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,
- > 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
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- > 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?

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

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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their magnitude). I currently use 'msvelovect.pro' to plot vectors on map projections, but i can not
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```
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  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 David Fanning on Sat, 01 Mar 2014 21:18:45 GMT
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Thanks a lot David.

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