Subject: Plotting Vectors with Coyote Graphics Programs
Posted by David Fanning on Sat, 22 Mar 2014 20:20:50 GMT
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Folks,

I've written a new vector plotting program, cgVelocityVectors, today in the manner of the NASA Astronomy Library routine PartVelVec. I had a couple of objectives in mind. First, I wanted an easier way to make a vector length key so users could easily match the length of a vector to its magnitude. Second, I wanted to add a couple of features to the program to make the vectors more attractive. For example, I wanted to be able to draw vectors with solid arrow heads.

A length key or legend can easily be contructed using two keywords, ReferenceVector and Length. ReferenceVector is used to specify a reference magnitude against which all vectors are scaled before they are displayed. Length specifies the length of the reference vector, in normalized coordinates. This allows you to adjust vector length on the plot with respect to a reference vector. You always are certain what a length means. Vectors can be overplotted on maps, contour plots, and in other graphics windows.

You can learn more about the program here:

https://www.idlcoyote.com/graphics_tips/vectors.html

And you can read the documentation for the program here:

https://www.idlcoyote.com/idldoc/cg/cgvelocityvectors.html

Cheers,

David
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Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")