$$\gamma = 0.20$$

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

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

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

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

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

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