Subject: Re: Relative strengths: IDL vs. PV-Wave ?
Posted by mcook on Mon, 02 Dec 1996 08:00:00 GMT
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Martin,

I can't answer all of your questions, but I can relate my own experiences for you to consider. First of all we have site licenses for PV-Wave on many of our computers here, so it is more widespread than IDL. I use IDL on a couple of projects primarily because I want to use their ENVI package for spectral remote sensing which is based on IDL. I have used both IDL and PV-Wave for my own uses however, and here are some of my observations:

* There isn't much difference as far as coding goes for the most part. For some reason, IDL seems to run faster for me, but that may be my particular applications. Don't use me as a benchmark.

* The main differences come from when the two products split from the common source and additions were made: GUI and numerical/stat routines. Review the two offerings yourself to compare their relative merits.

* I'm not crazy about the GUI for either. If I have to make a GUI now, I will use a TCL/TK driver with PV-Wave as an engine (I haven't tried it with IDL, simply because I've never had to). This opinion is primarily because I don't like messing with the intricacies of low-level widgets and the like. Also they seem much less flexible than I like.

* Some of my work involves using polygon graphics. PV-Wave has quite a few useful routines for polygon manipulation (both will render polygons) already included that really help here. It is easy to write your own routines to mimic the PV-Wave routines in IDL however.

* The only bug I've noticed between the two was a consistently incorrect rendering from PV-Wave of a 3-D surface with shading. IDL produced the correct rendering with essentially the same code and was much faster about it.

* I've only done a little interfacing to other languages, with IDL, but didn't have much problem. Again, it was only minor routines.

* I haven't noticed any difference for the image processing

routines.

* I would surmise that you want your own code for the machine learning or NN applications. I suspect your code would run on either about equally well.

* I was told there may be OpenGL support in a future version of IDL, which is something particularly useful to me.

* Even though PV-Wave is widespread here, I've noticed most engineers use MATLAB. I firmly believe however that is because they have little or no experience with PV-Wave. They don't realize the rich offerings Wave and IDL have for their work.

Hope this helps. I don't think you'll go wrong with either. If however you have need for a product like ENVI, I have found it very useful for my work and it isn't available for PV-Wave.

Regards,
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