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Subject: Re: Top 10 for old farts  
Posted by [Nigel Wade](#) on Tue, 01 Aug 2000 07:00:00 GMT  
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Pete Riley wrote:

>  
> Joseph B. Gurman in a flash of brilliance said:  
>  
>> The real beauty of IDL for scientists is \_not\_ its ability to do  
>> everything in the most elegant way possible, but in its capability to do  
>> 90% of what we want \_very fast\_ and to do more elegant things on a  
>> time-invested basis (e.g. really pretty plots; 3D shaded, rotating  
>> surfaces; the ability to save such projections as objects).  
>  
> Joe:  
> I agree 101%. But, I think the larger picture here though is that RSI missed  
> the "object" boat. When "Tek" terminals were in vogue, direct graphics were  
> perfectly adequate. But since the early 90's, graphics packages that  
> *\*really\** use object concepts have performed basic graphing tasks much better  
> than anything in IDL. I'm constantly amazed by the number of Mac users  
> (scientists) still propagating their copy of Kaleidagraph to their next  
> powermac. I can't blame them though; Insight doesn't come close to mimicking  
> the capabilities of a > 10 year old program. RSI is struggling with the  
> object paradigm shift. I believe it was a mistake to introduce the object  
> graphics so early and, at the same time, maintain the direct graphics. Why  
> not replace all the direct graphics calls with object equivalents? You  
> should be able to say:  
>  
> PLOT, findgen(10)  
>  
> and you get an object window (maybe plus the print, modify, etc... options  
> that are in insight). There should have been a transparent migration to  
> object graphics. I can appreciate that there are technical difficulties. But  
> as an end user, they shouldn't affect ME.  
>  
> -Pete Riley

If you want this functionality you could use MATLAB... ;)

But I think the important thing is that we need the /choice/.

I have some (limited) experience of this problem with MATLAB. I was involved in a software development project and one of the modules was a visualisation tool for scientific data. For various reasons MATLAB was the chosen platform.

Some way along with the development it became apparent that MATLAB was not going to be able to do what was required. The graphics required

drawing 100,000's of filled rectangles, and because of the object nature of MATLAB graphics the memory requirements to store all the graphics objects became too large for any reasonable system. Now, MATLAB has no other graphics system, so we had no choice but to drop MATLAB in favour of IDL direct graphics.

If IDL had only had object graphics it, too, would probably have been unable to do what we required.

So, object graphics is fine for those who require it; but it's also necessary to keep direct graphics for others who have different requirements.

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