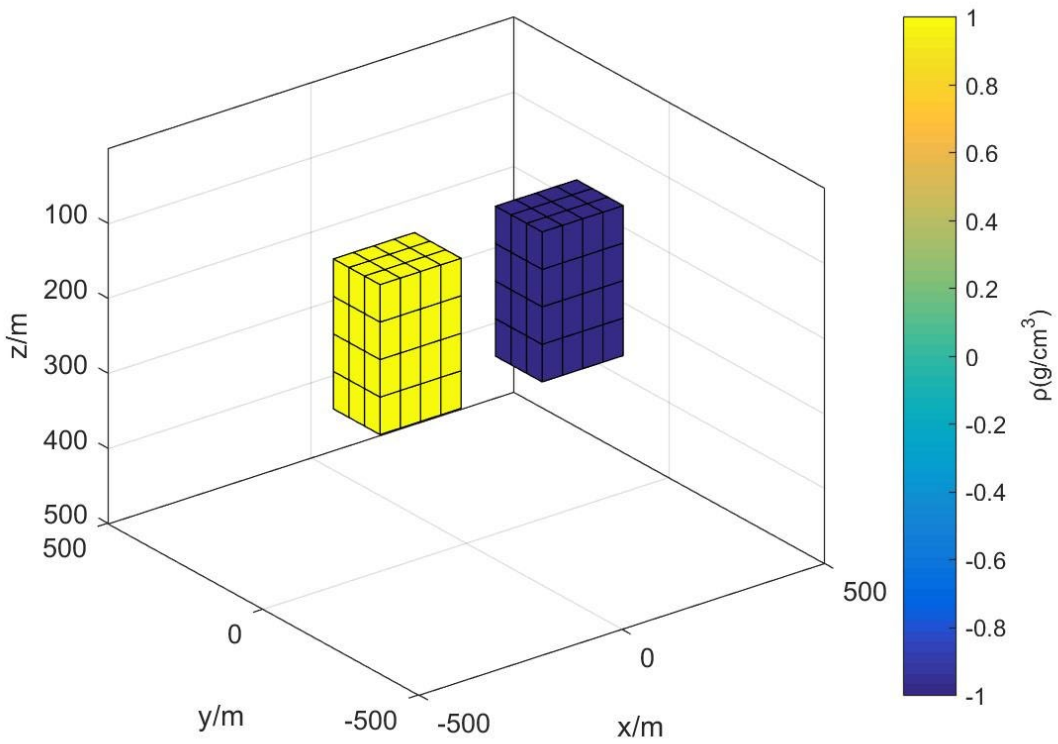
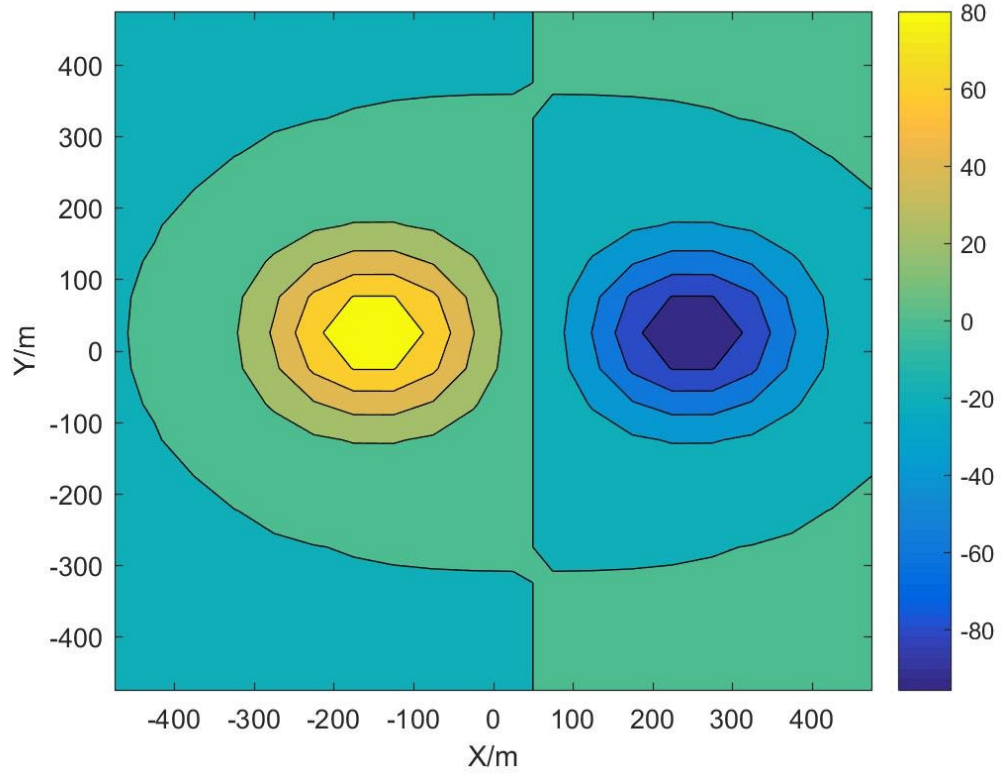
Synthetic model



