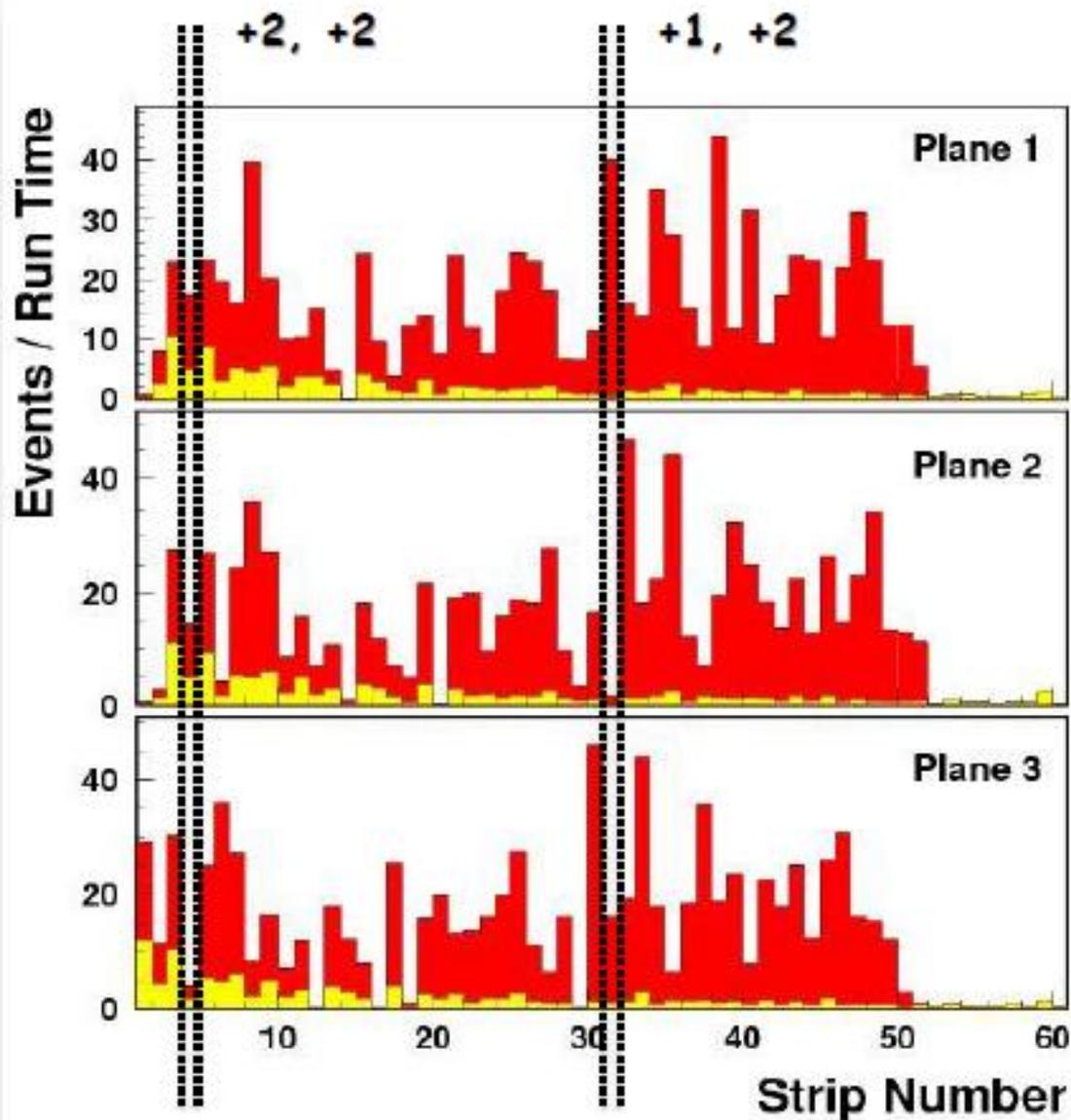


# Offsets



Runs: 3738 (ON)  
Run: 3754 (OFF)  
Beam: 100  $\mu$ A  
Dist: 8.69 cm

 Laser ON  
 Laser OFF

- Distribution of the events/tracks from two runs (Laser ON/OFF) are plotted for each plane.

