
Subject: Re: IDL, Matlab, Mathematica, Maple...

Posted by [David McClain](#) on Mon, 10 Apr 2000 07:00:00 GMT

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IDL and MatLab are intrinsically numeric modeling languages - no symbolic capabilities. Mathematica, Maple, Derive, Macsyma are symbolic languages with very poor performance for numeric modeling.

But why give up one for the other? With Mathematica there is a Mathlink connection to NML which is superior in performance to IDL. But if you don't want to learn functional programming, you can also use IDL because there is an RPC link from NML to IDL. That way you have the best of both worlds!

- DM

Sang-Heon Shim <sangshim@princeton.edu> wrote in message news:38EFE9C5.1C84B373@princeton.edu...

> Dear Experts,
> I don't think it is appropriate to ask this question here. But...
> I have used IDL for my research (mostly fit and plot big datasets and
> do numerical simulations) last 3 years and enjoyed a lot. Recently I am
> interested in other math softwares but I cannot find information like
> "which is good for which".
> Would you compare IDL, Matlab, Mathematica, and Maple?
> Thanks.
>
> Dan

Subject: Re: IDL, Matlab, Mathematica, Maple...

Posted by [Brad Gom](#) on Mon, 10 Apr 2000 07:00:00 GMT

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Since I like avoid big expensive software packages whenever possible (except IDL, sigh.), I can recommend 'Derive' (<http://www.derive.com/derive.htm>) It is a compact program that handles algebraic and symbolic math quite well. The last version I used was for DOS, but the interface was very useable. There is a windows version now, I believe. They have academic pricing that is very reasonable too. It isn't nearly as fancy as Matlab or other packages, but it gets the math done.

good luck

Brad

Mirko Vukovic wrote:

> In article <38EFE9C5.1C84B373@princeton.edu>,
> sangshim@princeton.edu wrote:
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> (not being an expert), I recently checked the Matlab site. And you
> know, they talk about operator overloading there! I'd love that in IDL.
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> As for symbolic software, I would love if someone could point me to some
> that makes equation manipulation easy. I don't care much for evaluating
> an integral or a derivative, but something that easily pulls a factor
> out of an expression and stuff like that would make me a happy person.
>
> Mirko
>
> Sent via Deja.com <http://www.deja.com/>
> Before you buy.

Subject: Re: IDL, Matlab, Mathematica, Maple...
Posted by [Mirko Vukovic](#) on Mon, 10 Apr 2000 07:00:00 GMT
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Subject: Re: IDL, Matlab, Mathematica, Maple...
Posted by [davidf](#) on Tue, 11 Apr 2000 07:00:00 GMT
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Paul van Delst (pvandelst@ncep.noaa.gov) writes:

> paul "not-trying-to-start-and-IDL-vs-Matlab-thread" v

The proper way to handle this is to get a roll of duct tape and have your office mate tape you to your chair in such a way that your fingers can't reach the keyboard, as I learned to my chagrin several weeks ago. :-(

Cheers,

David

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Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: IDL, Matlab, Mathematica, Maple...
Posted by [Paul van Delst](#) on Tue, 11 Apr 2000 07:00:00 GMT
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David McClain wrote:

>
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> capabilities.

Hmm. I really don't think of IDL as a numeric modelling language but a tool to help me display data quickly. When I think of numerical analysis I think Matlab (although I don't use it).

paul "not-trying-to-start-and-IDL-vs-Matlab-thread" v

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Camp Springs MD 20746

Subject: Re: IDL, Matlab, Mathematica, Maple...
Posted by [marc schellens\[1\]](#) on Tue, 11 Apr 2000 07:00:00 GMT
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Mirko Vukovic wrote:

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Cool. I predict that this will become one of the very long threads.

Being also not an expert I heard from experts in my group that matlab is better for instantaneous use, while IDL is better for programming use. Even though (a statement I wanted to give for a long time) I think IDL is made from scientists for scientists, as C++ for example is made from programmers for programmers. cheers,
:-) marc
