

Questions20230725

1. Could we ask for the developer of LMGC90 to improve the precision to double precision?

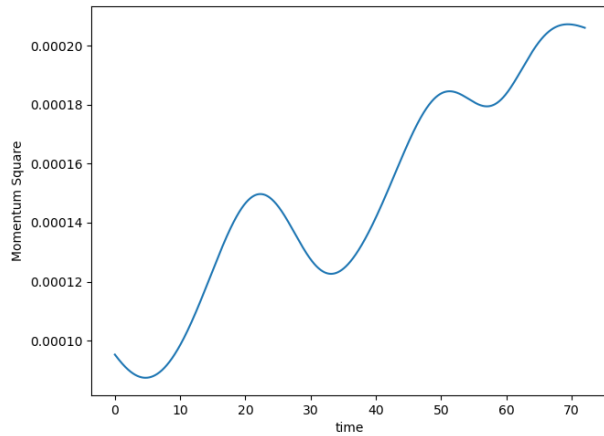


Fig.1 Torque-free case

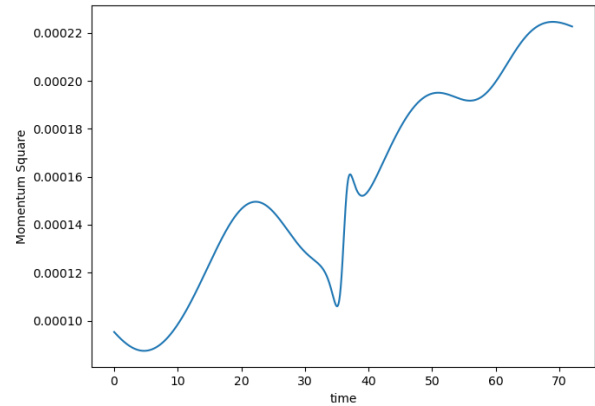


Fig.2 Flyby-case

I tried to control the precision by shrink interval time Δt , but it is very hard to improve more.

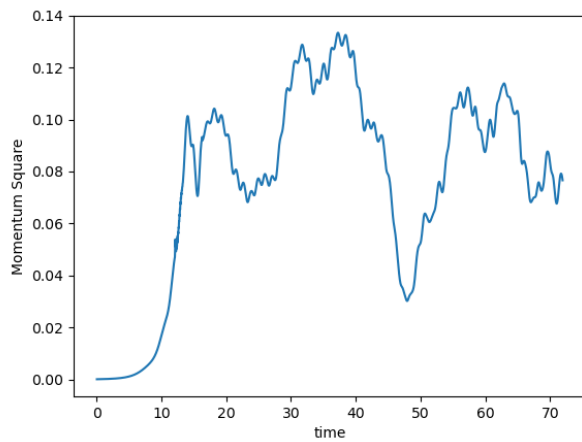


Fig.3 Time Interval 10^{-1}

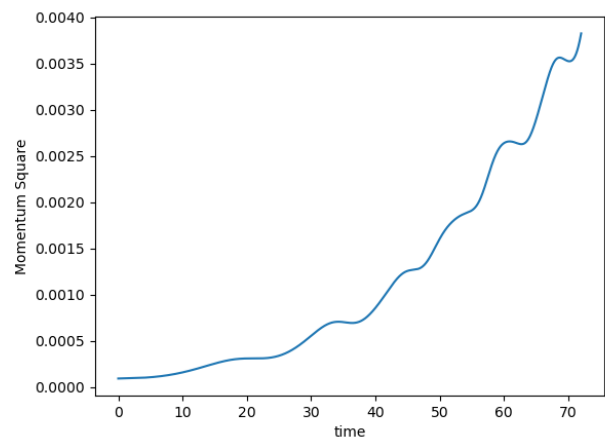


Fig.4 Time Interval 10^{-2}

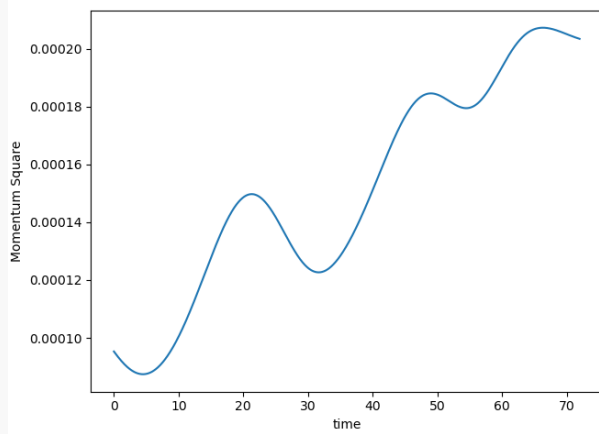


Fig.5 Time Interval 10^{-3}

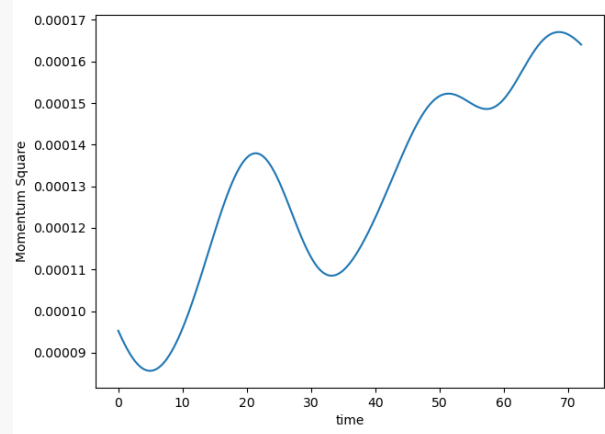
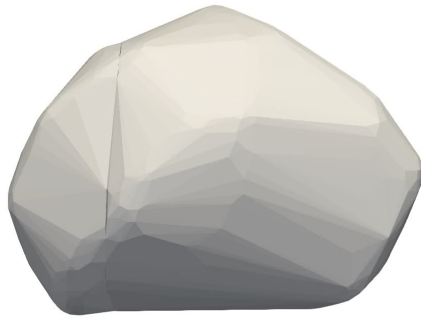


Fig.6 Time Interval 10^{-4}

2. Animation Shaking. I tried to add the Earth perturbation behind the Gravity force, but the animation shaking. How can I fix this?



Video 1. Flyby animation with 0.5 fraction

3. The 300-bodies simulation can't run.