```
x = solution.phase.time;
N = numel(x);
y1 = solution.phase.state(:,4);
y2 = 180./pi.*solution.phase.state(:,5);
y3 = 180./pi.*solution.phase.state(:,6);
y4 = solution.phase.control(:,1);
y5 = 180./pi.*solution.phase.control(:,2);


%# Some initial computations:
axesPosition = [220 40 1100 605];  %# Axes position, in pixels
yWidth = 40;                       %# y axes spacing, in pixels
xLimit = [min(x) max(x)];          %# Range of x values
xOffset = -yWidth*diff(xLimit)/axesPosition(3);

%# Create the figure and axes:
figure('Units','pixels','Position',[200 200 330 260]);
h1 = axes('Units','pixels','Position',axesPosition,...
          'Color','w','XColor','k','YColor', 'b',...
          'XLim',xLimit,'YLim',[min(y1) max(y1)],'NextPlot','add');

h2 = axes('Units','pixels','Position',axesPosition+yWidth.*[-1 0 1 0],...
          'Color','none','XColor','k','YColor','m',...
          'XLim',xLimit+[xOffset 0],'YLim',[min(y2) max(y2)],...
          'XTick',[],'XTickLabel',[],'NextPlot','add');

h3 = axes('Units','pixels','Position',axesPosition+yWidth.*[-2 0 2 0],...
          'Color','none','XColor','k','YColor',[1.0, 0.7, 0.0],...
          'XLim',xLimit+[2*xOffset 0],'YLim',[min(y3) max(y3)],...
          'XTick',[],'XTickLabel',[],'NextPlot','add');

h4 = axes('Units','pixels','Position',axesPosition+yWidth.*[-3 0 3 0],...
          'Color','none','XColor','k','YColor',[0.0, 0.75, 0.0],...
          'XLim',xLimit+[3*xOffset 0],'YLim',[min(y4) max(y4)],...
          'XTick',[],'XTickLabel',[],'NextPlot','add');

h5 = axes('Units','pixels','Position',axesPosition+yWidth.*[-4 0 4 0],...
          'Color','none','XColor','k','YColor', 'k',...
          'XLim',xLimit+[4*xOffset 0],'YLim',[min(y5) max(y5)],...
          'XTick',[],'XTickLabel',[],'NextPlot','add');

xlabel(h1,'Time(sec)');
ylabel(h5,'States & Controls');

%# Plot the data:
a = plot(h1,x,y1,'b', 'linewidth', 2);
b = plot(h2,x,y2,'m', 'linewidth', 2);
c = plot(h3,x,y3,'Color', [1.0, 0.7, 0.0], 'linewidth', 2);
d = plot(h4,x,y4,'Color', [0.0, 0.75, 0.0], 'linewidth', 2);
%plot(h5,x,y5,'Color', [1.0, 0.6, 0.0]);
e = plot(h5,x,y5,'k', 'linewidth', 2);
```

```
grid (h1,'on');
% % % grid (h2,'on');
% % % grid (h3,'on');
% % % grid (h4,'on');
% % % grid (h5,'on');

legend([a; b; c; d; e], {'Speed (m/s)','Flight path angle (deg)','Azimuth (deg)','CL↙
(dimensionless)','Bank angle (deg)'});
% % % Pos = get(Leg, 'Position');
% % % set(Leg, 'Position', [1 - Pos(3), Pos(2:4)]);

%legend('Speed (m/s)','Flight path angle (deg)','Azimuth (deg)','CL↙
(dimensionless)','Bank angle (deg)')
```