%% Hanus form for of Controller

clear;close all;

format long g

Kp = 8e-5;

Ki = Kp/10;

s = tf('s');

PI = Kp + Ki/(s+0.01);

[A,B,C,D] = ssdata(PI);

A\_Hanus = A - (B/D)\*C;

B\_Hanus = [0 B/D];

C\_Hanus = C;

D\_Hanus = [D 0];

sys\_Hanus = ss(A\_Hanus,B\_Hanus,C\_Hanus,D\_Hanus);

sys\_HanusD = c2d(sys\_Hanus,0.02,'Tustin');

[A,B,C,D] = ssdata(sys\_HanusD);

