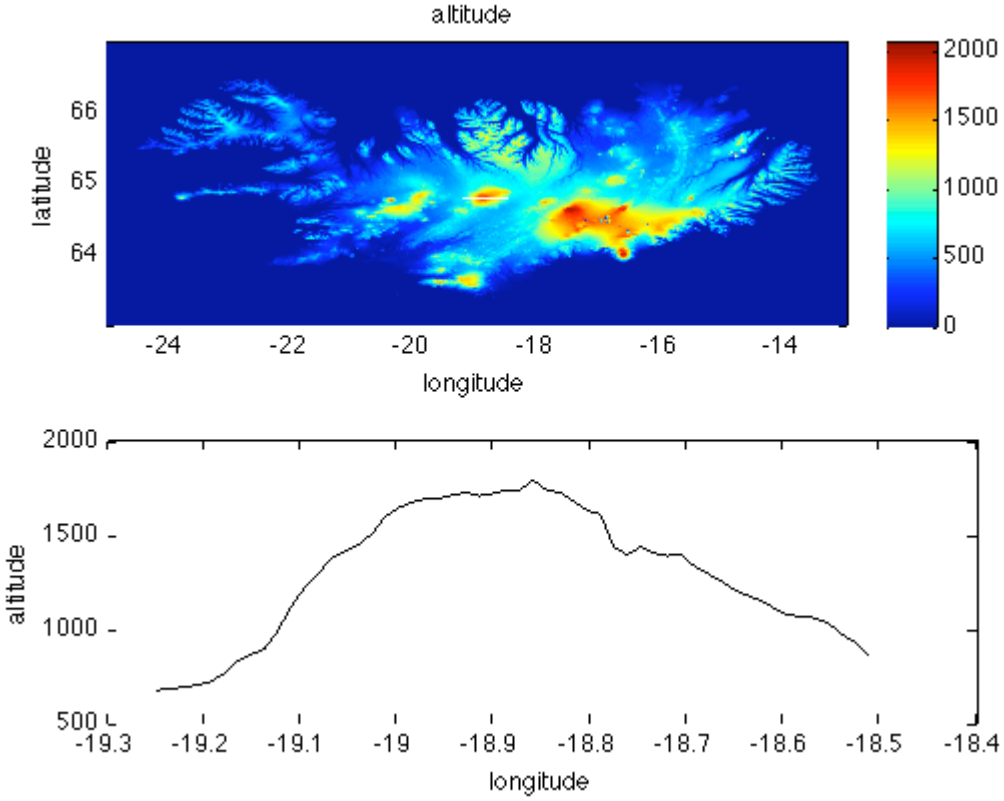
```
clear all
close all
clc

% question 1

aa=load('data_islande.txt');

nlon=length(unique(aa(:,1)));
nlat=length(unique(aa(:,2)));

lon=reshape(aa(:,1),nlon,nlat);
lat=reshape(aa(:,2),nlon,nlat);
topo=reshape(aa(:,3),nlon,nlat);

% question 2

topo(topo>2110)=NaN;

figure
subplot(2,1,1)
pcolor(lon,lat,topo)
shading interp
xlabel('longitude')
ylabel('latitude')
title('altitude')
colorbar

% question 3

lon1=-19.25 ; lat1=64.8;
lon2=-18.50 ; lat2=64.8;

line([lon1 lon2],[lat1 lat2],'Color','w')

% question 4

pas=abs(lat(1,2)-lat(1,1));

x=lon(lon>lon1 & lon<lon2 & abs(lat-lat1)<pas/2);
y=topo(lon>lon1 & lon<lon2 & abs(lat-lat1)<pas/2);

subplot(2,1,2)
plot(x,y,'k')
xlabel('longitude')
ylabel('altitude')
```



Published with MATLAB® 7.9