
Subject: Re: Displaying 3-D vector fields

Posted by [jim.blackwell](#) on Fri, 08 Nov 2002 15:35:15 GMT

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"Rick Towler" <rtowler@u.washington.edu> wrote in message
news:<[aqe77h\\$1joo\\$1@nntp6.u.washington.edu](mailto:aqe77h$1joo$1@nntp6.u.washington.edu)>...

> This sounds like a job for object graphics.

>

> Someone has to have written a vector object which consists of a few
> polylines that make up the body and head in a model. Use would be as simple
> as defining the location and magnitude.

>

> Once you have that, something as simple as this would work:

>

> ; Your vector locations - XYZ (empty array used as example)
> location=FLTARR(100,3)

>

> ; Your vector magnitudes - ABC (empty array used as example)
> magnitude=FLTARR(100,3)

>

> ; Create a model to put all of our vectors in
> model = OBJ_NEW('IDLgrModel')

>

> ; Fill it up with vector objects

> vectors = OBJARR(100)

> for n=0, 99 do \$

> vectors[n] = OBJ_NEW('vector', LOCATION=location[n,*], \$
> MAGNITUDE=magnitude[n,*])

>

> ; Add the array of vectors to our model

> model -> Add, vectors

>

> ; Display the contents of the model using xobjview

> xobjview, model, /BLOCK

>

> ; Destroy the objects

> OBJ_DESTROY, model

>

>

> If you want to animate the vectors you'll have to do a little more work but
> it would be simple.

>

>

> The trick is finding the "vector" object. Someone on this list has to have
> written something similar. I was giving this a day hoping someone with such
> an object would step up... Try searching the usual code archives. I
> thought Mark Hadfield had something like this but his webpage isn't up
> anymore.

>
> If you want to try and write the vector object yourself left me know and I
> can help get you started.
>
> -Rick
>
>
>
> "Jim" <jim.blackwell@gsfc.nasa.gov> wrote in message
> news:95167173.0211061237.389f387a@posting.google.com...
>> Hi all,
>>
>> After playing with several pieces of code I've found in the archives,
>> and not having any luck, I figured I'd ask someone here.
>>
>> I have X, Y, Z points in space with a,b,c vector component values.
>> I'd like to plot these in 3-D space. The data points are in the form
>> of a rectangular regularly spaced grid.
>>
>> Any help would be appreciated
>>
>> Jim Blackwell

Hey, read about the example program show_stream.pro and it seems to do
almost what I want if I could just figure out how it wants me to input
my data. Any ideas ?
