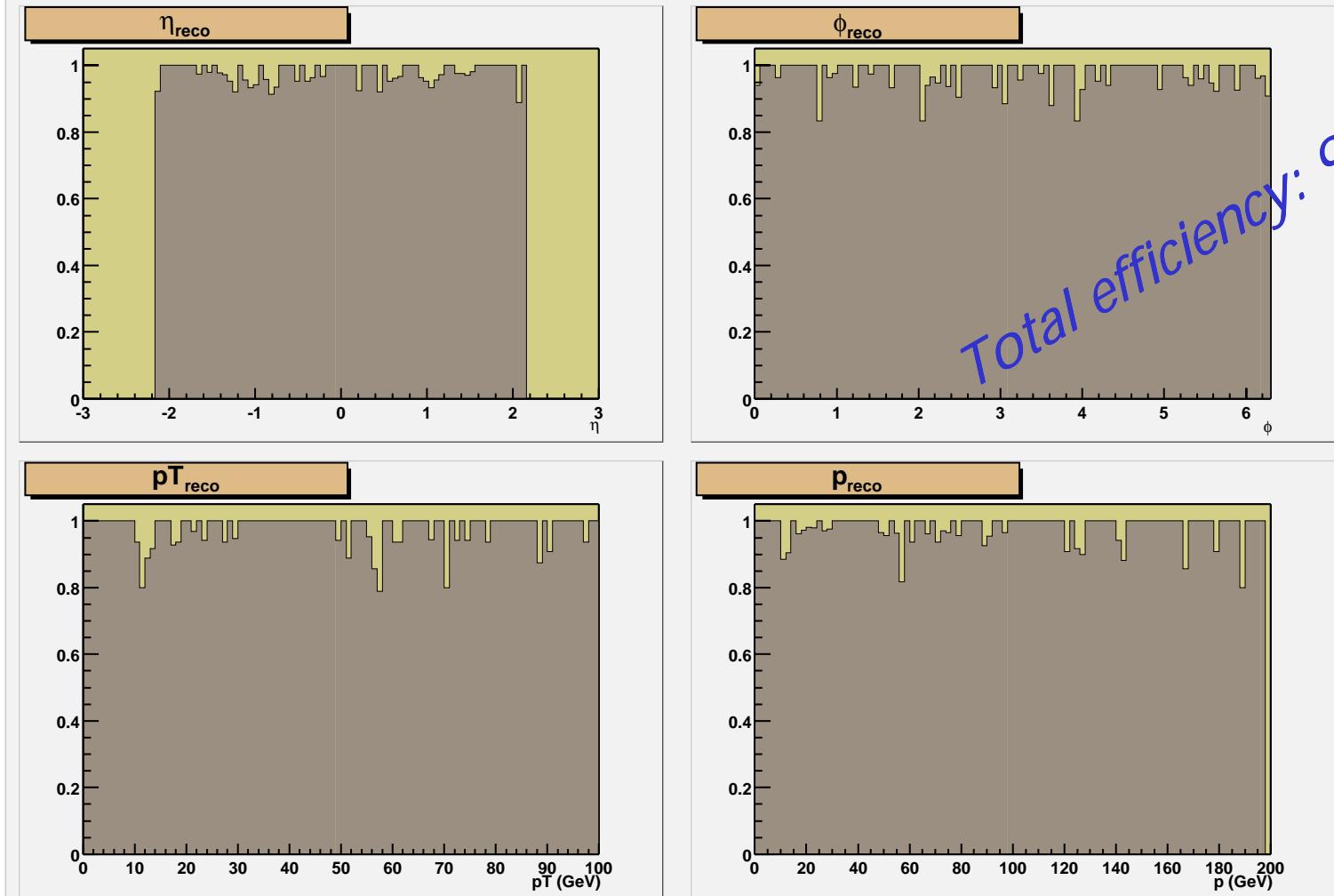


LL efficiency



25 July 2001

3

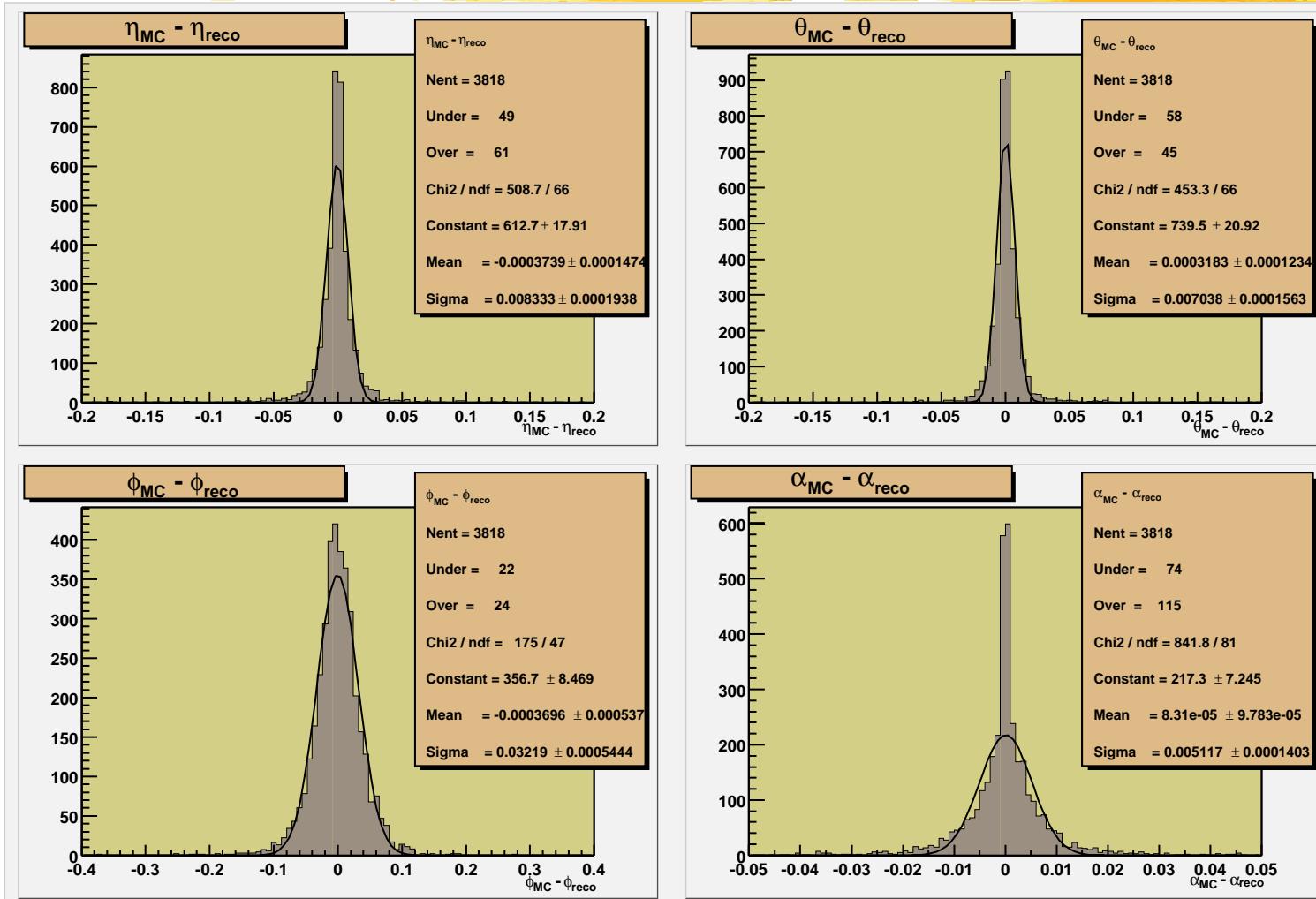


Efficiency calculation



