
Subject: Re: How to plot the magnetic field vector along the trajectory
Posted by duxiyu@gmail.com on Thu, 13 Mar 2008 12:42:56 GMT
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Thank you, Manodeep,
It is very useful for me.

Du

On Mar 13, 5:30 am, Manodeep Sinha <manod...@gmail.com> wrote:

> Hello Du,
>
> For a 2-d projection, try partvelvec.pro (
<http://www.astro.washington.edu/deutsch-bin/getpro/library32.html?PARTVELVEC>)
>
> velovect needs your data to be in a 2-d array format instead of the
> scattered data points that you have.
>
> Alternatively, the plots solution with a previous call to scale3 to
> establish the axis and the
> ranges should also be sufficient.
>
> Cheers,
> Manodeep
>

> On Mar 12, 10:35 am, jdu <jdu.u...@gmail.com> wrote:

>
>> Thanks a lot.
>> I have found the internal procedure 'VELOVECT' which can produces 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

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>>>> 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
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