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Subject: Re: vectors with same length

Posted by [Kenneth P. Bowman](#) on Mon, 28 Jul 2008 21:44:53 GMT

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In article

<e8c1f958-1621-4dba-9f10-ebba593e2de9@d1g2000hsg.googlegroups.com>, knielsen73@gmail.com wrote:

> Hi,  
>  
> I am using velovect to create a vector plot. I would like for all the  
> vectors to have the same length instead of the length representing  
> amplitude. Is there are quick way to do this using velovect, or do I  
> have to modify velovect?  
>  
> Thanks,  
> Kim

Just divide each vector by it's magnitude. Given vector components u and v

$\text{mag} = \text{SQRT}(u^2 + v^2)$

VELOVECT, u/mag, v/mag

Watch out for zeroes, though.

Ken Bowman

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Subject: Re: vectors with same length

Posted by [Chris\[6\]](#) on Mon, 28 Jul 2008 21:53:33 GMT

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On Jul 28, 11:31 am, knielse...@gmail.com wrote:

> Hi,  
>  
> I am using velovect to create a vector plot. I would like for all the  
> vectors to have the same length instead of the length representing  
> amplitude. Is there are quick way to do this using velovect, or do I  
> have to modify velovect?  
>  
> Thanks,  
> Kim

Wouldn't it be easy to divide your data by their lengths, so that they all have length one?

velovect, u/sqrt(u^2+v^2), v/sqrt(u^2+v^2), x, y

chris

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