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.
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Du

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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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