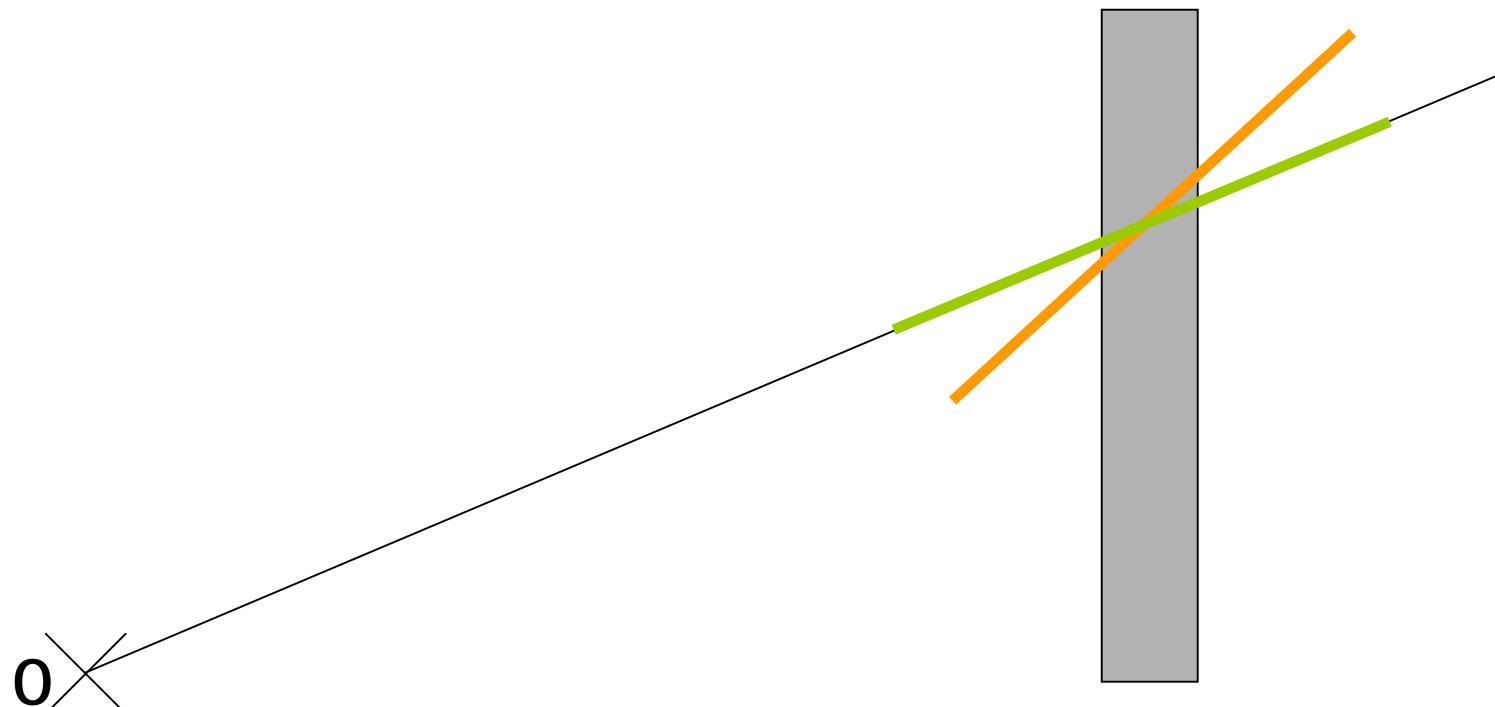
- MC segment requires two wire hits
- Reco segment is found when it is close ($dR < 40$ cm) to MC segment
- Efficiency takes out geometrical acceptance
- But includes hit reconstruction efficiency
 - PDT single wire efficiency: 95%
 - MDT wire efficiency: 99%
- 'Real' efficiency: 98.3%