- The difference between Laser ON/OFF is clearly visible.

- Offsets between the planes exist, and approximately they are: 1<sup>st</sup> and 3<sup>rd</sup> planes (+2 (or +1 and +2) ) strips (compared to the last one).

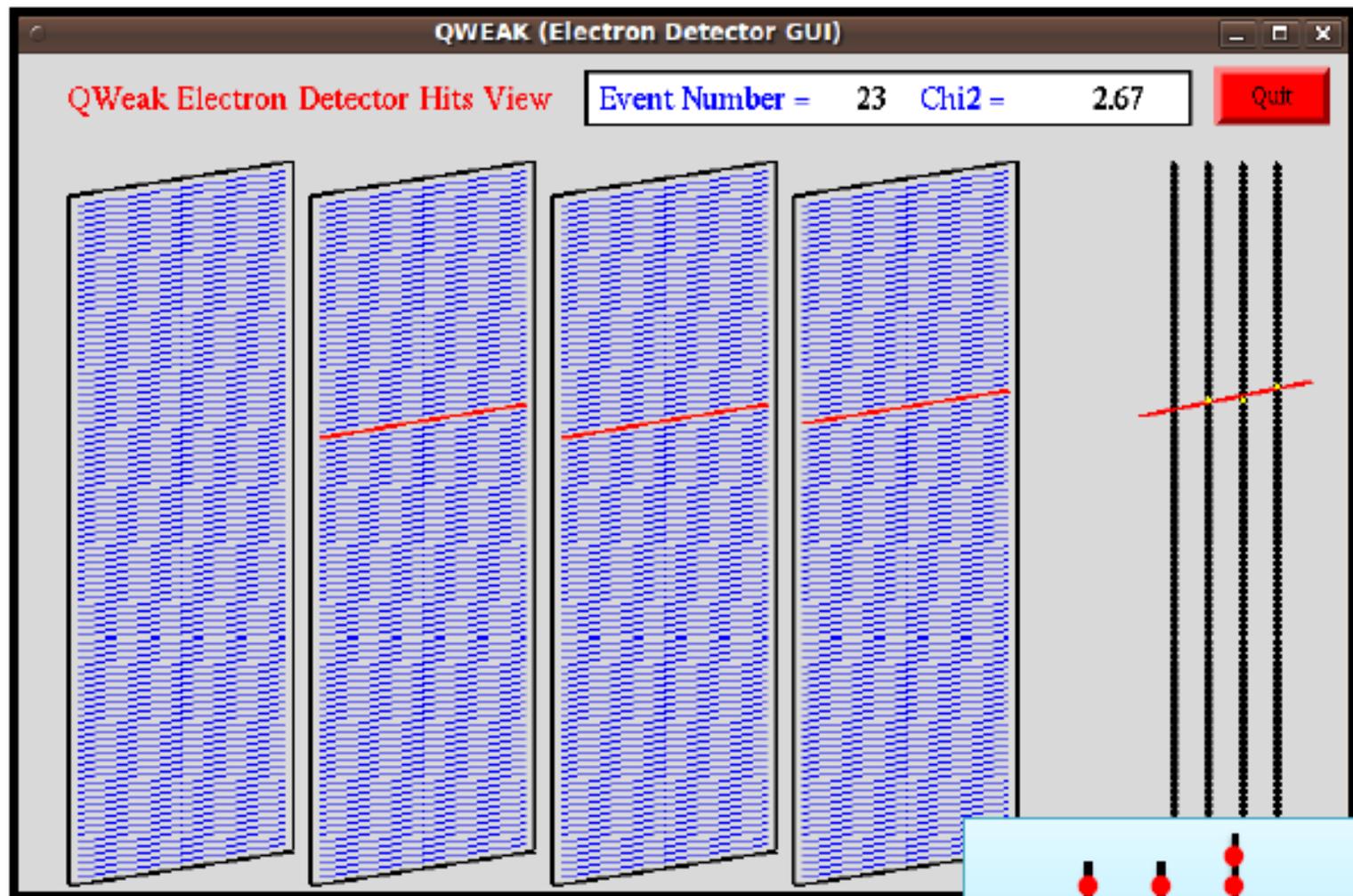
- Background from Laser OFF is negligible and behaves as expected.

