
Subject: texture map on cylindrical section

Posted by [Rob Dimeo](#) on Tue, 05 Apr 2005 19:50:57 GMT

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Hi,

I'm trying to texture map an image onto a cylindrical section (created with an IDLgrPolygon object) but I'm having trouble determining the proper texture mapping coordinates to display it properly. Can I use the vertices or connectivity arrays that were calculated from MESH_OBJ somehow for this?

The code below creates and displays the cylindrical shell section properly but the part that I really want...the texture mapping...is left off. Any help is greatly appreciated!

Thanks,

Rob

```
pro cylindrical_sector
```

```
; This procedure attempts to create a section of a cylindrical  
; shell.
```

```
; Use extrusion to create the cylindrical section
```

```
; First create an arc in the x-y plane
```

```
radius = 1.0 & height = 1.0
```

```
th_lo = 25.0 & th_hi = 180.-th_lo
```

```
n = 50 & dth = (th_hi-th_lo)/(n - 1.0)
```

```
th = th_lo+dth*findgen(n)
```

```
x = radius * cos(!dth * th)
```

```
y = radius * sin(!dth * th)
```

```
z = replicate(-0.5*height,n)
```

```
type = 5 ; extrusion
```

```
; Create the array based on x and y
```

```
array = fltarr(3,n)
```

```
for i = 0,n-1 do array[0:2,i] = [x[i],y[i],z[i]]
```

```
; Use MESH_OBJ to create the extruded section
```

```
mesh_obj, type, verts, polys, array
```

```
; tcoords = ????????
```

```
; Create a model into which we'll stuff the POLYGON object
```

```
omodel = obj_new('IDLgrModel')
```

```
; Create the image data to be texture-mapped onto the
```

```
; POLYGON object.
```

```
image_data = bytscl(hanning(32,32))
```

```
oimage = obj_new('IDLgrImage',image_data)
```

```
; Create the POLYGON object
```

```
osection = obj_new('IDLgrPolygon',verts,style = 2,polygons = polys, $  
  color = [255,0,0]);,texture_map = oimage,texture_coord = tcoords)  
omodel->add,osection  
omodel->rotate,[1,0,0],-90.0  
xobjview,omodel
```

```
end
```
