$R_{\min} = 3.10 \text{ AU}, R_{\max} = 40.50 \text{ AU}$ 1000 [AU] 20 $N_{
m bound}$ 800 $R_{
m half}$ 600 10^{0} 10^{0} Time [yr] Time [yr] 1e-7 error 0.00 0.0 Gravity energy 6 -0.25energy -0.50 $-0.75\frac{10^{0}}{10^{0}}$ 10^{0} Time [yr] Time [yr]

 $R_{\min} = 10.63 R_{\max} = 25.59$ $R_{\min} = 12.33 R_{\max} = 23.55$ $R_{\min} = 14.07 R_{\max} = 21.55$ $R_{\min} = 16.20 R_{\max} = 19.94$ $R_{\min} = 3.10 R_{\max} = 40.50$ $R_{\min} = 4.04 R_{\max} = 37.70$ $R_{\min} = 5.11 R_{\max} = 35.03$ $R_{\min} = 6.35 R_{\max} = 32.53$ $R_{\min} = 7.66 R_{\max} = 30.09$ $R_{\min} = 8.96 R_{\max} = 27.66$