LL central resolution



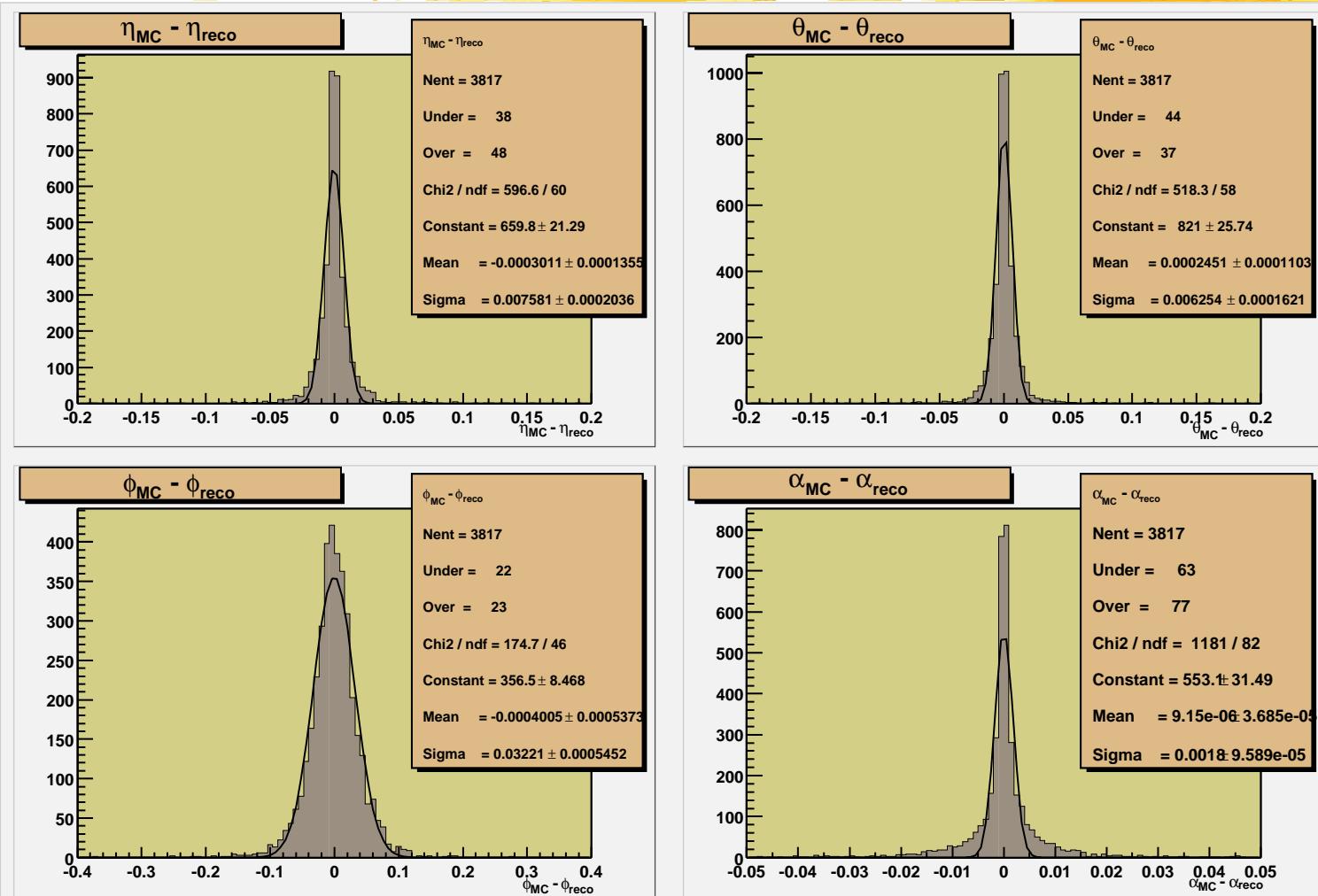
Vertex constraint

- Use vertex to constrain A-layer segment
 - Valid for low pT tracks?



