SSD Efficiency
AuAu test sample

svt meeting 01/08

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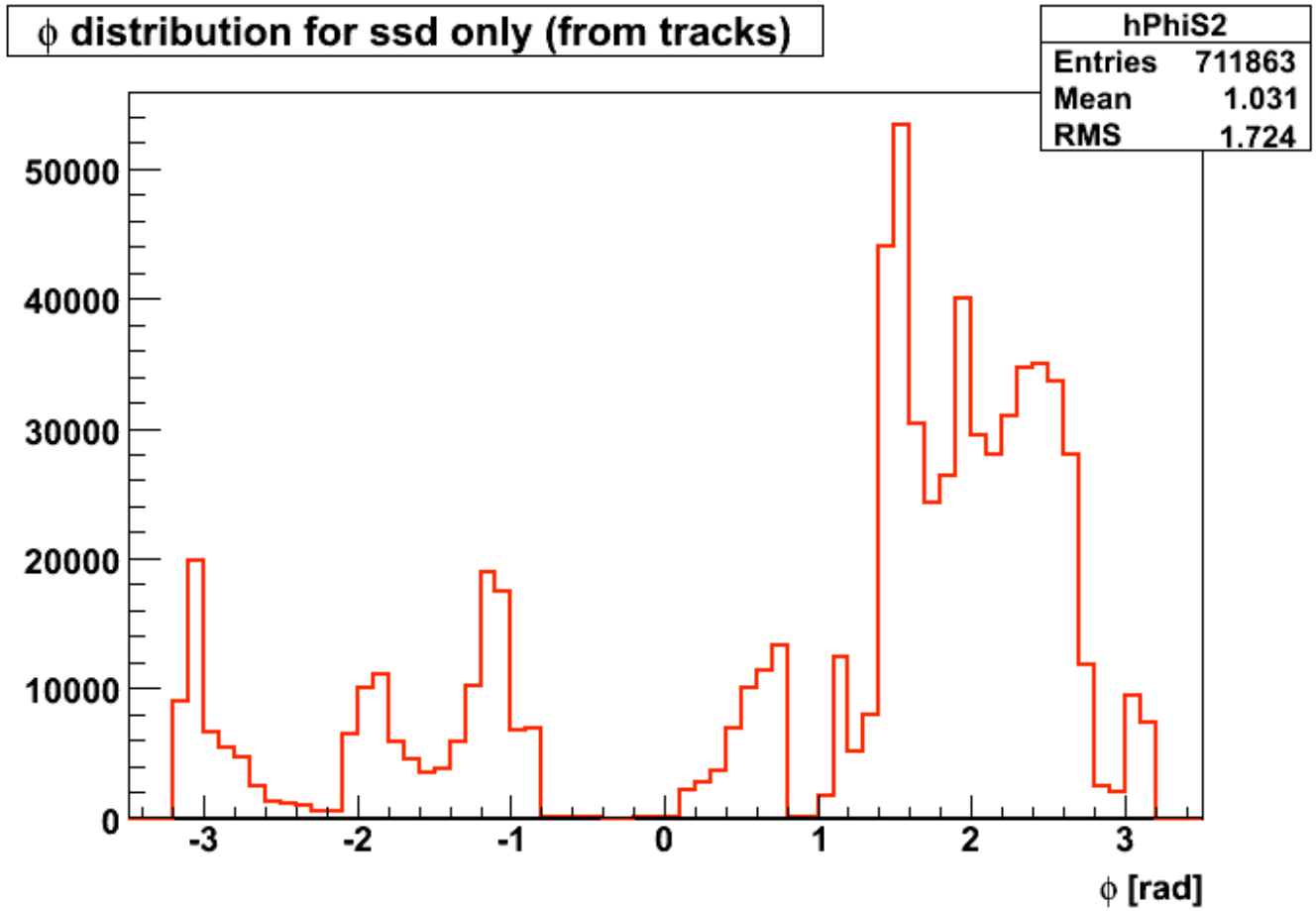
Datasets - cuts

