
Subject: Re: Creating mesh from XYZ points
Posted by [Dick Jackson](#) on Thu, 14 Mar 2013 18:37:40 GMT
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Hi Mairan,

Good to hear this is working so far. There are options to set scale and window size in XObjView, and an XObjView_Rotate to spin it. Bonus: XObjView_Write_Image to save a snapshot to a file.

There's not a simple way to get different axis scaling as you had in your original triple-plot, but for this, I feel that keeping them the same (isotropic) in all views is preferable for communicating the true 3-D shape.

I believe I have set up exactly the views you want (YvsX, YvsZ, XvsZ), but I'm not sure if your original views in the PDF were rendering exactly right. (if the second plot were correct, I'd expect in the first plot that the middle overlap section would show the red lump in front, not the blue)

I hope this helps!

PRO QHullTest

```
xyz1 = RandomU(seed, 3, 100) + Rebin([0, 0.35, 0.35], 3, 100)
xyz2 = RandomU(seed, 3, 100) + Rebin([0, -0.35, -0.35], 3, 100)
```

```
QHull, xyz1, tri1
QHull, xyz2, tri2
```

```
:: Make connectivity arrays from list of triangles
```

```
conn1 = [Replicate(3, 1, (N_Elements(tri1)/3)), tri1]
conn2 = [Replicate(3, 1, (N_Elements(tri2)/3)), tri2]
```

```
oMesh1 = Obj_New('IDLgrPolygon', xyz1, Polygons=conn1, Style=2,
Color=[255,0,0])
```

; You probably want to use Vert_Colors to add the colour information!

```
oMesh2 = Obj_New('IDLgrPolygon', xyz2, Polygons=conn2, Style=2,
Color=[0,0,255])
```

```
XObjView, [oMesh1, oMesh2], $
  XSize=200, YSize=300, Scale=(1/Sqrt(3)), $ ; Default scale is 1/
  Sqrt(3)
  TLB=wXObjViewTLB
```

```
XObjView, Refresh=wXObjViewTLB ; Ensure that scene is drawn
XObjView_Write_Image, 'snapYvsX.png', 'png'
Wait, 1
XObjView_Rotate, [0, 1, 0], 90 ; +90 around Y
XObjView_Write_Image, 'snapYvsZ.png', 'png'
Wait, 1
XObjView_Rotate, [1, 0, 0], 90 ; +90 around X
XObjView_Write_Image, 'snapXvsZ.png', 'png'
```

END

Cheers,
-Dick

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On Mar 14, 10:14 am, Mairan Teodoro <mairan.teod...@gmail.com> wrote:

> Hi Dick,
>
> Thank you very much for your valuable help!
>
> Indeed, now I'm able to create what I wanted using Option 1 as you can see in this link:
>
> https://dl.dropbox.com/u/6573328/hom_model2
>
> However, I would need to be able to set the viewing parameters such as inclination angle and
scale (like in the 2D figure I showed before). Do you think this is possible within Option 1?
>
> Again, thank you for you help!
> Cheers,
> m.
