SIR using Gillespie's discrete event model
$1.00\text{e-}02,\ \gamma = 1.00\text{e-}03,\ \mu = 3.91\text{e-}05,\ \varepsilon = 0.00\text{e+}00,\ I_0 = 5.00\text{e-}02,\ N_{pop} =$