Subject: Re: Vector representation of data.
Posted by chris_torrence@NOSPAM on Fri, 29 Mar 2013 21:18:43 GMT
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On Wednesday, March 27, 2013 8:04:24 AM UTC-6, dave poreh wrote:
> Folks
>
> Hi,
>
> I have data like x,y, z and z shows my intensity data (x and y are like coordinates). My data has low value in one corner and i was thinking maybe I could show the data like vectors; length of vector should show ||z|| and direction toward the lowest point in my 2D data (x-y). Can someone give me an idea about how could I do that please?
>
> Cheers,
>
> Dave

Hi Dave,

You should be able to use the VECTOR function to create the actual vector plot. You just need to compute the "U" and "V" components of the vectors, along with the X and Y locations. Then it is just:

v = VECTOR(U, V, X, Y)

The trick will be computing your angles, perhaps by computing some sort of "gradient" along your data? If you could get ||Z|| and angle Theta on a 2D grid, then you could just use:
U = ||Z|| cos(Theta)
V = ||Z|| sin(Theta).

Hope this helps a bit.

Cheers,
Chris
ExelisVIS