Subject: How does IDL do ...
Posted by ewilliams on Thu, 01 May 1997 07:00:00 GMT
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Hi all,

I am trying to put together a presentation for new IDL users that is a good introduction to using it for astronomical applications. One of the similar applications used in astro is IRAF. If anyone is familiar with IDL and IRAF would you be able to give me a rundown comparing the two, particularly when you might want to use one over the other. We have both apps in our working environment and I don't want to displace either, but I have never really used IRAF and I have a feeling that some things our users do in IRAF can be done faster in IDL. I already know that programing in IDL is much clearer.

I am also curious as to how IDL does matrix calculations. A simple example:

If you want to operate on an 2D array with FORTRAN you need to write nested loops to work through the rows and columns and work with each element.

In IDL you apply a function or WHERE statement to a whole array in one command.

I am wondering if IDL is still doing the nested loops anyway, and therefore not really any faster at doing the job?

Sorry if this is confusing. I am trying to convince others that IDL just does this kind of math faster. If anyone has an example that would be great.

Finally, I am also trying to sell IDL to students as one good tool learn not only for astronomy but to open up future job possibilities in other fields. I have mentioned the following fields:

astronomy
geology
bio medical imaging

Are these correct? Can anyone pass on a few more?

Thanks very much for any input. As you can see I am trying to get support in my department for using IDL on a much larger scale. In fact any selling points anyone might pass on would be good. Especially in the performance area.

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See my website on my participation on the search for extrasolar planets:
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