
Subject: Re: Displaying 3-D vector fields

Posted by [jim.blackwell](#) on Mon, 18 Nov 2002 16:43:27 GMT

[View Forum Message](#) <> [Reply to Message](#)

"Rick Towler" <rtowler@u.washington.edu> wrote in message

news:<[ar10ak\\$22do\\$1@nntp6.u.washington.edu](mailto:ar10ak$22do$1@nntp6.u.washington.edu)>...

> "Jim" <jim.blackwell@gsfc.nasa.gov> wrote

>

>> what scales the size of the arrow (the length of the arrow relative to

>> the shaft)?

>

> The vector is scaled according to the sqrt() of the sum of the squares of

> the components of the magnitude. The *entire* vector is scaled, head and

> all since I am using the model's transformation matrix to do the work for

> me. The vector is not drawn if the magnitude is 0.

>

>

>> Is the default vector that is drawn of unit length ?

>

> Yes, the default vector is 1 unit long. It's default magnitude is [0,0,-1]

> which makes it parallel to the z axis pointing away from the viewer. It's

> default location is [0,0,0].

>

> -Rick

I see. Say have you looked at the IDL program "vector_field" ? Seems to do something similar in that it creates vectors, however I don't know offhand how to implement this in IDL object graphics to see what it looks like ?
