
Subject: Re: overlaying arrow plots

Posted by [David Fanning](#) on Wed, 01 Nov 2006 14:00:51 GMT

[View Forum Message](#) <> [Reply to Message](#)

metachronist writes:

> I used convert_coord to convert the time indices (1sec
> data-1,2,3,4,...etc.) to device coordinates and kept the second
> coordinate, a constant. How can I overlay the arrowplots created from
> the 1D timeseries on the same 'postscript' plot with the time series
> and on a map projection? And is there a better way to tackle such
> problems?

Well, let's just say that of the three coordinate systems
available, you chose the only one that isn't going to
work for you in PostScript. :-)

Put your arrows and other overlays into DATA or NORMAL
coordinates and you will be golden.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: overlaying arrow plots

Posted by [news.verizon.net](#) on Wed, 01 Nov 2006 20:34:52 GMT

[View Forum Message](#) <> [Reply to Message](#)

metachronist wrote:

> Dear All,
>
> I started using IDL more only recently. So please be kind :-) I have
> made arrow plots from a 1D timeseries using one_arrow, which in turn
> calls one_ray. I want to be able to overlay these vector plots on maps
> and regular x-y plots of the timeseries/other derived quantities.

one_arrow and one_ray are old routines from the IDL Astronomy Library
and are not part of the standard IDL distribution. They only
accepted device coordinates, so you had to be careful to convert both
the arrow position and length to device coordinates. If you just
want to draw an arrow without annotation, then you might have better

luck with the standard IDL routine ARROW, which accepts /DATA and /NORMAL keywords.

I have now updated one_arrow.pro so that it accepts both /DATA and /NORMAL keywords (at <http://idlastro.gsfc.nasa.gov/ftp/pro/misc/>)

--Wayne

Subject: Re: overlaying arrow plots
Posted by [rkombiyil](#) on Thu, 02 Nov 2006 05:49:51 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi Wayne,

Thanks for your time and help! Yes, I could overlay them arrows without any problems now. I chose one_arrow because it accepts angles as input (Maybe I could do the same with ARROW also, I haven't checked the code/syntax yet.). My angles are time dependent.

Hmm, at first glance it seems like them arrows are inverted?? For example, my min(angle) is 36.3610 and max(angle) is 124.032. So these should be plotted pointing in the north-east and north-west respectively?? I mean, aren't the angles counterclockwise from +x? The directions were fine earlier. I didn't read your modifications yet. But now directions seem off.
FYI,

After I do:

```
--  
plot,time,tseries
```

```
--  
I make a call to one_arrow via:
```

```
--  
for i=0,n_elements(tseries)-1 do $  
  one_arrow,time(i),zeroarray(i),angle[i],"",arrowsize=[(angle  
[i]/maxangle),9.0,35.0],charsize=0.1,thick=1.  
--
```

Thanks for the modifications and the help!

Cheers,
/rk

Wayne Landsman wrote:

> metachronist wrote:

>> Dear All,

>>

>> I started using IDL more only recently. So please be kind :) I have

>> made arrow plots from a 1D timeseries using one_arrow, which in turn

>> calls one_ray. I want to be able to overlay these vector plots on maps
>> and regular x-y plots of the timeseries/other derived quantities.
>
>
> one_arrow and one_ray are old routines from the IDL Astronomy Library
> and are not part of the standard IDL distribution. They only
> accepted device coordinates, so you had to be careful to convert both
> the arrow position and length to device coordinates. If you just
> want to draw an arrow without annotation, then you might have better
> luck with the standard IDL routine ARROW, which accepts /DATA and
> /NORMAL keywords.
>
> I have now updated one_arrow.pro so that it accepts both /DATA and
> /NORMAL keywords (at <http://idlastro.gsfc.nasa.gov/ftp/pro/misc/>)
>
> --Wayne
