
Subject: Re: help - sticks plots of u,v/speed direction??

Posted by [davidf](#) on Tue, 11 Jan 2000 08:00:00 GMT

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Jean Newman (jcn@u.washington.edu) writes:

> I have time-series of vectors u and v and wish to plot them along a time
> axis as sticks, a pretty standard plot for winds or current. Can anyone
> help me with how to go about this using IDL?

I've been thinking about this a little bit, but I'm really
afraid of embarrassing myself. Do you have a reference to
a web page where I might see what a stick plot looks like?

I'm thinking this is really the kind of thing that lends
itself to object graphics.

Cheers,

David

--

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

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Subject: Re: help - sticks plots of u,v/speed direction??

Posted by [Pedro Velez-Belchi](#) on Wed, 12 Jan 2000 08:00:00 GMT

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Jean Newman ha escrito:

> I have time-series of vectors u and v and wish to plot them along a time
> axis as sticks, a pretty standard plot for winds or current. Can anyone
> help me with how to go about this using IDL? Jean
>

Hello Jean hope the following lines can help you, any further trouble just
let me know:

;in dir should be the direction, diaj is the julian day (or any other time
indicator), velo is the array with the ;magnitude of the vector

```
s0=size(dir)
nc0= s0(1)
```

```
x00=FLTARR(nc0)
y00=FLTARR(nc0)
x10=FLTARR(nc0)
y10=FLTARR(nc0)
```

```
xmin0= min(diaj)-0.5
xmax0= max(diaj)+0.5
ymin0=-50.
ymax0=50.
diroffset=90.
dir=-dir+90-diroffset
sizex=10
```

```
; calcula coordenadas flechas
FOR i=0,nc0-1 DO BEGIN
  x00(i)=diaj(i)
  y00(i)=0.
  x10(i)=x00(i)+velo(i)*COS(dir(i)*!DTOR) $
    *((xmax0-xmin0)/(ymax0-ymin0))*(4./sizex)
  y10(i)=y00(i)+velo(i)*SIN(dir(i)*!DTOR)

ENDFOR
```

```
PLOT, /DEVICE,[xmin0,xmax0], [ymin0,ymax0], $
  xrange=[xmin0,xmax0], yrange=[ymin0,ymax0], xstyle=1, ystyle=1, $
  xtitle='time(days) after 1 October 1996', ytitle='Wind velocity (m/s)',
$
  title= title,/nodata
ARROW, /DEVICE, x00(0:nc0-1), y00(0:nc0-1), x10(0:nc0-1), $
  y10(0:nc0-1), /DATA,/solid,hsizex=0
end
```
