
Subject: Re: Plotting functions in IDL

Posted by [hahn](#) on Thu, 18 Jan 1996 08:00:00 GMT

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kunstman@pu.informatik.th-darmstadt.de (Thomas Kunstmann) wrote:

> What is the best way of plotting a function in IDL? As far as I know,
> it only handles vectors of discrete data and no equations.

Yes, IDL need the data in tables, either in core or on disk.
Actuall, I'm glad that this avoids error, because you have to
think of how to fill the table. I.e. try the following with
mathematica:

```
Plot[Sin[x*x],{x,-3Pi,3Pi}]
```

you won't believe your eyes!

What mathematica does - and many other packages do - is to divide the
given intervall into equal pieces and call the function at the pivots.
But due to the periodicity and due to rounding errors the function
are neither symmetrical to the y axis nor are the extremes always
found. Thus in this case you have a dip in the amplitude at $x=7.1$.
The minimum y value is -0.3 rather than -1.

So you either think of how to fill the table that IDL should plot or
use some other graphics package and believe the results!

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