Subject: Summary: IDL vs SPlus; or similar packages for MS Windows
Posted by rfinch on Mon, 09 Aug 1993 05:32:38 GMT
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My original request:

> I need
> a data analysis package for a 486 running Windows.
>
> Requirements/Wants:
>
> - strong interactive visualization (graphics) tools. But this should
> allow interactive sifting of data (more than just plotting).
> - some sort of efficient method for storing and retrieving
> time-series data.
> - programming language
> - some statistics, preferably with Fourier and time-series analysis
> capability.
> - menu system would be nice, but command line is ok.
> - ability to develop a custom GUI for particular apps would be nice.
>
> I would use IDL (PV-Wave), because that's what I know already. But
> they want $1000-$1500 for the 486 version, too much I think. SPlus
> would only charge $500, because we have that already on Suns and they
> offer a discount. But I haven't used it so don't know anything about
> it. So first, if anybody out there has used IDL and SPlus, I would
> much appreciate your opinions on both, or even SPlus alone.
>
> Secondly, if anybody can recommend something besides SPlus, I would
> appreciate that. I'm looking for something in the $300-$500 range.
> Heavy-duty statistics that SAS and SPSS offer are less important than
> visualization and programming functions.

Note: Opinions expressed are my own and do not represent anything from my employer. Not responsible for any errors! This summary is subjective, informal, and sometimes just retelling of rumors. Prices quoted are for MS-Windows, best data available. I have no connection to these companies other than as a customer of some. Many thanks to all respondants.

Comments and corrections by all welcome, but especially *users* of these packages, so we can have less rumors and more facts!

Follow ups to comp.graphics.visualization.

====> Summary:

For visualization *and* analysis of data, these packages should do the

job.

IDL; Research Systems Inc., 303-786-9900, $1500 (this price is 1 1/2 years old)

S-Plus; StatSci, 800-569-0123, normally $1450, but $730 until 30Sep1993.

Matlab; The Math Works, 508-653-1415, $1695 + extra $$ for extra modules.

And this one will probably work:

Macsyma; Macsyma, Inc., 800-622-7962, $349

Also suggested was Mathematica and SPSS 5.00 but I did not get any info on them. Somewhere I heard that SPSS runs better with OS/2 than Windows.

Also suggested were two public domain packages, XLispStat and J, see more below.

Mentioned below are packages oriented more towards graphics.

====> More extensive info, subjective opinion:

I am most familiar with IDL. It does not offer a nifty menu interface but most be used from a command line. If offers complete programmability, pretty good graphs, good math, some stats, fairly powerful ability to develop custom menu-driven interface.

If RSI is reading this, you really should develop a menu interface. I've programmed 10000+ lines of IDL and it still makes me tired to face that command line prompt with no menus. New people considering a system to buy will probably go somewhere else just for this reason.

S-Plus--haven't used it personally. Perhaps more complete graphs than IDL in some areas (e.g. 3-D scatter plots), and definitely more complete statistics. However one responder said: " I use Splus, and it's a marvelous statistics package, but it is somewhat klunky for data examination. You can have only one graphics window open at a time, and often need to build up a plot piece by piece--which is ok for producing publication quality plots, but not good for EDA."

I was most impressed with Matlab's literature. If the ads are correct this must be a marvelous package...what do users of Matlab say? A pretty good library of modules also, such as Control System, Mu-Analysis and Synthesis, Robust-Control, System Identification,

Neural Network, Spline, Optimation, ... these are all extra $$.

The Macsyma demo disk very impressively show its graph and symbolic math capabilities, and the price is great compared to other packages. But I am not sure about its ability to handle lots of numerical (discrete/measured) data. Certainly it could be connected to C or Fortran routines, but those take longer to program and sort of defeat the purpose of buying one of these packages, which is to presumably save time.

XLispStat is free via anonymous ftp from umnstat.stat.umn.edu. Here is a respondant: "The word on the street is that XLISP-STAT is very good for projects involving linked, dynamic graphics. Splus is strong for static graphs, but not so much for dynamics graphics. The book by Luke Tierney is worth a look. If you are literate in LISP, this may be a good way to go. Also, it is FREE. It doesn't have as much in the way of hard coded stats, so you might have to build your own."

I tried it a bit but it seemed to require too much work to get it to a useful state, even though I know lisp, plus its graphics seemed more primitive than the commercial systems. Personally I'm willing to pay some money to get a fairly developed system. As I get older I lose my taste for hours of system hacking before tackling my data!

J is another public domain (or shareware?) package. It is available from watserv1.waterloo.edu. I did not try it, and should, to be fair. It seems to have powerful math capabilities, but from what I could tell from respondants' comments, seemed to be on the "experimental" end of the spectrum with not so powerful graphics.

Graphics oriented packages: I didn't look too much into these, they seemed to offer graphics only, and not math manipulation or programmability.

Stanford Graphics
DeltaGraph
Origin
Axum (DOS only?)
Sigmaplot
CoPlot (DOS only?)
Grapher
Statgraphics

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Any opinions expressed are my own; they do not represent the DWR