1. The input file (sol100.in) has following line for solenoidal field

map1D\_B("wcs","z",0.590,"bsol1.gdf","z","Bz",Bfac);

2. Bfac.mr file is having following lines:

#Bfac 0.2 0.5 0.05 (\* in case you want to run from 0.2 to 0.5 in steps of 0.05)

Bfac 0.2 (in case you want to run for specific field values)

Bfac 0.28

Bfac 0.4

Bfac 0.45

Bfac 0.6

Bfac 0.65

Bfac 0.78

3. Batch file command to run mr files:

mr -o sol100.gdf Bfac.mr gpt sol100.in (\*creates gdf file for solenoidal fields as mentioned in Bfac.mr)

gdf2a -o result.txt sol100.gdf x y z G Bx By Bz ID (\*creates ascii data from gdf file\*)

4. 4DUniformDist20K.dat has uniform distribution for X, Y within ±10mm & ±10 mrad while energy is uniform from 90 keV to 110 keV for electron. Batch file command to make it to gdf is:

asci2gdf -o particle.gdf 4DUniformDist20K.dat