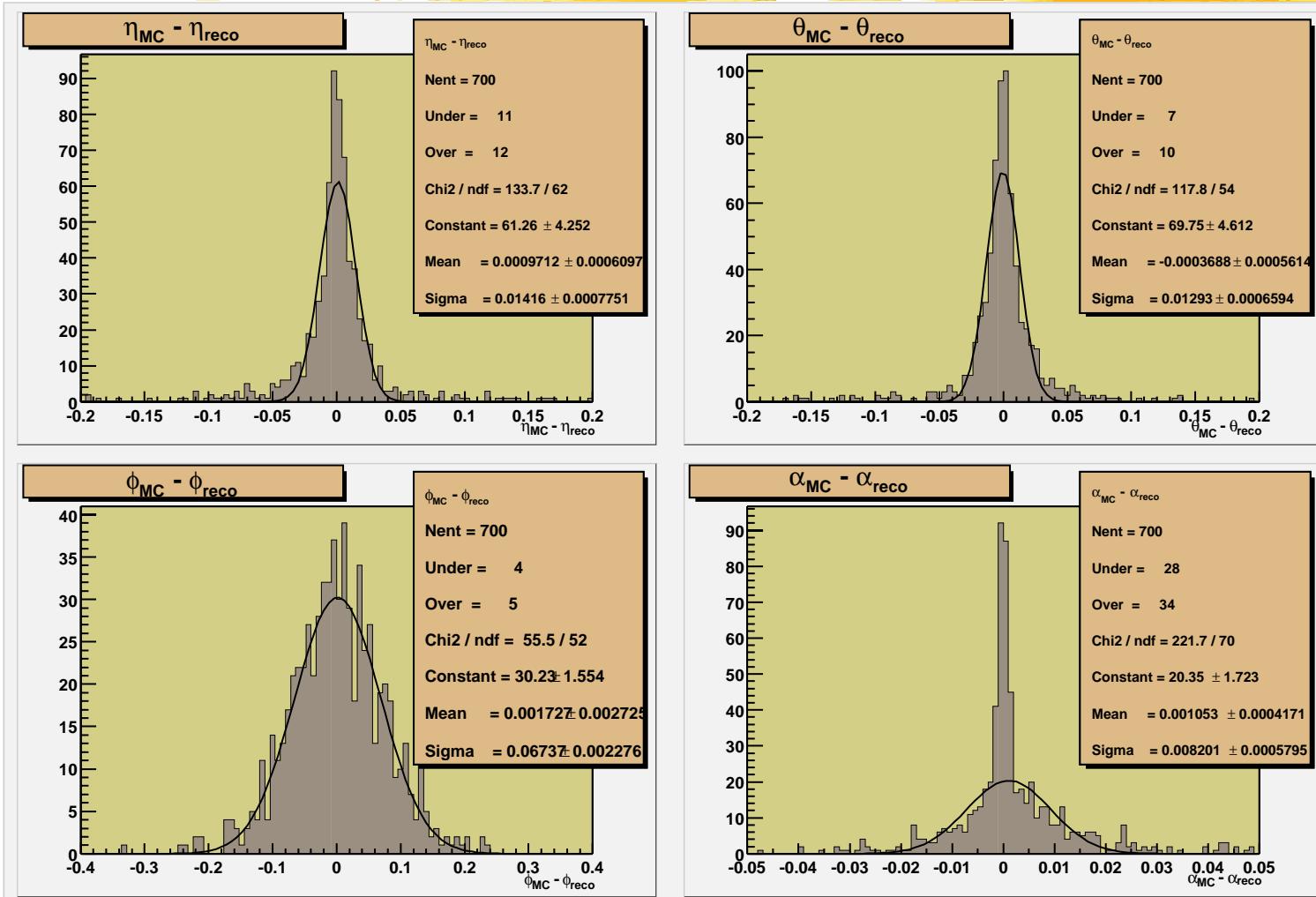


LL central resolution with vertex