

```

function class_head_map
loc1 = cd;
loc = 'C:\Documents and Settings\GOPAL VALSAN\My Documents\My Data\';
xfile = 'X-HighDensity.txt';
yfile = 'Y_HighDensity.txt';
zfile = 'Z-HighDensity.txt';

cd(loc);
x = dlmread(xfile, '\t');
y = dlmread(yfile, '\t');
z = dlmread(zfile, '\t');

cd(loc1);
[file, loc] = uigetfile('*.txt', 'Pick a classification file');
cd(loc)
class = dlmread(file, '\t');

[m,n] = size(class);
h = figure;
for i = 1:m
    class1(i) = (sum(class(i,1:n-1)))/((n-1)*class(i,n))*100;
end

map = head_map1(class1);

[m,n] = size(x);

for i = 1 : (m-1)
    for j = 1:(n-1)
        xtemp = [x(i,j) x(i,j+1) x(i+1,j) x(i+1,j)];
        ytemp = [y(i,j) y(i,j+1) y(i+1,j) y(i+1,j)];
        ztemp = [z(i,j) z(i,j+1) z(i+1,j) z(i+1,j)];
        maptemp = [map(i,j) map(i,j+1) map(i+1,j) map(i+1,j)];
        fill3(xtemp,ytemp,ztemp,maptemp);
        hold on
        xtemp = [x(i+1,j) x(i+1,j+1) x(i,j+1) x(i,j+1)];
        ytemp = [y(i+1,j) y(i+1,j+1) y(i,j+1) y(i,j+1)];
        ztemp = [z(i+1,j) z(i+1,j+1) z(i,j+1) z(i,j+1)];
        maptemp = [map(i+1,j) map(i+1,j+1) map(i,j+1) map(i,j+1)];
        fill3(xtemp,ytemp,ztemp,maptemp);
        hold on
    end
end
view([91.5, 34]);
colorbar

file = strrep(file, '.', '-');
saveas(h, file, 'fig')
saveas(h, file, 'jpg')

```