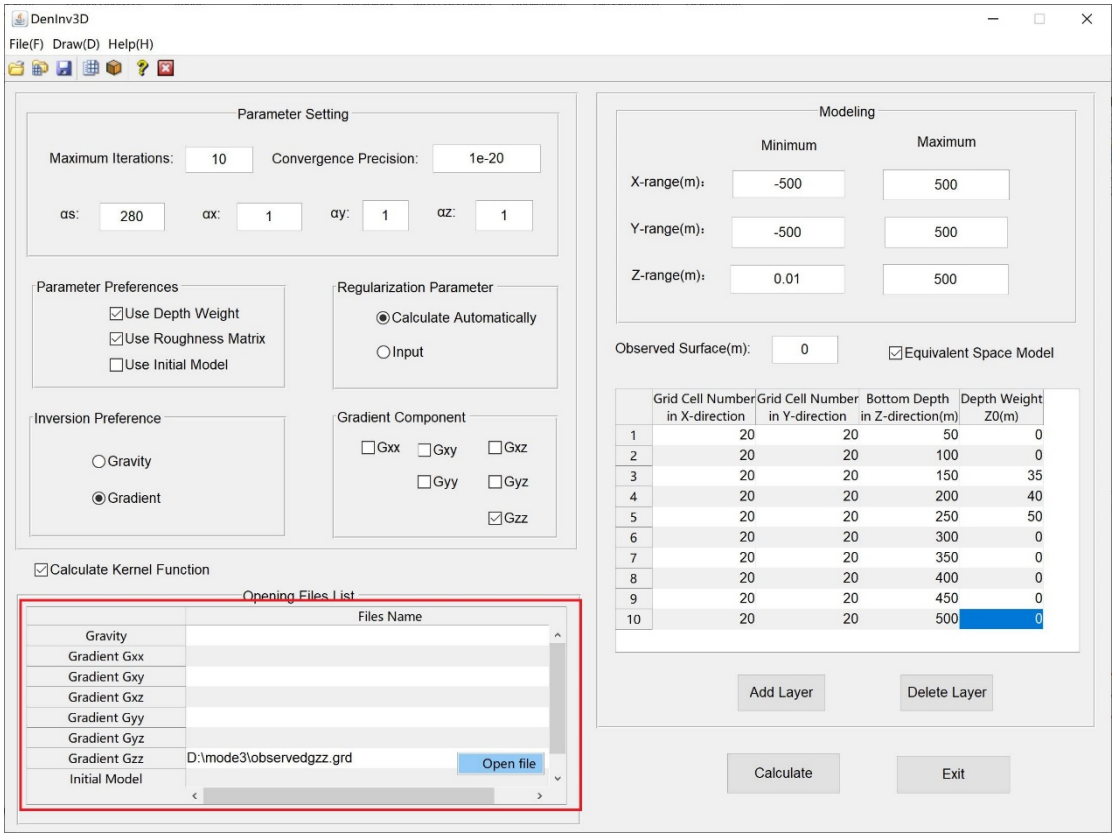

Observed Gzz: observedgzz.grd



Step1:

Parameter setting and open file:

