>> N = 10;

T = 200;

nx = 3;

nz = 1;

x = zeros(nx,T);

x0 = zeros(nx,1); % initial states

z = zeros(nz,T);

alpha = zeros(N,T);

alpha0 = 1/N\*ones(N,1); % initial weights

particles = zeros(nx,N,T);

Q = [1, 0, 0; 0, 1, 0; 0, 0, 1];

R = 1;

>> w = mvnrnd([0,0,0]', Q, T)';

>> v = mvnrnd(0, R, T)';

>> state\_noise = mvnrnd([0,0,0], Q);

>> H = [1, 1, 1];

>> F = F = [0.5, 0.5, 0; 0, 0.5, 0.5; 0, 0, 0.5];

F = F = [0.5, 0.5, 0; 0, 0.5, 0.5; 0, 0, 0.5];

↑

Error: The expression to the left of the equals sign is not a valid target for an assignment.

Did you mean:

>> F = [0.5, 0.5, 0; 0, 0.5, 0.5; 0, 0, 0.5]; F = F;

>> F = [0.5, 0.5, 0; 0, 0.5, 0.5; 0, 0, 0.5];

>> p\_xk\_given\_xk\_1 = mvnpdf(x, F\*x, Q);

Error using mvnpdf (line 116)

SIGMA must be a square matrix with size equal to the number of columns in X, or a row vector with length equal to the number of

columns in X.

>> p\_xk\_given\_xk\_1 = mvnpdf(x', F\*x, Q);

Error using mvnpdf (line 67)

X and MU must have the same number of columns.

>> p\_xk\_given\_xk\_1 = mvnpdf(x', F\*x', Q);

Error using \*

Inner matrix dimensions must agree.

>>