
Subject: Re: How to plot the magnetic field vector along the trajectory

Posted by [jdu](#) on Wed, 12 Mar 2008 15:35:44 GMT

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Thanks a lot.

I have found the internal procedure 'VELOVECT' which can produce a two-dimensional velocity field plot.

It just meet my request.

It seems that the 'iVector' can also produce the figures I want.

Du

On Mar 12, 10:23 pm, Lasse Clausen <la...@lbnc.de> wrote:

> On 12 Mar, 14:26, David Fanning <n...@dfanning.com> wrote:

>

>

>

>> Lasse Clausen writes:

>>> I found the question perfectly straight forward already from the first
>>> post. Maybe it's to do with the fact that I fiddle with spacecraft
>>> trajectories and magnetic fields every day. Or maybe I'm just in a
>>> better mood than David...

>

>> No question I was in a bad mood after wasting most of the
>> afternoon looking for vestiges of earlier IDL installations
>> on my computer, but it seems to me that how you go about
>> adding magnetic vectors depends *entirely* on how you go
>> about plotting the trajectory.

>

>> In the proposed solution, I see we are just throwing
>> out the Z component of both the trajectory and the vector
>> field. Certainly this is the easiest way to proceed.
>> I just wonder if it is accurate though. :-)

>

>> 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.")

>

> We are not throwing away anything, we are merely projecting into the
> XY plane... ;-) You have to project somewhere as the computer screen
> is not capable of displaying 3D - nor is paper, incidentally. And the
> usual way to do this kind of thing is to provide three plots, one in
> the XY plane, one in XZ and one in YZ. You then have to assemble the

> 3D picture in your head.
>
> Alternatively, you can do the whole thing in "3D", using SURFACE to
> establish the coordinate system and then
>
> PLOTS, posx[i]+bx[i], posy[i]+by[i], posz[i]+bz[i], /T3D
>
> to plot the lines.
>
> Cheers
> Lasse Clausen
