(3,16,17). One of the most easily accessible quantities to monitor in an NPT ensemble is the total area A of a bilayer with N_{chol} cholesterol molecules and N_{DPPC} DPPC molecules in each monolayer. One can then define the area per total lipid $a(x)$ as a function of the mole fraction of cholesterol, defined as $x \equiv N_{\mathrm{chol}}/(N_{\mathrm{DPPC}} + N_{\mathrm{chol}})$,

$$a(x) = \frac{A(x)}{N_{\mathrm{lipids}}} = \frac{A(x)}{N_{\mathrm{DPPC}} + N_{\mathrm{chol}}}. \quad (1)$$

Table 1 and Fig. 1 show that there are some differences between the three simulations, but within statistical error they are rather similar.