Subject: Re: How to plot the magnetic field vector along the trajectory
Posted by manodeep@gmail.com on Wed, 12 Mar 2008 21:30:51 GMT
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Hello Du,

For a 2-d projection, try partvelvec.pro (http://
 www.astro.washington.edu/deutsch-bin/getpro/library32.html?P ARTVELVEC)

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
>>> 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