Drift Chamber Efficiency

The drift chamber efficiency was computed for each wire. In figure 1, the vertical axis represents a wire index (wire index = 100*plane + wire). Almost all wires have efficiencies better than 90%. The reason for the relatively low wire efficiency is that in this calculation no correction is made for the finite tracking resolution, which may result in a track to be expected in the adjacent cell if it passes close to the edge. Figure 2 shows the efficiency when this "edge effect" is taken into account. About 96% of the wires have a 100% efficiency, while all the remaining 4 have efficiencies better than 99%.

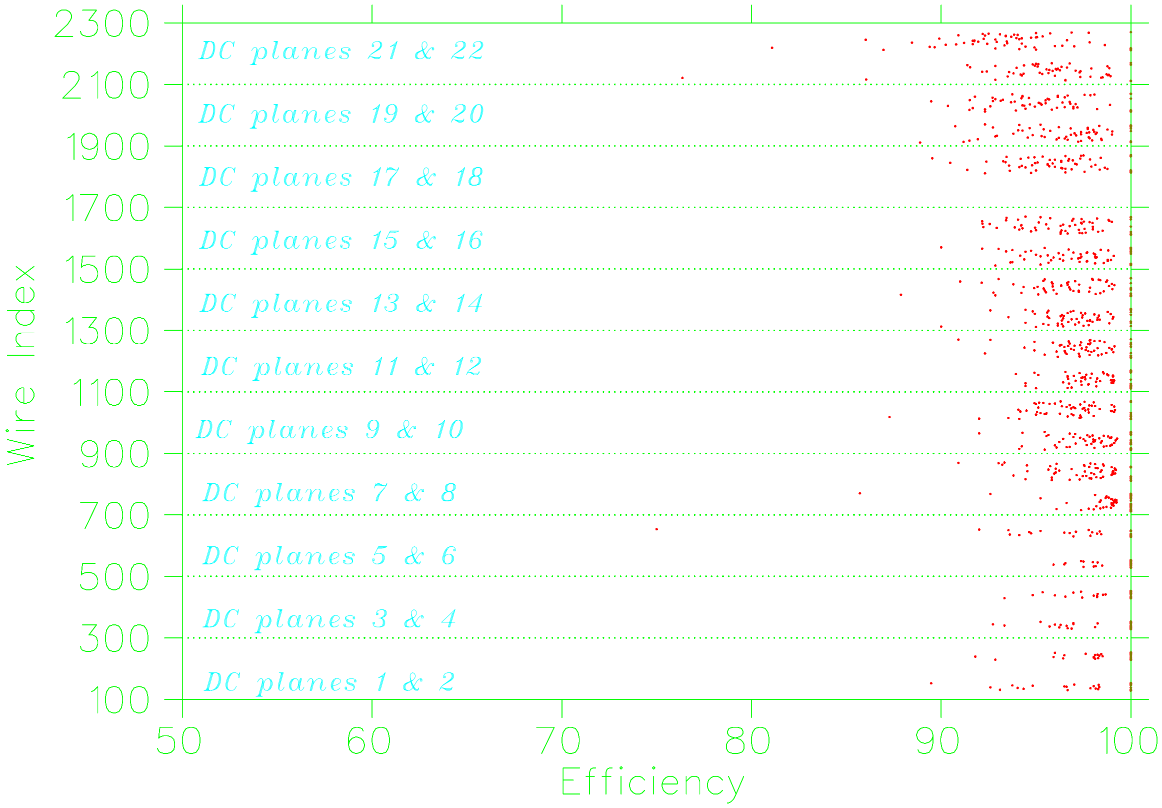

Figure 1: Plane efficiencies without cell-edge corrections.

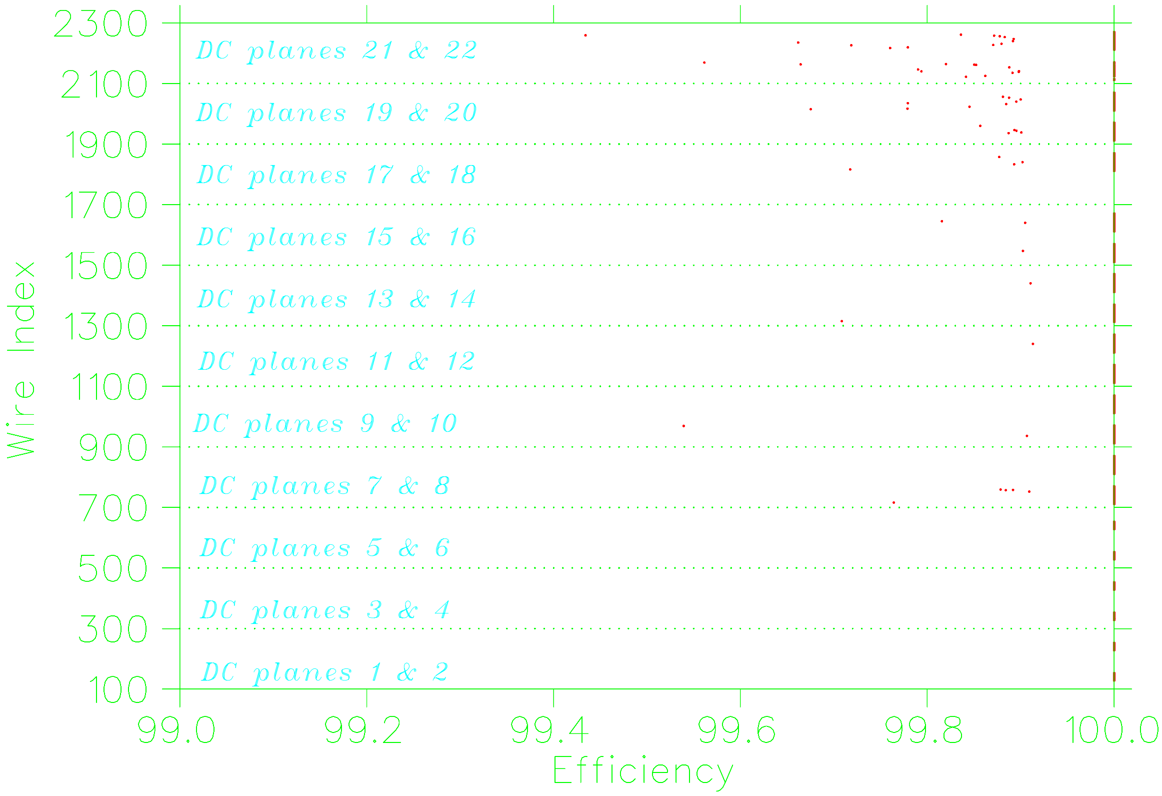

Figure 2: Plane efficiencies with cell-edge corrections.