$$\gamma = 0.20$$

$$M_{tar}$$
  $\bar{\rho} = 1.87g/cm^3$   
 $\bar{h} = 8.51 * 10^6 cm$   
100104 particles

$$M_{imp} \ \bar{\rho} = 1.86g/cm^3 \ \bar{h} = 8.84 * 10^6 cm \ 19994 \ particles$$

$$50\tau_{coll} = 49.52h @ v_{esc}$$

$$M_{tar}$$
  $\bar{\rho} = 2.19g/cm^3$   
 $\bar{h} = 1.73 * 10^7 cm$   
100104 particles

$$M_{imp}$$
  $\bar{\rho} = 2.06g/cm^3$   
 $\bar{h} = 1.83 * 10^7 cm$   
19994 particles

$$50\tau_{coll} = 46.24h @ v_{esc}$$

$$M_{tar}$$
  $\bar{\rho} = 2.95 g/cm^3$   
 $\bar{h} = 3.36 * 10^7 cm$   
 $100087$  particles

$$M_{imp} \ \bar{\rho} = 2.38 g/cm^3 \ \bar{h} = 3.69*10^7 cm \ 19991 \ {\rm particles}$$

$$50\tau_{coll} = 41.00h @ v_{esc}$$