
Subject: colored vector plots

Posted by [anil](#) on Fri, 28 Feb 2014 15:08:04 GMT

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Dear all,

What is the most efficient way to do colored vector plots (representing colors corresponding to their magnitude). I currently use 'msvelovect.pro' to plot vectors on map projections, but i can not seem to color them.

Currently i just say msvelovect,u,v,lon,lat,colors=?!?something

I guess there is not much color option in this one, so I tried partvelvec.pro, but i could not succeed there either. I defined my lon, lat,u and v are the same size = (76,51). I tried to scale_vector and cgscalevector as:

```
colors=cgscalevector((indgen(n_elements(u(0:75,0:50))))),0,25 5)
```

and then partvelvec,u,v,lat,lon,veccolors=colors, but it gives errors such as:

```
CGDEFAULTCOLOR: Cannot determine a color from a value of 0.131613 of data
```

```
% CGDEFAULTCOLOR: Cannot determine a color from a value of 0.197419 of data
```

Could anyone please suggest a solution?

Thanks in advance,

Anil

Subject: Re: colored vector plots

Posted by [David Fanning](#) on Fri, 28 Feb 2014 15:19:56 GMT

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anil writes:

>

> Dear all,

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> % CGDEFAULTCOLOR: Cannot determine a color from a value of 0.197419 of data
```

>

> Could anyone please suggest a solution?

```
POSX=RANDOMU(seed,200)
```

```
POSY=RANDOMU(seed,200)
```

```
VELX=RANDOMU(seed,200)-0.5
```

```
VELY=RANDOMU(seed,200)-0.5
```

```
magnitude = SQRT(velx^2 + vely^2)
LOADCT, 5, NCOLORS=254, BOTTOM=1 ; Load vector colors
colors = BytScl(magnitude, Top=254) + 1B
PARTVELVEC, VELX, VELY, POSX, POSY, VECCOLORS=colors
END
```

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: colored vector plots
Posted by [anil](#) on Sat, 01 Mar 2014 19:07:35 GMT
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On Friday, February 28, 2014 5:19:56 PM UTC+2, David Fanning wrote:

> anil writes:

>

>

>

>>

>

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>

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>
>
>
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>
> POSY=RANDOMU(seed,200)
>
> VELX=RANDOMU(seed,200)-0.5
>
> VELY=RANDOMU(seed,200)-0.5
>
> magnitude = SQRT(velx^2 + vely^2)
>
> LOADCT, 5, NCOLORS=254, BOTTOM=1 ; Load vector colors
>
> colors = BytScl(magnitude, Top=254) + 1B
>
> PARTVELVEC, VELX, VELY, POSX, POSY, VECCOLORS=colors
>
> END
>
>
>
> Cheers,
>
>
>
> David
>
> --
>
> David Fanning, Ph.D.
>
> Fanning Software Consulting, Inc.
>
> Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>
>
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Thanks a lot David.

Subject: Re: colored vector plots
Posted by [David Fanning](#) on Sat, 01 Mar 2014 21:18:45 GMT
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anil writes:

> Thanks a lot David.

I didn't work very hard. I found this in the header of the Partvelvec program. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

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