Subject: Plotting vectors
Posted by Vap User on Fri, 24 Jul 1998 07:00:00 GMT
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Hi;

I posted something on this subject yesterday, but it seems the article got waylaid, so I'm reposting. If you see two messages on vector plotting in IDL, forgive the duplication.

I have a request for a new functionality in IDL. I would like to see something like the following.

Use usersym to define a symbol, in my case, an arrow. Then plot it using

plots, x,y, psym=8, orientation=orientation

where orientation is an array having the same dimensionality as X/Y and gives the orientation in degrees (or maybe radians?) away from some axis, most likely the X axis.

At the moment I'm forced to loop through the vectors, and all good IDL programmers abhor loops, constructing the actual symbol by a complicated call to plots. Back in the days when I only had to plot 24000 vectors for each swath of data this was tiresome but not terminal, but now I'm working on a project where each swath contains 124K vectors, with 14 swaths per day, each one taking ~30 seconds to plot using a customized version of velovect.pro. 7 mins to wait to see a days data.

Waddya think?

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I don't speak for JPL, it doesn't speak for me.
Well, not all the time, at least.
William Daffer <vapuser@haifung.jpl.nasa.gov>

Subject: Re: Plotting vectors
Posted by Andy Heaps on Thu, 05 Oct 2006 09:56:56 GMT
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Hello Maki,
you might like to have a look in our local IDL guide

as I came across this problem in the summer. There are two routines
in the guide that might help you. vector.pro plots a regular grid of
vectors and is a master calling routine to plot_vector.pro which plots
an individual vector. It's at
http://ncas-cms.nerc.ac.uk/index.php?option=com_content& task=view&id=94&Itemid=122

The example code and data is a link on the right hand side.

Cheers
Andy

maki wrote:
> Hi all,
> I have a set of geographic locations at which I would like to plot
> velocity vectors. I looked at previous messages on that topic but did
> not find an easy way to do it. VELOVECT seems to plot a 2D-velocity
> field but my data are not gridded (nor randomly distributed). I also
> looked at the ARROW procedure but it looks not easy, as we need to
> specify the cordinates of the tail and arrowhead of each vector (I have
> the Xi,Yi coordinates of each arrow tail, and the corresponding Ui and
> Vi components, in a different unit than the map).
> Thanks for your help !
>

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Subject: Re: Plotting vectors
Posted by Chris[2] on Fri, 06 Oct 2006 02:57:07 GMT
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Why not try using iVector, which was added in IDL6.3?
You can do:

iMap, map_projection='Stereographic' ; or whatever projection you want
iVector, U, V, X, Y, /OVERPLOT

Look up iMap and iVector in the docs for all of the available keywords.

-Chris
ITTVIS

"maki" <chagirard@yahoo.com> wrote in message
news:1160040976.089616.240440@b28g2000cwb.googlegroups.com.. .
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