Subject: Re: texture_coord
Posted by David Fanning on Thu, 01 Nov 2001 17:53:23 GMT
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Karl Schultz writes:

> It isn't that bad, but it is sort of hard to explain. Code helps - see the
> bottom of this post.

OK, thanks, Karl. That certainly wasn't what the
documentation implied, but what else is new. :-)

Here is the deal. To map an image onto the *entire*
surface, this code works. (Note that Scale_Vector
is a function found on my web page. You can scale
the array however you like. It must be scaled
into the range of 0 to 1.)

```
  ss = Size(surfaceData, /Dimensions)
  texcoords = FltArr(2, ss[0], ss[1])
  texcoords[0,*,*] = Scale_Vector(Findgen(ss[0]) # $
     Replicate(1,ss[1]), 0.0, 1.0)
  texcoords[1,*,*] = Scale_Vector(Replicate(1,ss[1]) #
     Findgen(ss[0]), 0.0, 1.0)
```

To place the image on a portion of the surface,
you have to modify the values appropriately. Here my
surface is an array of (200,100) in size and I wish
to place the image with the lower-left corner at (40,30)
and the upper-right corner at (129,59). Thus the image
will occupy a 90x30 "chunk" of my surface.

```
  texcoords = FltArr(2, ss[0], ss[1])
  texcoords[0,40:129,30:59] = Scale_Vector(Findgen(90) # $
     Replicate(1,30), 0.0, 1.0)
  texcoords[1,40:129,30:59] = Scale_Vector(Replicate(1,30) # $
    Findgen(90), 0.0, 1.0)
```

In either case, the surface is created like this:

```
  thisSurface = OBJ_NEW('IDLgrSurface', surfaceData, Style=2, $
    Color=[255,255,255], Texture_Map=thisImage, $
    Texture_Coord=texcoords
```

I'll write up an article about this later today.

Cheers,

David

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