Description of Methodology:

Step1: The parameter values were calculated using central difference approximation and the results were:

a=0.346

b=0.097583

r=0.076586

c=0.022312

Step2: The parameters in step1 were used as initial values of parameters for the LSQ Method and the parameters obtained are:

a = 1.000110

b = 0.345389

r = -0.034175

c = -0.155267

Step3: The parametres in Step1 were used as initial values of parameters for the Direct method and the parameters obtained are:

a=0.814358

b=0.032091

r=-0.213041

c=-0.004811