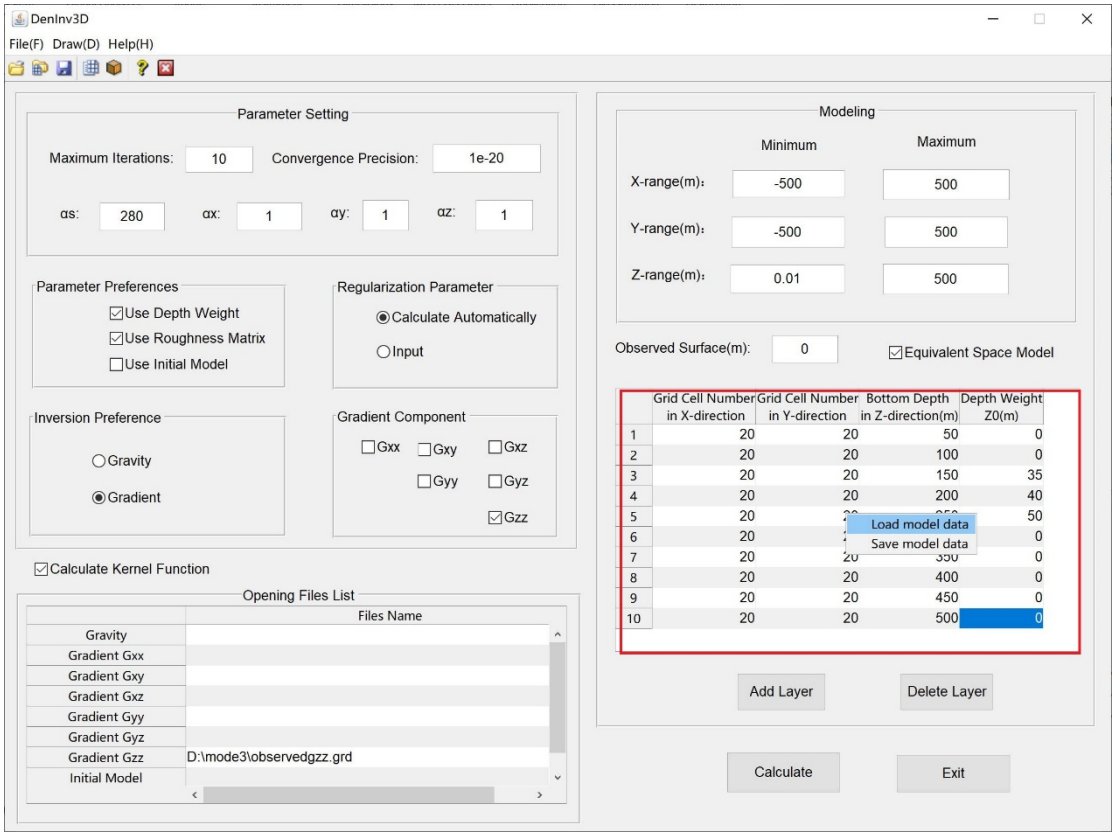
Click right-button of mouse inside the red line to open the observed gzz file:observedgzz.grd




Step2:

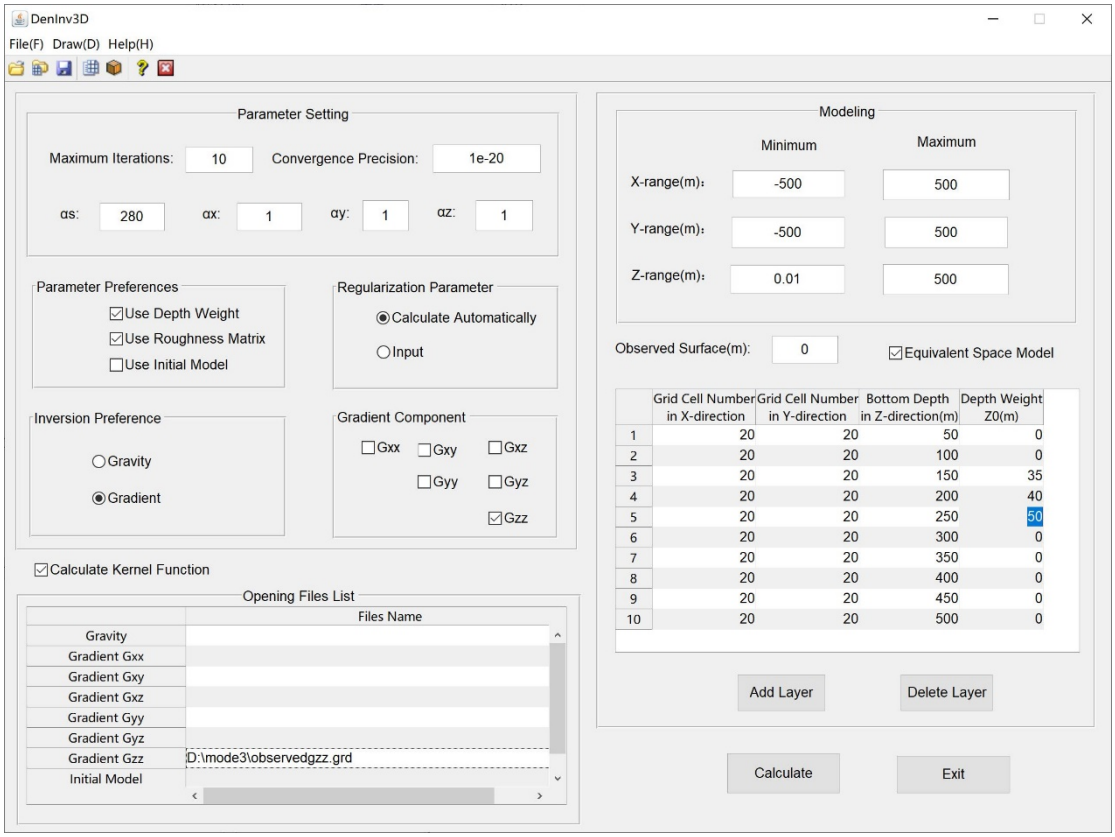
Input the modeling parameters or load model data from file, click right-button of mouse to open a model file in the red line area.