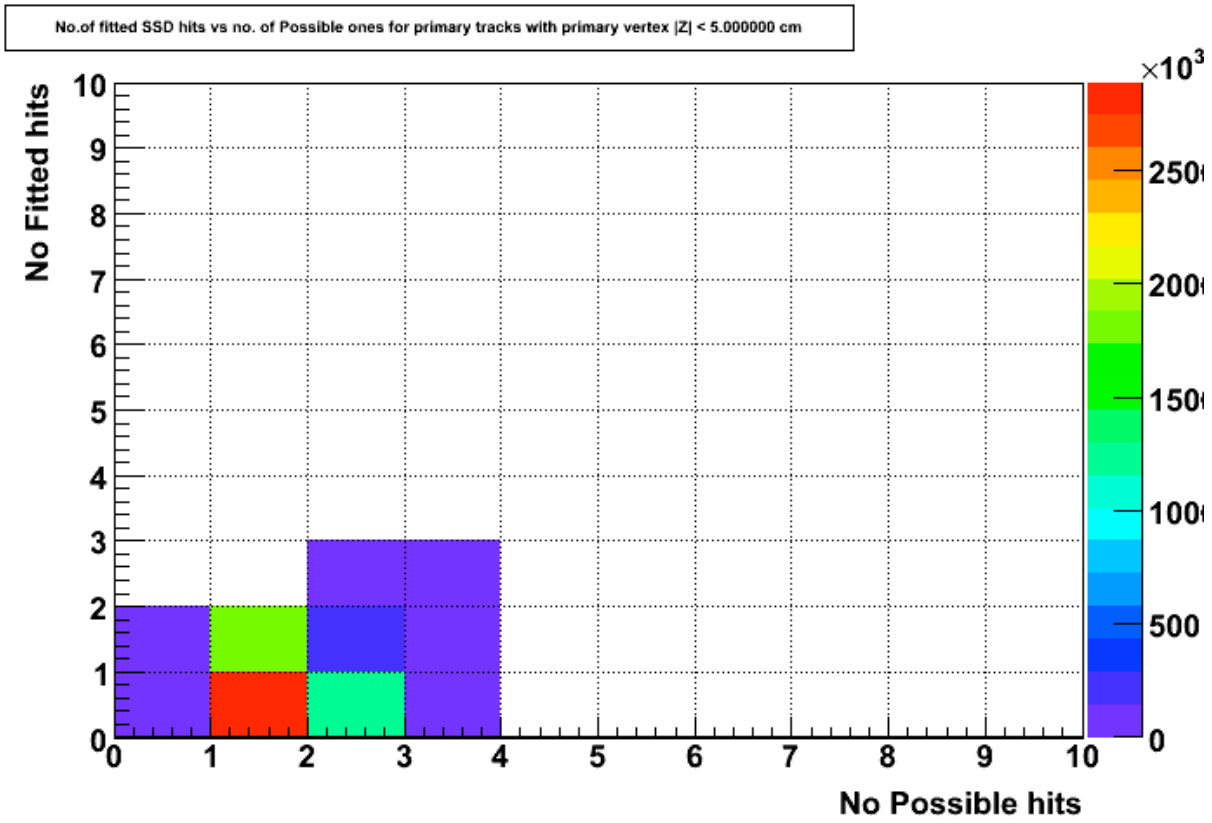
- RFF : Low Luminosity run ; day 159
- Primaries tracks
- |z-vertex| < 5 cm
- η in SSD acceptance
- NTpcFit points > 15
- Efficiency : calculated as a binomial distribution between No of fitted points and No of possible points.

Φ of tracks with NoFittedHits =1



The distribution of tracks where NoFittedHits=1 for SSD is agree with Mark's plot.

Overall Efficiency



Integrated over phi and pT :
Efficiency = 38.1%

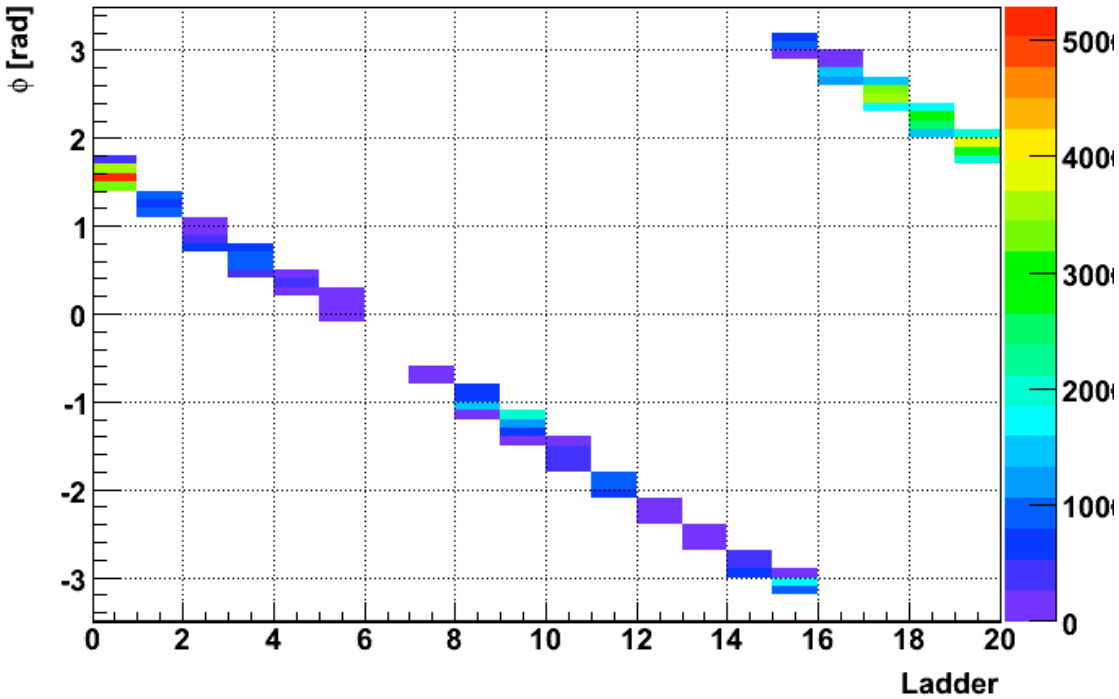
Efficiency per ladder

ladder	1	2	3	4	5	6	7	8	9	10
Eff (%)	70.3	16.8	8.6	33.9	69.5	15.8	~0	1.6	66.1	41.4
ladder	11	12	13	14	15	16	17	18	19	20
Eff (%)	23.2	73.7	10	6.4	18.7	57.0	23.9	67.8	60.1	54.9

Summary

- Efficiency depends of the phi of tracks then we have differents values ladder by ladder
- Maximum efficiency is ~ 70 %
- will look at FF data

Ladder Id vs Φ



I used this plot to find the relation between the ladder id and its phi range.