ODEPHAS2 2-D phase plane ODE output function.

When the function odephas2 is passed to an ODE solver as the 'OutputFcn' property, i.e. options = odeset('OutputFcn',@odephas2), the solver calls ODEPHAS2(T,Y,'') after every timestep. The ODEPHAS2 function plots the first two components of the solution it is passed as it is computed, adapting the axis limits of the plot dynamically. To plot two particular components, specify their indices in the 'OutputSel' property passed to the ODE solver.

At the start of integration, a solver calls ODEPHAS2(TSPAN,Y0,'init') to initialize the output function. After each integration step to new time point T with solution vector Y the solver calls STATUS = ODEPHAS2(T,Y,''). If the solver's 'Refine' property is greater than one (see ODESET), then T is a column vector containing all new output times and Y is an array comprised of corresponding column vectors. The STATUS return value is 1 if the STOP button has been pressed and 0 otherwise. When the integration is complete, the solver calls ODEPHAS2([],[],'done').

ODEPHAS3 3-D phase plane ODE output function.

When the function odephas3 is passed to an ODE solver as the 'OutputFcn' property, i.e. options = odeset('OutputFcn',@odephas3), the solver calls ODEPHAS3(T,Y,'') after every timestep. The ODEPHAS3 function plots the first three components of the solution it is passed as it is computed, adapting the axis limits of the plot dynamically. To plot three particular components, specify their indices in the 'OutputSel' property passed to the ODE solver.

At the start of integration, a solver calls ODEPHAS3(TSPAN,Y0,'init') to initialize the output function. After each integration step to new time point T with solution vector Y the solver calls STATUS = ODEPHAS3(T,Y,''). If the solver's 'Refine' property is greater than one (see ODESET), then T is a column vector containing all new output times and Y is an array comprised of corresponding column vectors. The STATUS return value is 1 if the STOP button has been pressed and 0 otherwise. When the integration is complete, the solver calls ODEPHAS3([],[],'done').

ODEPLOT Time series ODE output function.

When the function odeplot is passed to an ODE solver as the 'OutputFcn' property, i.e. options = odeset('OutputFcn',@odeplot), the solver calls ODEPLOT(T,Y,'') after every timestep. The ODEPLOT function plots all components of the solution it is passed as it is computed, adapting the axis limits of the plot dynamically. To plot only particular components, specify their indices in the 'OutputSel' property passed to the ODE solver. ODEPLOT is the default output function of the solvers when they are called with no output arguments.

At the start of integration, a solver calls ODEPLOT(TSPAN,Y0,'init') to initialize the output function. After each integration step to new time point T with solution vector Y the solver calls STATUS = ODEPLOT(T,Y,''). If the solver's 'Refine' property is greater than one (see ODESET), then T is a column vector containing all new output times and Y is an array comprised of corresponding column vectors. The STATUS return value is 1 if the STOP button has been pressed and 0 otherwise. When the integration is complete, the solver calls ODEPLOT([],[],'done').