Subject: Re: Adding Text/Equations to Plots
Posted by Heather on Mon, 16 Mar 2009 19:33:37 GMT
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On Mar 16, 1:26 pm, David Fanning <n...@dfanning.com> wrote:
> Heather writes:
>> I'm hoping someone can help me figure out a way to add equations to a
>> plot. I used POLY_FIT to find the coefficients of a line for my data,
>> and plotted that line. I really want to add the equation of that line
>> to my plot.
>
>> I thought I could use legend.pro (a routine I found at
>> http://astro.uni-tuebingen.de/software/idl/astrolib/plot/leg end.pro
>> that I am already calling in my routine anyhow), but that requires the
>> input "items" be a string. And I couldn't figure out how to create a
>> string that would call the elements of the array in which the
>> coefficients are.
>> (This is what I tried:
>> IDL> numbers=findgen(10)
>> IDL> string="This is a number: numbers(6)"
>> IDL> print, string
>> This is a number: numbers(6)
>
>> Clearly not what I want. And I can't do something like:
>> IDL> string1="This is a number: "
>> IDL> print, string1, numbers(6)
>> This is a number: 6.00000
>
>> because what it will actually look like to the legend.pro routine is:
>> IDL> string2="This is a number: " numbers(6)
>
>> string2="This is a number: " numbers(6)
>> ^
>> % Syntax error.
>
>> Any advice would be greatly appreciated, but I'm fairly new to the
>> world of IDL, so please use "simple" explanations!
>
> "Simple explanations"!? Do you see what the world is
> coming to?
>
> OK, here is a simple explanation. What you want to
> do is concatenate strings. That is a big word that
> means "string them together like beads on a string".
> Whoops! Two different meanings of "string" here. :-(
>
> OK, looks like you maybe know what a string is in
> computer-speak. What you need to know, in a nutshell,

> is how to turn a number into a string. You do that,
> believe it or not, with the STRING command. (Do you
> see now how even simple explanations trip themselves up?)
>
> Here is an example:
>
> IDL> var_1 = 'dog'
> IDL> number = 8
> IDL> var_2 = 'something'
> IDL> mystring = var_1 + ' ' + StrTrim(number,2) + ' ' + var_2
> IDL> print, mystring
> dog 8 something
>
> If you are really lucky, you can turn numbers into strings
> with STRTRIM. If you are unlucky, you need to use the STRING
> command, with (there is a good chance of this) the FORMAT
> keyword set to a likely format.
>
> number = 3.45096754
> aString = String(number, FORMAT='(F5.2)')
>
> The program Number_Formatter is handy for this sort of thing:
>
> http://www.dfanning.com/programs/number_formatter.pro
>
> Cheers,
>
> David
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming:http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

I guess "simple" is a fairly relative classification. That actually
did it though. Thanks!
