

The Matlab script plots.m allows the user to reproduce the whole body simulations used to identify the model against data from volume infusion and hemorrhage.

The following scripts compute the right-hand side of the set of differential equations for the model. The two different versions of the model are used for different simulations, as described below

dXdT1.m – This is the full model

dXdT2.m – This model assumes volume infusion and urine volume output are balanced. (Used for hemorrhage experiments.)

Other files:

par.mat: Vector of model parameter values

xo.mat: The initial conditions (obtained by running the default model to a steady state)

PVfunction.m: computer the LV pressure as a function of time and volume