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run_camera_sim.m

Initialize and run camera controls simulation to show robot response.

```
model = 'camera';
info = 'Simulating model: ';
```

Initilize constants

Set up simulation parameters for robot

```
rhodot_s = 1;
x_s = [0 3 6 10];
y_s = [0 0 3 3];

disp(append(info, model))
```

Simulating model: camera

Run the Simulation

Open and run the model, collecting response to plot it

```
open_system(model)
%
% run the simulation
%
out = sim(model);
```

no point visible near row 384
no point visible near row 384
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Plot the Results

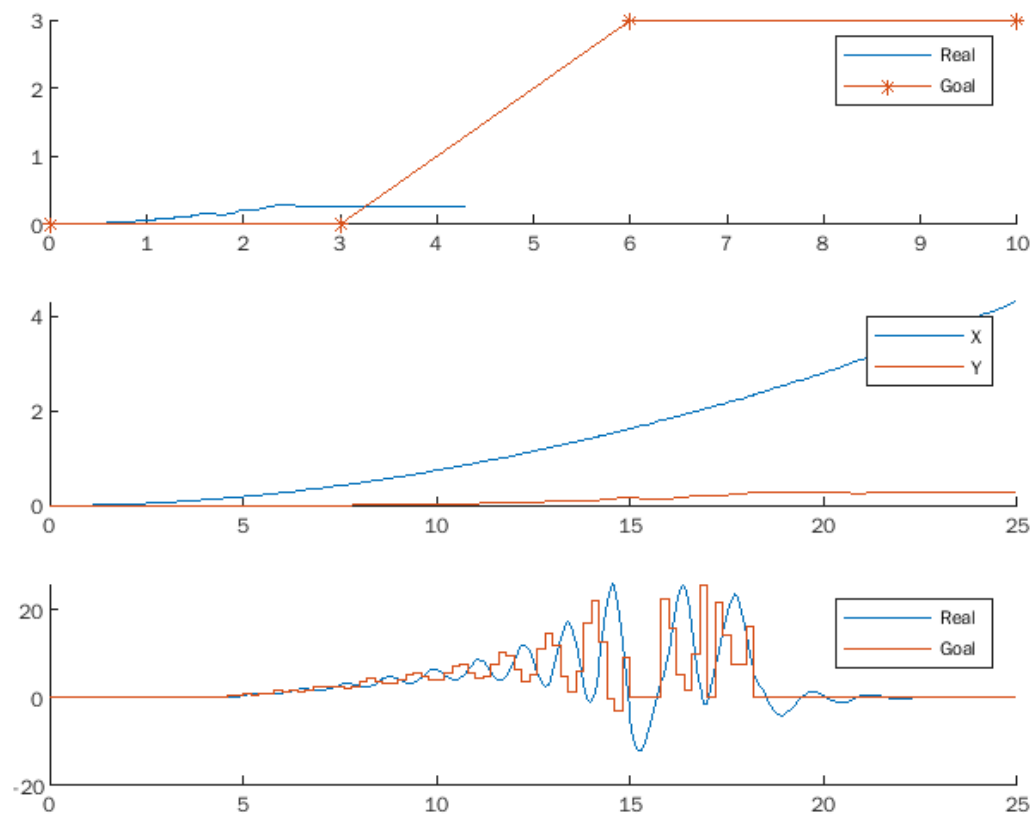Show the robot's drive path, as well as X and Y responses.

```
figure

subplot(3,1,1)
hold on;
plot(out.X.Data, out.Y.Data)
plot(x_s,y_s,'*-')
legend('Real', 'Goal')
hold off;


subplot(3,1,2)
hold on;
plot(out.X)
plot(out.Y)
legend('X', 'Y')
hold off;

subplot(3,1,3)
hold on;
plot(out.Phi)
plot(out.Phi_s)
legend('Real', 'Goal')
```

```matlab
hold off;
```

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