

```

grid on
hold on

x=0; y=0;
A=[0,0]'; B=[0,0]';
for n=1:50000
    A=cat(1,A,x);
    B=cat(1,B,y);
    r=randi(100,1);
    if r==1
        x=0;
        y=.16*y;
    end
    if 2<=r&&r<=86
        x=.85*x+.04*y;
        y=-.04*x+.85*y+1.6;
    end
    if 87<=r&&r<=93
        x=.2*x-.26*y;
        y=.23*x+.22*y+1.6;
    end
    if 94<=r
        x=-.15*x+.28*y;
        y=.26*x+.24*y+.44;
    end
end
plot(A,B,'g.','markersize',1)

```