Subject: Re: Displaying 3-D vector fields
Posted by Rick Towler on Thu, 14 Nov 2002 20:13:42 GMT
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"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