Olsson

JADE Computer Note ~~43~~ 44

P. Steffen

8.9.1980

Change of JETCAL + improve resolution for tracks close to the wire plane.

1. Change of JETCAL:
   After subtraction of the time pedestale, the drift time is no more set to zero, if it happens to be negative.
   The first bank descriptor word of the calibrated JETC-bank is increased by 200 (in the old version it was increased by 100).

   If a calibrated JETC-bank exists, one can use the subroutine JRECAL for recalibration. The routine is faster than the deletion of the existing calibrated JETC-bank and the subsequent call of JETCAL.

2. The resolution for tracks close to the wire plane can be improved by using the following algorithm for the calculation of the distance from the sense wire:

$$\Delta = \tau \cdot V_{drift}$$

$$\Delta < -0.63 \text{ mm} : \quad \Delta_{corr} = 0$$

$$-0.63 \text{ mm} < \Delta < 1.80 \text{ mm} : \quad \Delta_{corr} = (\Delta + 0.63 \text{ mm}) \cdot 0.80$$

$$1.80 \text{ mm} < \Delta < 4.00 \text{ mm} : \quad \Delta_{corr} = (\Delta + 0.28 \text{ mm}) \cdot 0.93$$

$$4.00 \text{ mm} < \Delta \qquad \Delta_{corr} = \Delta$$

   With this correction one obtains a much better resolution for high momentum tracks which are close to the wire plane.

3. FXYZ and JETXYZ will be changed to cope with negative drifttimes.

4. The changes will be done at the 10.9.80.

5. In the coming period of data taking the new JETCAL will be used.