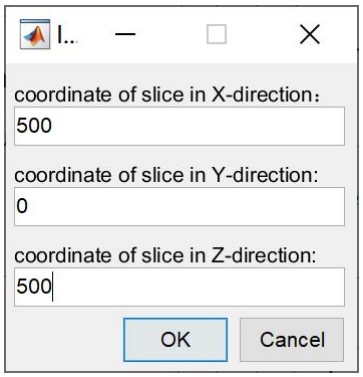
Load model data:model.txt

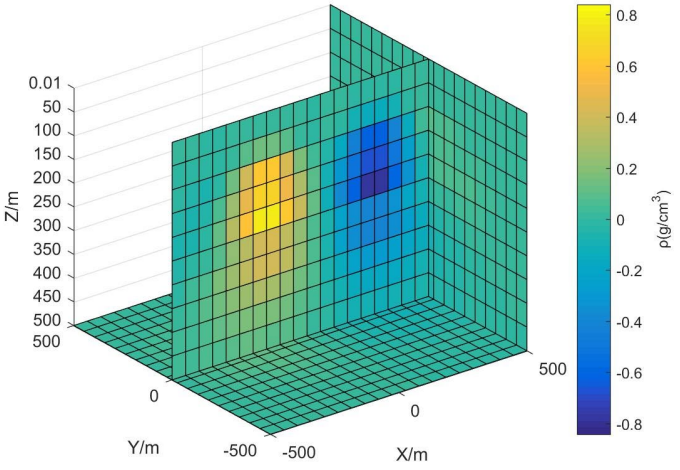


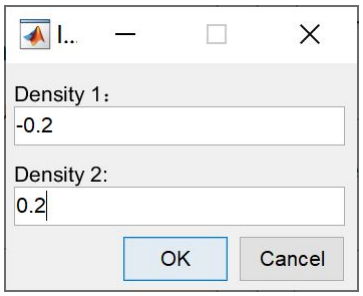

Step 3:

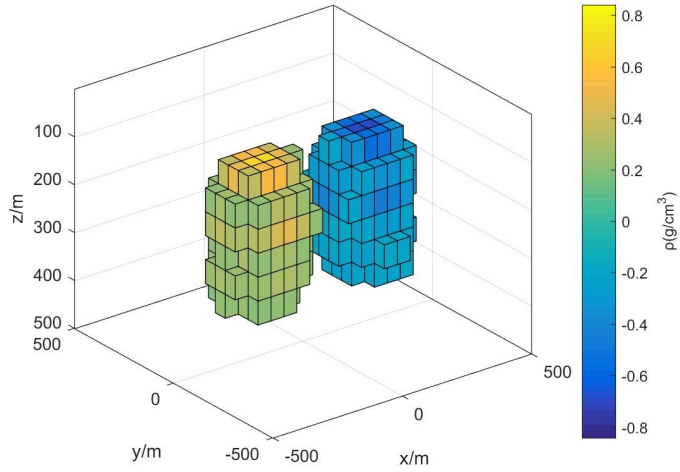
Click the button “calculate” to run






If Density 1< Density 2:

rho < Density 1, or rho > Density2 will be shown.

If Density 1 > Density 2:

rho between Density 1 and Density2 will be shown.

observedgzz.grd: observed gzz which was calculated from the synthetic model, the Golden Software Surfer GRD ascii format.

model.txt: the modeling file.

Inversiondensity.dat: inversion result.
4 columns: x,y,z,rho

Inirho.dat: the synthetic model
Inirho0.dat: the fourth column of inirho.dat, an example of initial model to show the data format, if you want to use the initial model.

How to input the modeling data?
According to the observedgzz.grd, we have:
Xmin=-475 m,Xmax=475 m,Nx=20,dx=(Xmax-Xmin)/(Nx-1)=50 m
Ymin=-475 m,Ymax=475 m,Ny=20,dy=(Ymax-Ymin)/(Ny-1)=50 m

Model:
Xminm=Xmin-dx/2=-475-50/2=-500
Xmaxm=Xmax+dx/2=475+50/2=500
Yminm=Ymin-dy/2=-475-50/2=-500
Ymaxm=Ymax+dy/2=475+50/2=500
Nxm=20,Nym=20
dxm=(Xmaxm-Xminm)/Nxm=50
dym=(Ymaxm-Yminm)/Nym=50

For the first observed point: (x,y)=(-475,-475)
The center of the first prism model: (xm,ym)=(-475,-475)
It means that the center of prism model corresponding to the observed point.
The coordinate of the inversion density is the center of the prism model.