constraint

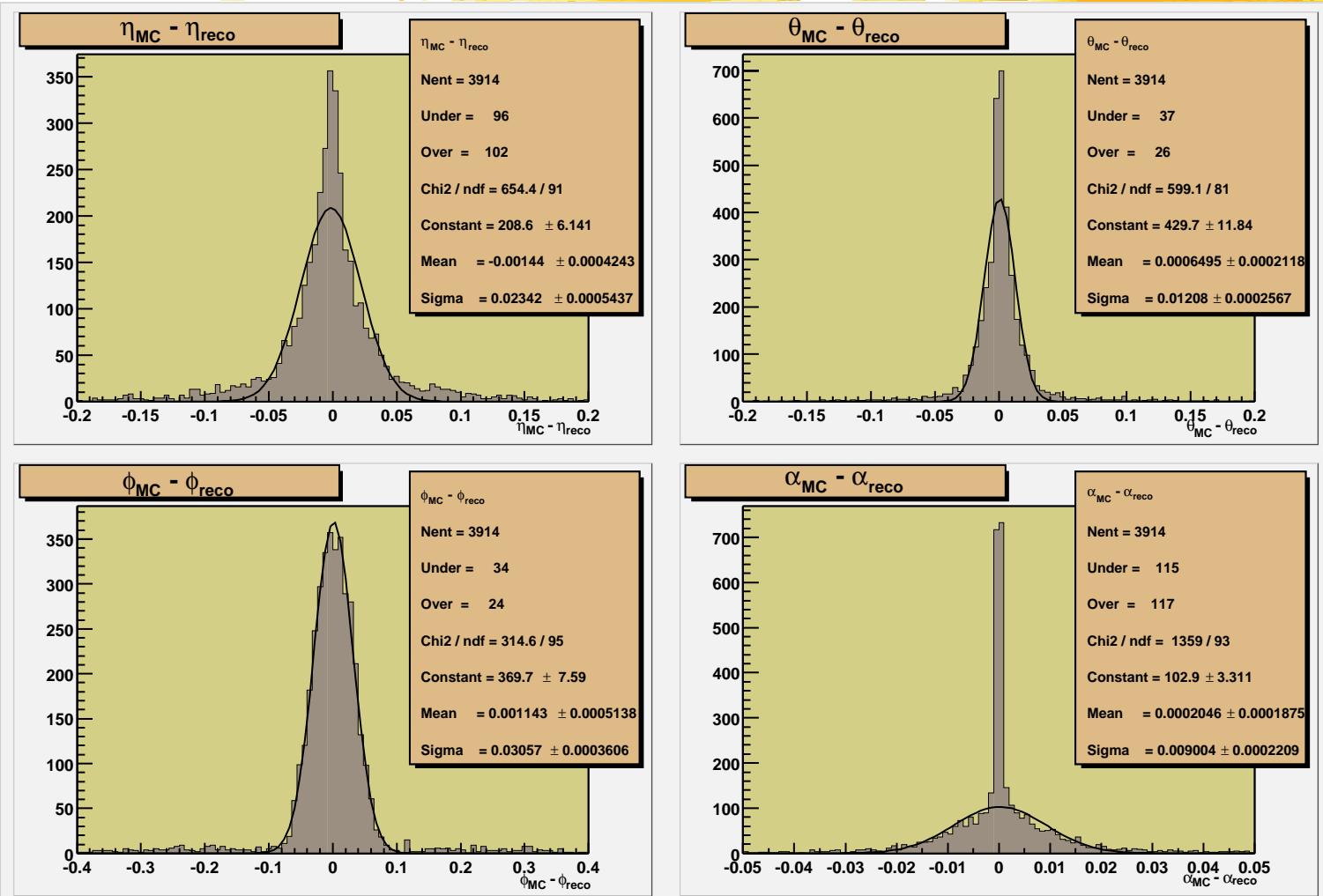