# Offsets between the Planes

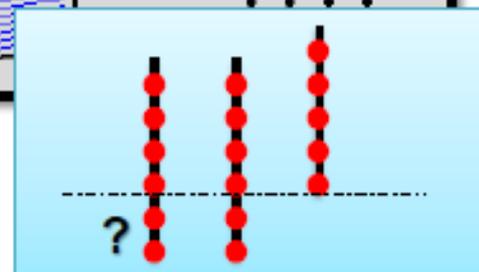
Examples:

1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup>

|    |    |    |
|----|----|----|
| 41 | 41 | 39 |
| 26 | 27 | 25 |
| 42 | 43 | 41 |
| 14 | 14 | 12 |
| 50 | 50 | 48 |
| 48 | 49 | 47 |
| 20 | 20 | 18 |
| 15 | 15 | 13 |
| 34 | 34 | 32 |
| 33 | 33 | 31 |
| 25 | 26 | 14 |
| 26 | 27 | 25 |
| 37 | 38 | 36 |
| 23 | 24 | 22 |
| 34 | 34 | 32 |



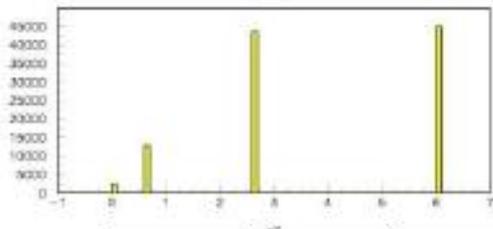
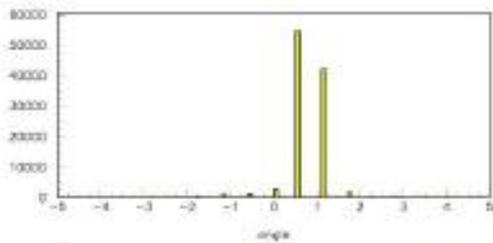
Data suggest that there are offsets between the planes: approximately they are: 1<sup>st</sup> and 2<sup>nd</sup> planes (+2) strips (compared to the last one).



