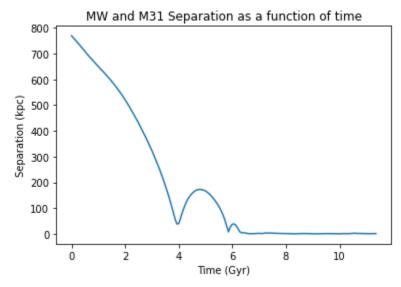
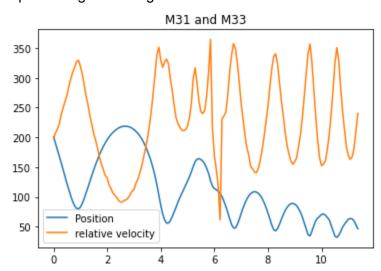
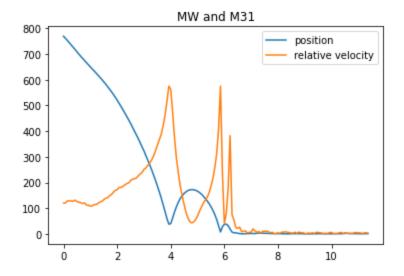
1. The MW and M31 experience 3 close encounters. This can be seen by the three minima in the plot of their relative positions

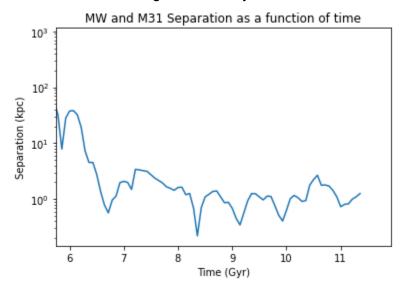


2. The positions are generally inverse to the velocities with the velocities experiencing much larger variations.

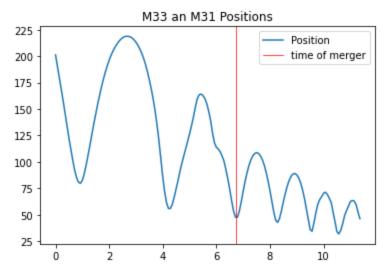




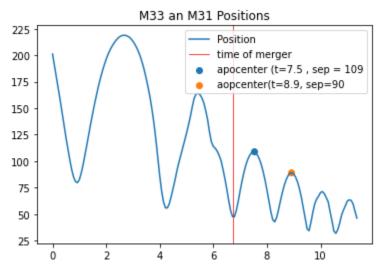
3. The MW and M31 merge after 6.7 Gyr



After MW and M31 merge the period of the orbit of M33 increases and the maximum separation decreases.



4. The difference between two successive apocenters is 1.4 Gyr and 19 kpc.



This means that if the initial separation is 75 kpc after 4 orbits M33 will merge with the MW/M31 remenate. 5.5 Gyr after the MW/M31 merger takes place M33 merges.