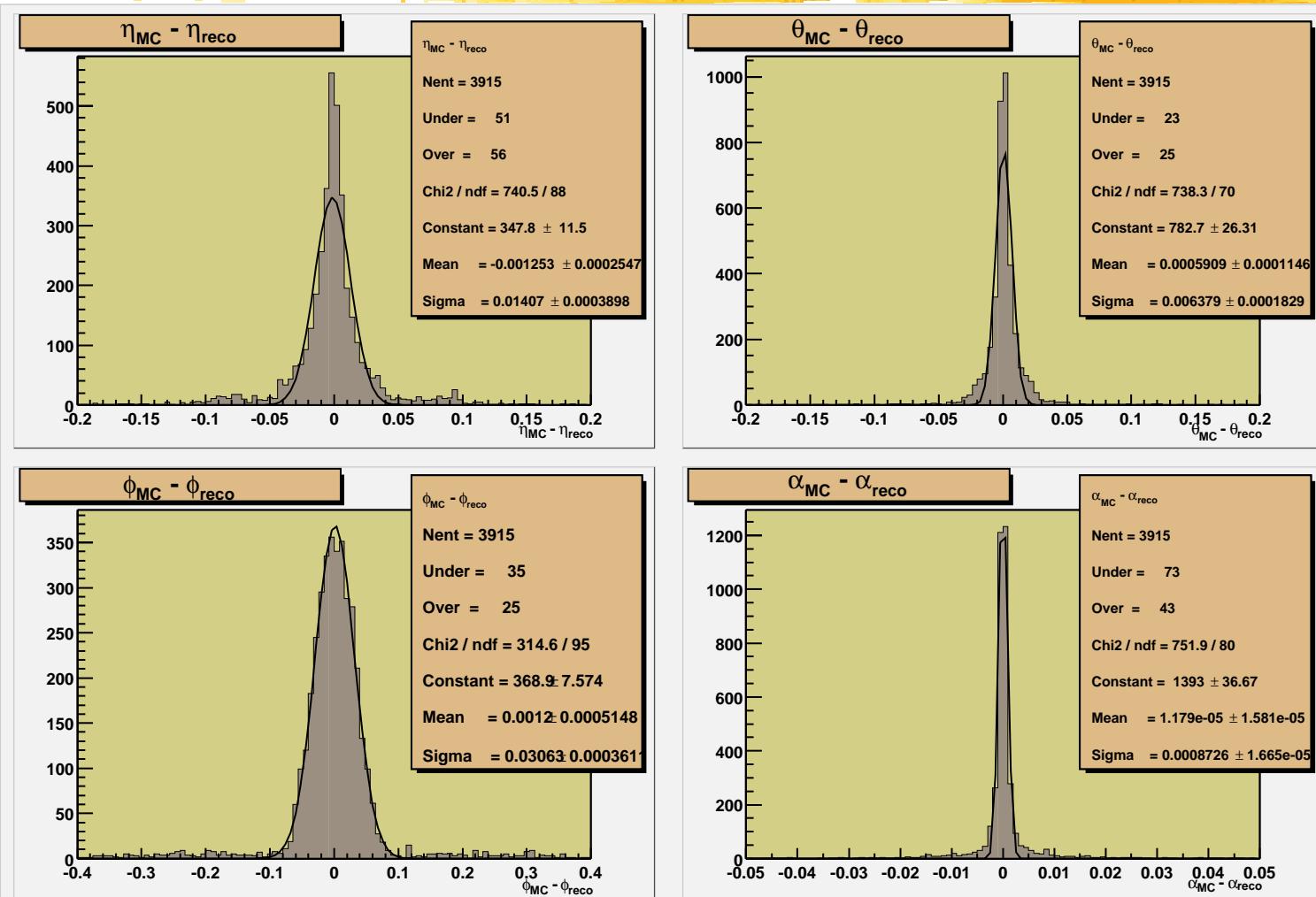
Combi central resolution (with vertex constraint)



