Subject: Re: IDL and PV-WAVE?
Posted by Dale Bailey on Thu, 11 Jan 1996 08:00:00 GMT
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I am working in a medical scientific environment (using PET scanning) and in general tomographic imaging and we previously used PV-Wave. We switched to IDL about 2 years ago because the manufacturer of our PET scanners selected IDL as their applications development platform. My PV-Wave programs all ran without a hitch under IDL (except I had to write a trivial routine (AVG) to average an array). I am told that Wave has tailored itself more to the business market while IDL has gone more into the scientific visualization market, but I haven't seen Wave for 2 years or so now. We deal with 3D and 4D datasets from medical imaging devices and are very happy with IDL.

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Subject: Re: IDL and PV-WAVE?
Posted by Peter Sharer on Fri, 12 Jan 1996 08:00:00 GMT
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I have recently gone through a similar exercise of determining the differences between the two packages. Our group has been using IDL for several years and have been quite happy with it, but we were looking for a point-and-click data analysis application to complement IDL. PV-Wave has its roots in IDL. In fact, if you check the FAQ you will learn that PV-Wave began with a one-time snapshot of the IDL source code in 1990, for which Visual Numerics paid several million dollars. So, for several years there was very little difference and even now most of the syntax is almost identical. They do differ in their widget programming philosophies, IDL uses a proprietary system (some say easier to program), while PV-Wave is a Motif based system (more standard). An additional difference, one that is attractive to us, is that Visual Numerics has added a point-and-click analysis module.

I visited with both companies at the American Geophysical Union meeting just before the holidays. I was impressed with the PV-Wave data analysis tools which are lacking in IDL, so I went down the aisle to the folks at RSI. They recognize that IDL falls short on this capability, and say that the next version, due sometime in '96 (they made no commitment to the release date), will include it.

For us this is a tough decision as we want the added capability of PV-Wave and don't really want to wait an indeterminate time for the next

IDL release, but most of what we would buy with PV-Wave would not be added value. So we must decide if it is the best value for our investment. If you are not attached to either product, Wave might be a solid choice, though you should evaluate company stability, user support, training opportunities, etc. I can only vouch for RSI. They have been excellent on all accounts.

You might also investigate Visualization Data Explorer from IBM. It is a very different tool from either Wave or IDL. We are now evaluating it.

Peter Sharer

sharer@argus.arc.nasa.gov

Subject: Re: IDL and PV-WAVE?
Posted by pjclinch on Mon, 15 Jan 1996 08:00:00 GMT
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Over here, at least educationally, the two cost the same (or at least *did*, when we bought Wave). If one was more than the other, I'd buy the cheaper one. During evaluation we were impressed with both products and support and backup for both as well. In the end we plumped for the (then) new PV~Wave Advantage version, as the extra maths and stats clout from that looked attractive (we've put it to good use too).

Wave 6.0 (waiting for our upgrade in the post) has a rather better front end for beginners or the "if it isn't a GUI I can't use it" brigade. Not sure how IDL's doing in that respect at present.

Peter Sharer (sharer@argus.arc.nasa.gov) wrote:

: You might also investigate Visualization Data Explorer from IBM. It is a
: very different tool from either Wave or IDL. We are now evaluating it.

I think that's more along the lines of AVS, which you may wish to look at. Same goes for SGI's Iris Explorer, which I think is multi-platform now.

We now have AVS, which is better for some things (like building GUI applications for specific jobs), and worse for others (reading in a stack of data you don't know much about and tinkering with it). *Different*, rather than better, and complementary rather than a replacement.

Pete.

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