Subject: Re: On the differences between idl and pvwave
Posted by dwight on Fri, 20 Sep 1991 15:54:25 GMT
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|>At the National Severe Storms Lab we have IDL. My local university, which
|>shall go unnamed, bought PVWAVE.
|>They are indeed 99% the same product.
|>The essential differences:
|>Graphics commands especially go by the 'keyword' concept in PVWAVE, while
|>IDL goes (VAX version) by 'parameters':
|>   IDL> CONTOUR,agrid,[1,2,5,10,20,50,100]
|>   WAVE>CONTOUR,agrid,labels=[1,2,5,10,20,50,100]
|>The latter is too much typing for an INTERACTIVE programming language IMO.
|>I also believe that the former is better for 'sophisticated' programming
|>where you might build commands then execute them (if you are so inclined).
|>
|>Also, both come with a 'user library', sort of a small scale IMSL-like
|>set of routines. IDL's is useful. PVWAVE's was full of bugs.
|>
|>PVWAVE comes with a 'window based tutorial' which I found simply a nuisance.
|>The way to learn IDL, like any programming language, is by cloning some
|>short and sweet programs that do typical things (I have such a set of
|>screen size programs that do elementary plotting, contouring, map drawing,
|>map plotting, basic image things, etc...call me).
|>
|>I could ramble a long time on this. IDL is a good scientific programming
|>language. I used to use FORTRAN, now I use IDL. I am willing to provide
|>information, ranging from getting a sample manual to you, to sending real
|>programs that do real science.
|>
|>Dave Keller   "I own no stock in Research Systems Incorporated"
|>
|>
We, this certainly deserves a response (being we are the local University that bought PVWAVE).
1). For people who know PVWAVE, one does not have to use keywords but can achieve the
    same 'parameter' effect of IDL by programming the procedure appropriately...so this point
    is invalid. The keyword concept is both useful and good. It provides a way of checking
    if a parameter is present and providing a default if it is not present. Furthermore, if all one
    does is interactive programming, then the user/"programmer" loses much of the power and
    flexibility of both systems.
 2) PVWAVE comes with a much larger library than IDL which I have found to be vary useful

and since I have used PVWAVE quite a bit, I have found only a few bugs (no more than most
software, and their tech support has been very helpful). I can not speak for IDL, but I doubt
Dave can speak for PVWAVE.
3) PVWAVE's tutorial in windows can be a bit sluggish at times, but hey...windows are not
anybody's race horse...and after all, both systems are little more than an interpretive compiler
which are not speed daemons in themselves, verses compilers that generate machine code.
PVWAVE supplies many of the "sweet" programs that Dave has but are supported and probably
better written.
4) IDL/PVWAVE are good for basic data manipulation and graphs, for anyone who does real
scientific work, I would suggest doing most of your computations in FORTRAN or any other
such language for speed and generate a file of data or graph points and use one or more of
these tools for final analysis. I doubt any reasonable person who does any large or medium
scale computing would advocate replacing FORTRAN et.al. with IDL or PVWAVE.

I don't advocate IDL over PVWAVE or vice versa. Precision Visuals did a very good job of
marketing their product and we've been happy with what we have and I use PVWAVE frequently
for a variety of used and has been invaluble in many cases for graphics for Master/PhD
thesis/dissertations as well as image processing.

It appears to me that both products are good and useful. They are now on separate development
paths since they have ended their business relationship. Find the one that best fits your
economic and computing needs and choose it. Lets get rid of this needless tirade/boring discussion
of which is better much less what their differences are (at least until later products). Both
have the same capabilites for the most part.

Pax

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Sorry, no cute quotes this time. Oh hell, what the heck...I don't own stock in either
IDL or Precision Visuals.

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These opinions do not necessarily represent the opinions of OU or the GCN.
(Sorry to disappoint you, no cute quote this time.)
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