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Subject: Re: Which is better WAVE or IDL?

Posted by [rep2857](#) on Sun, 22 Jan 1995 19:18:52 GMT

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In article <3fm85f\$1kr@lyra.csx.cam.ac.uk>,

Iarla Kilbane-Dawe <iarla@atm.ch.cam.ac.uk> wrote:

> I'm curious to know what anyone who may have used both systems  
> might have to say about comparing the two. We use PV-WAVE  
> but I've been told that IDL is  
> a) cheaper, and,  
> b) more robust and bug free in usage.  
> Would anyone have any comments to make on this?  
>

Hi Iarla -

I'm using both. I have heard that IDL was cheaper, but I haven't checked the pricing for Wave for a couple years. If Wave is more expensive, it could probably be justified if you use all of the additional components provided by Wave such as the database access and symbolic math. Each of these are additional items to the base cost, but I believe they are unique to Wave. IDL has additional cost items, but these are better described as applications rather than access functions. One is a package called ENVI which is especially suited for working with multi- and hyper-spectral datasets. They also mentioned a medical application in a recent newsletter which I haven't had time to check out, yet.

As far as being more robust or bug-free, I think both are very robust and bugs are certain to be in both products due to their code/library sizes, nature of functions (math, statistics, widgets, etc.) provided, and fairly limited number of users which explore the edges of these types of functions.

Wave does not support 24-bit color for widget-based drawing applications on Sun's and HP's. Currently, I am only working with 8-bit displays on the Sun's I am using for Wave development, so I am hardware limited. Some of my IDL development is making extensive use of 24-bit display capabilities on the Sun's used for a different project.

Wave is in a partnership with IMSL which may give them a more extensive math library, although IDL doesn't seem to be lacking anything that I normally use.

I feel IDL is easier to program widgets in, but Wave has a larger set of widgets. Either product allows creation of new widgets. If you are used to Motif widgets, Wave widgets will seem more familiar. IDL widgets make better use of keywords for adding additional functionality

to widgets, whereas Wave provides similar abilities by having to include handler statements. The end user would be hard pressed to determine whether widget applications were written in IDL, Wave or Motif, though.

This is probably a minor point, but for me it is worth mentioning: Wave is not available for Mac or PowerMac, platforms. The IDL demo I used several months ago for a PowerMac 7100/66 ran at 3/4 the speed of our Sun 10/51 which I tested it against. Roughly a 4:1 price ratio (similar memory and peripherals) and a 4:3 performance ratio between the Sun and PowerMac (for running IDL only). These aren't latest and greatest systems by either manufacturer, but they are adequate for simple price:performance comparisons. Both manufacturers have cheaper and faster systems at this time.

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