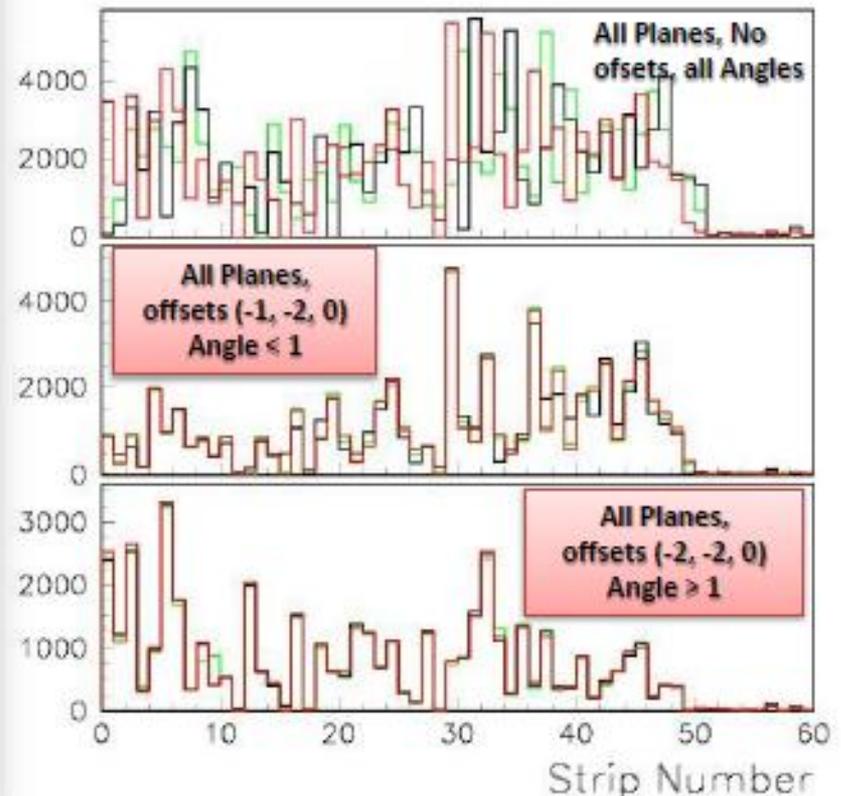
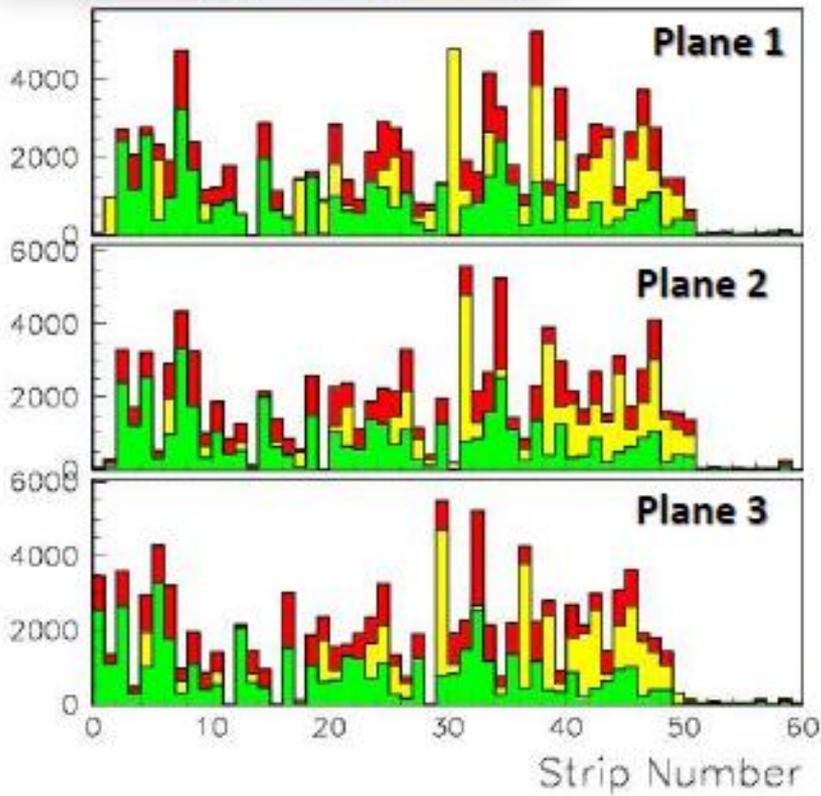
# Angular Distribution

(On the left plot) the distribution of the  $x^2$  is not perfect due to misalignment of the planes. Due to this, distribution of the hits/tracks on planes are different for each other, therefore before trying to calculate efficiency we need to understand which offsets we need to apply and where (to which strips).

