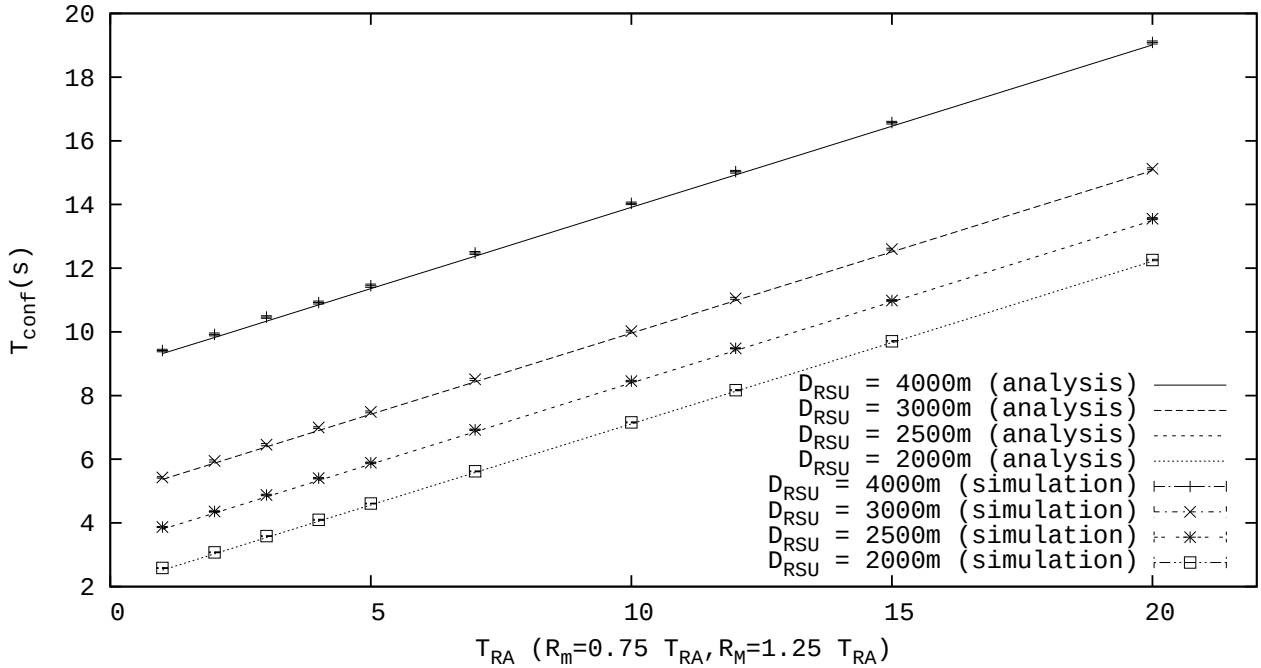
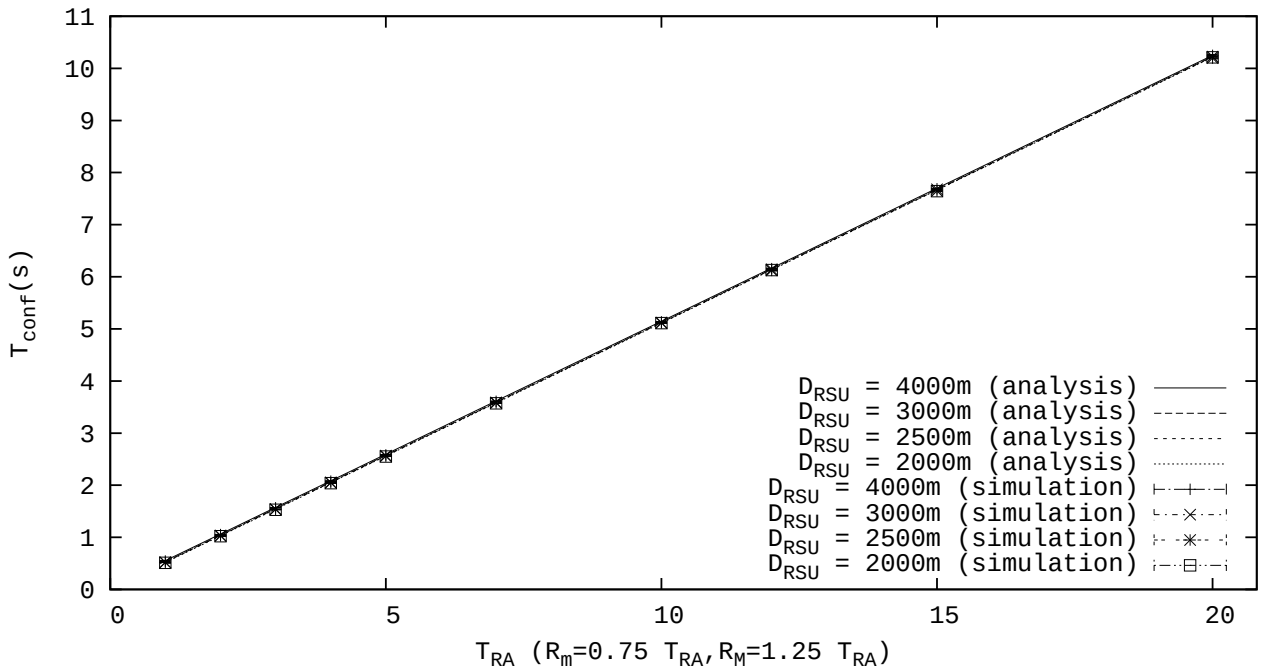


(a) $R = 150m$



(b) $R = 300m$