Subject: Re: sorting out polygon connectivity in a simple 2D rectangular dataset... Posted by George millward on Fri, 16 Nov 2012 18:56:58 GMT

View Forum Message <> Reply to Message

```
On Thursday, November 15, 2012 9:27:55 PM UTC-7, Dick Jackson wrote:
> Hi George,
>
>
> Yep, it's as easy as you thought it should be... you just used IDLgrPolygon (which
allows/requires that you specify the connectivity for the mesh) instead of IDLqrSurface (which
creates the grid for you. This looks like what you want. If you really wanted to use IDLgrPolygon,
the Mesh_Obj procedure (type=2) would help you to make the required vertex and connectivity
lists.
>
>
  PRO VertColorSurfaceTest
>
>
>
      Simple test of Object Graphics surface with Vert Colors
>
>
>
>
      Dick Jackson Software Consulting -- www.d-jackson.com
>
>
>
>
  x = LIndGen(180,60) MOD 180 + RandomU(seed, 180,60)*0.5
>
  y = LIndGen(180,60) / 180 + RandomU(seed, 180,60)*0.5
>
>
  z = Dist(180,60) + RandomU(seed, 180,60)
>
>
  density = BytScl(x+y)
                         to be the vert colors
>
>
>
  oPalette = Obj_New('IDLgrPalette'); Make a palette to show density
>
>
  oPalette -> LoadCT, 2
>
>
>
> oSurface = Obj_New('IDLgrSurface', z, x, y, Style=2, $
>
              Vert_Colors=density[*], $ ; (must be a vector)
>
```

```
>
              Palette=oPalette)
>
>
>
  XObjView, oSurface ; Display in a viewer window
>
>
  END
>
>
>
>
  Hope this helps!
>
  Cheers,
  -Dick
>
>
  Dick Jackson Software Consulting
  Victoria, BC, Canada --- www.d-jackson.com
>
>
  On Thursday, November 15, 2012 3:48:02 PM UTC-8, George....@yahoo.com wrote:
>> Hi There,
>
>>
>> I'm getting stumped by what I think should be really easy.
>>
>> I have a 180 by 60 rectangular dataset and I want this to be the vert_colors
>> on an idlgrpolygon. But how do I calculate the connectivity - shouldn't it be really easy for a
simple rectangular dataset?
>>
>> ie, I have 3D cartesian coords: x(180,60), y(180,60), z(180,60) and some data
>
```

>> Density(180,60) that I want to be the vert_colors.
>
>>
>
>> It works if I use 'style=0' but thats because this just plots 'dots' so the connectivity is not important. But for the standard surface 'style=2' it's not looking right. Should one need to define the connectivity for a simple 2D rectangular surface - it would seem to me that the default would be for this to 'just work'?
>
>>
>
>> Cheers
>
>>
>
>> George.
Dick,
Perfect - I forgot about IDLgrSurface.
Thanks for your help.
George.