
Subject: Better plots with object graphics ?

Posted by [Klemens Barfus](#) on Tue, 09 Nov 2004 11:13:54 GMT

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Dear list members,

When I started with IDL, I did that because I was not satisfied with three dimensional plots of other programmes.

The motivation was to generate plots of simulated cloud fields like you can see on the following page:

<http://de.geocities.com/klemensbarfus/>

This graphic has been produced by direct graphics of IDL.

When I talked to an employee of Creaso - the german distributor of IDL on a conference, he told me to use object graphics to get better results. After this I bought the recommended book Power Graphics with IDL, hoping, that I would get sometime as nice visualisations as the IDL examples.

The question is now: before I start with object graphics, will I get better cloud visualisations with for example changing illumination etc ? Or are object graphics in this case just useful for animations, when I want to turn the cloud field etc ?

What would be the basic object for these visualisations ? Cube objects ?

Or are there other predefined objects, which are more useful for such kind of volume visualisations ?

I would like to get a kind of starting point for working with object graphics though I know, that it would perhaps be better not to start with 3D stuff :-)

Thanks for your help and comments in advance !

Klemens

Subject: Re: Better plots with object graphics ?

Posted by [David Fanning](#) on Tue, 09 Nov 2004 13:47:56 GMT

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Klemens Barfus writes:

- > When I started with IDL, I did that because I was not satisfied with
- > three dimensional plots of other programmes.
- > The motivation was to generate plots of simulated cloud fields like you
- > can see on the following page:
- > <http://de.geocities.com/klemensbarfus/>
- > This graphic has been produced by direct graphics of IDL.
- > When I talked to an employee of Creaso - the german distributor of IDL
- > on a conference, he told me to use object graphics to get better

- > results. After this I bought the recommended book Power Graphics with
- > IDL, hoping, that I would get sometime as nice visualisations as the IDL
- > examples.
- > The question is now: before I start with object graphics, will I get
- > better cloud visualisations with for example changing illumination etc ?

Well, it will depend to some extent on what kind of programmer you are and whether or not you can learn to use IDL object graphics. I would say, in general, that the *potential* for getting better visualizations is much higher with object graphics than with direct graphics. Whether you can actually create them or not is beyond our knowing.

- > Or are object graphics in this case just useful for animations, when I
- > want to turn the cloud field etc ?

No, they can be useful in many other ways, as well.

- > What would be the basic object for these visualisations ? Cube objects ?

Possibly, if you are happy with what you had before. But you might want to experiment with polygon objects and texture mapping for something that more closely resembles a cloud.

- > Or are there other predefined objects, which are more useful for such
- > kind of volume visualisations ?

I think you might have to think about building an appropriate object for your purposes. The object library supplies the starting materials, but you are limited only by your imagination.

- > I would like to get a kind of starting point for working with object
- > graphics though I know, that it would perhaps be better not to start
- > with 3D stuff :-)

Well, the minute you method the word "object graphics" you are ensnared in 3D stuff. Just relax and enjoy it. It can be fun if your deadlines are far enough out. :-)

Cheers,

David

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David W. Fanning, Ph.D.
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Subject: Re: Better plots with object graphics ?
Posted by [David Fanning](#) on Tue, 09 Nov 2004 13:51:21 GMT
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David Fanning writes:

> Well, the minute you method the word "object graphics" you
> are ensnared in 3D stuff.

Whoops! Just typing the word "objects" gets the
fingers going in all the wrong directions. Of course,
I meant "mention", not "method". :-)

Cheers,

David

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