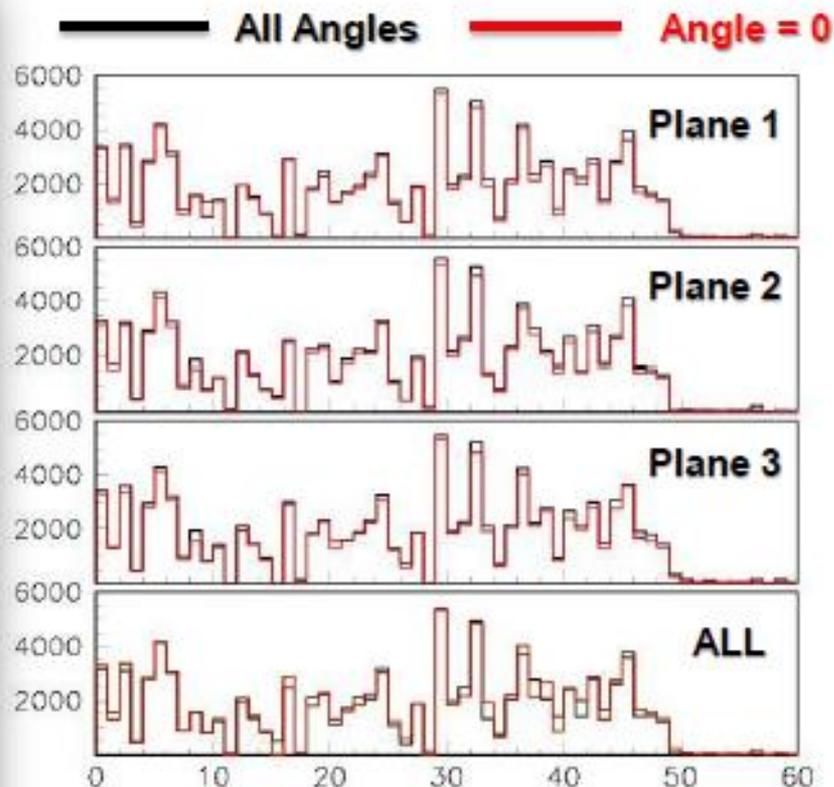
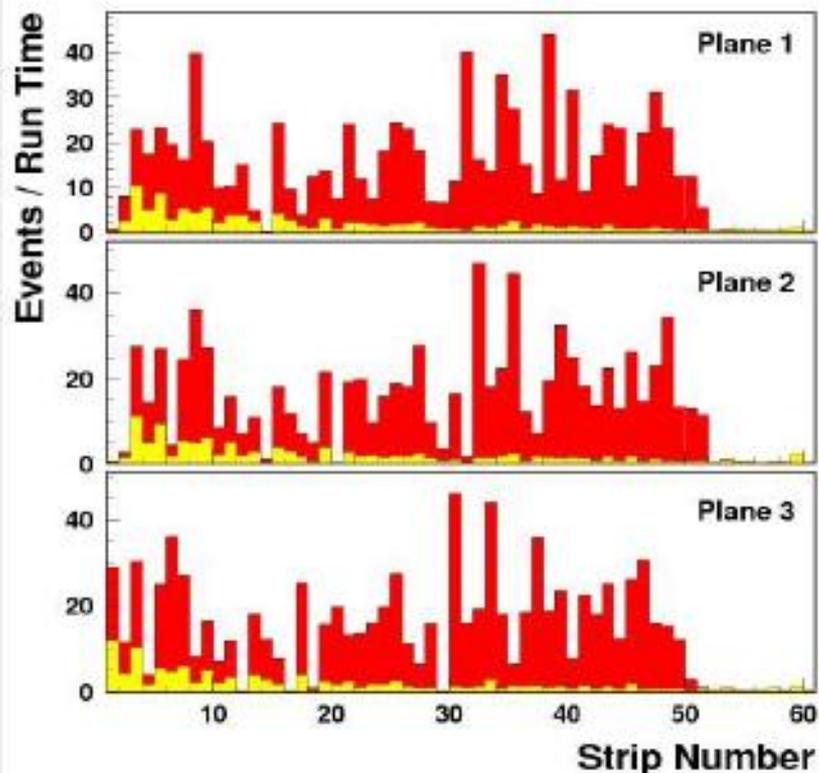
Distributions of the strips for all planes are the same for the same angles.  
There are more "events" with  $>1$  at low number of strips, and more events with  $<1$  at high number of strips.



All <1 >1



# Offset Corrected Data



• After offset correction all planes (distributions for all planes) become very similar (as we expected).

• Almost all tracks/events have angle=0

Angle  $< 1$   
offsets (-1, -2, 0)

Angle  $\geq 1$   
offsets (-2, -2, 0)

Corrections (Offsets) worked. Next Steps: Calculate Efficiency and get "Compton behavior data"