LL forward resolution

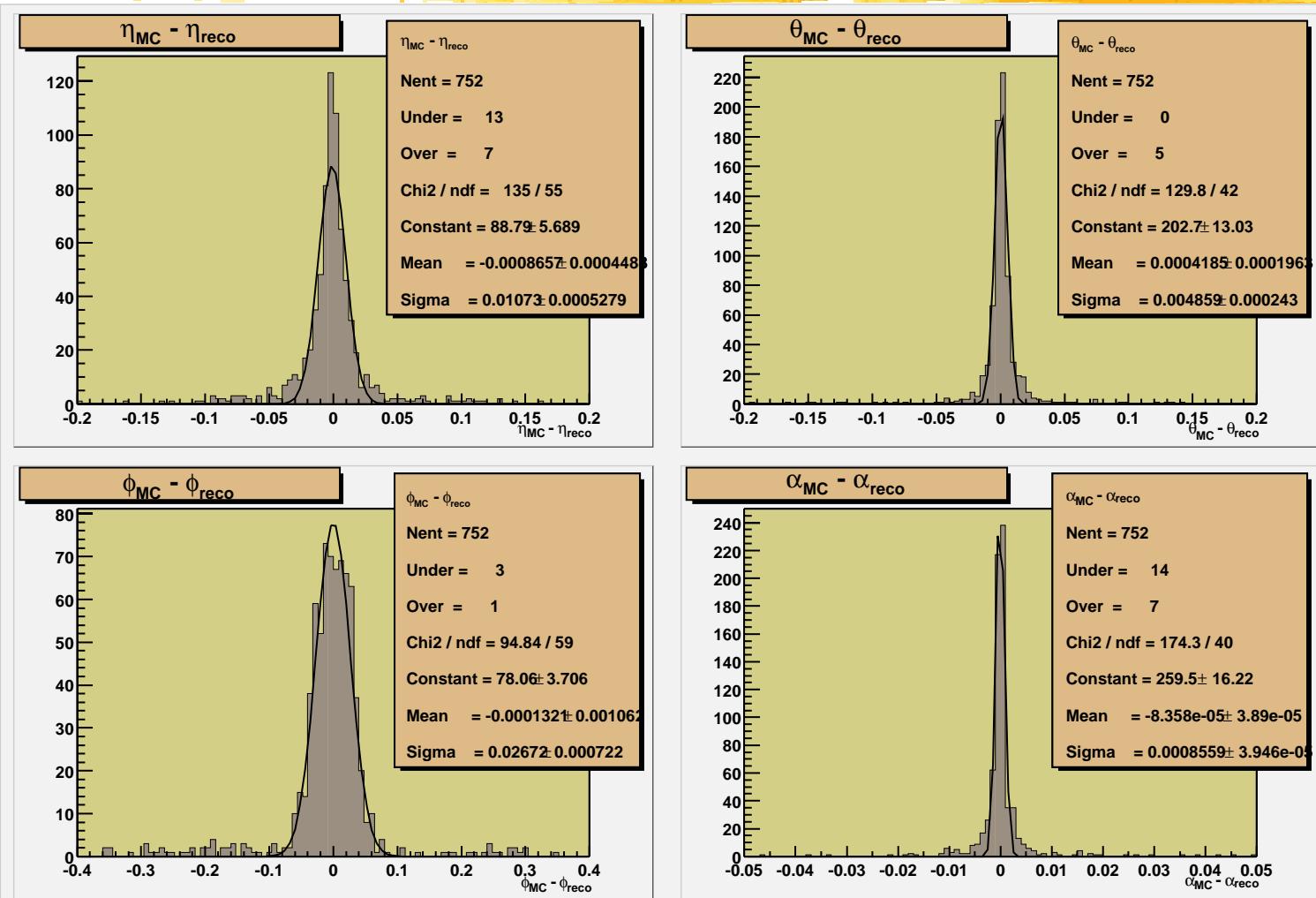


LL forward resolution with vertex constraint





Combi forward resolution (with vertex constraint)





Timing & errors



- Optimized build on d0mino
 - Linked List algorithm: 9 ms/ μ
 - Combinatorial: 12 ms/ μ
- Time on L3 node: unknown
 - Estimate 3-4 times faster than d0mino
- Errors on segment need work
 - But first figure out errors on hits!