
Subject: Re: Bug in IDLgrPolygon ?

Posted by [Karl Schultz](#) on Mon, 16 Dec 2002 16:08:11 GMT

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"Thomas Gutzler" <tgutzler@ee.uwa.edu.au> wrote in message
news:3DFD6478.1B64C1D6@ee.uwa.edu.au...

> This leads me directly to my next question.
> Is it possible to select a single polygon of a IDLgrPolygon-Model with
> the mouse ?

The Select method can return object references to atomic graphic objects like IDLgrPolygon. IDLgrPolygon objects can contain lists of independent and/or "meshed" polygons. If any one of the polygons contained in an IDLgrPolygon object is selected, Select returns the object reference for that IDLgrPolygon object.

I think that you want to be able to determine which polygon within an IDLgrPolygon object is selected?

After the call to Select, use the PickData method to get the location of the selection point in model coordinates. You can then compare this point against all of your polygons in that object to see which polygon contains that point. Right now, there's no way for IDL to tell you directly.

> I found the 'SegmentLayout.pro' wich does something like this. But if I
> understood the program right it generates an own model for every segment
> and I don't want to generate 100000s of models (one for every polygon of
> the surface).

You don't need a model for each polygon. I think that there are two reasonable choices:

1) Make an IDLgrPolygon object for each polygon (or segment, if I understand your terminology). This makes selection easy, since Select will give you an object that contains only one polygon (segment).

2) Put multiple polygons in IDLgrPolygon objects and use Select, followed by PickData to determine the selected polygon (segment).

The first method is the easiest, but might take up a lot of space if there are lot of segments. IDLgrPolygons aren't that expensive, so there would have to be a LOT of them to make this method unreasonable.

If your "segments" form a mesh and you want to display them with smooth shading so that shared vertices use averaged normals, you're forced to put all the segments in a single IDLgrPolygon object. You could still make another segment-per-object representation for selection use only if you don't mind the duplication (see the SHARE_DATA property for some help in

this area).

- > XObjView has a nice function (Select) that shows the type of a Model if
 - > clicked with the mouse. Perhaps this could be enhanced to return the
 - > coordinates (or better, their indexes) of a polygon of a polygon-model
 - > but unfortunately I couldn't find the code in xobjview.pro :(
 - >
 - > At last I want to view the model, select a polygon by mouse which won't
 - > be shown till it's selected again.
 - >
 - > ideas ?
 - >
 - > Thanks in advance,
 - > Tom
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