file = untitled; % 'untitled' refers to the data in the MATLAB workspace

%

n = 1; % select the selection to be displayed;

i = file(:,n);

x = file(:,end-2);

y = file(:,end-1);

z = file(:,end);

cutoff =1000; % select a cut-off value

scale = 2; % how much to scale down the dots. Larger numbers mean smaller dots

xx = []; % vectors to be filled with values above tolerance only

yy = [];

zz = [];

ii = [];

seqnum = length(i); % number of sequences that are read

for n=1:seqnum

if i(n)>cutoff

xx = [xx; x(n)];

yy = [yy; y(n)];

zz = [zz; z(n)];

ii = [ii; i(n)];

end,

end

totalcount = sum (i); %total counts

thresholdcount = sum (ii); %counts above threshhold

C=ceil(ii);

figure; % from here on the output figure is defined

axes1 = axes('LineWidth',1.5,'FontWeight','bold '); % Create axes

view(axes1,[-37.5 30]);

grid(axes1,'on');

hold(axes1,'all');

scatter3(xx,yy,zz,ii/scale,C,'filled');

box on;

colorbar('peer',axes1,'FontWeight','bold'); % Create colorbar

xlabel('Code 1','FontWeight','bold'); % Create xlabel

ylabel('Code 2','FontWeight','bold'); % Create ylabel

zlabel('Code 3','FontWeight','bold'); % Create zlabel