The following is some more detail of electron drift in the TPC. The drift of electrons basically follows the flowing equation.

$$\vec{v}_d = \frac{\mu E}{1+\omega^2\tau^2} \cdot [\hat{E} + \omega\tau\,\hat{E}\times\hat{B} + \omega^2\tau^2(\hat{E}\,\hat{B})\hat{B}$$

where V_d is the drift velocity vector. The E hat and B hat are the unit vectors of the E and B fields, and mu and omega-tau are gas parameters (magnetic field strength is also in the omega parameter). Tau is the mean time between collisions, omega is the cyclotron frequency, and mu is the electron mobility.

If I remember correctly the number that was most debated in E895 was omega-tau. The number ranged from about 4 to 6.5 if I remember correctly. Once you know omega-tau (I will call this wt from now on) you will have the electron drift mapping, and you should not need simulation. You can see that the behavior is quite dependent on wt. For small wt the electron just drift along the E field lines. For large wt, the last term is dominant and the electrons follow the B fields. The E cross B effect is most significant for wt near one.

The point of this is that we can easily calculate the distortions with the equation above. We just have to make some guesses about wt. Once we have data, we can extract wt from that.