Subject: Re: how to draw streamline
Posted by mankoff on Fri, 07 Mar 2008 03:56:03 GMT
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On Mar 6, 10:08 pm, wenfang_z...@hotmail.com wrote:
> Hi,all
> I want to draw the wind streamline map,and I try many methods
> described in the forum, but some are wind vectors not the streamline,
> which is the serial contour line with arrow on the contour plot.
>
> some one ever mentioned that there was a script sample on the web
sitehttp://www.metvis.com.au/idl/
> but i can't get access to it.
>
> so if there anybody who can load that web site and give a copy of both
> the script and the streamline image for me?
>
> I will appreciate your help!
>
> wenfang

The thunderstorm demo has code to calculate streamlines from u,v,w.

-k.

Subject: Re: how to draw streamline
Posted by David Fanning on Fri, 07 Mar 2008 04:04:49 GMT
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wenfang_zhao@hotmail.com writes:

> I want to draw the wind streamline map,and I try many methods
> described in the forum, but some are wind vectors not the streamline,
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>
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>
> so if there anybody who can load that web site and give a copy of both
> the script and the streamline image for me?

I looked over there, but I didn't see anything that
looked like streamlines. Sorry. :-(

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: how to draw streamline
Posted by David Fanning on Fri, 07 Mar 2008 04:06:09 GMT
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mankoff writes:

> The thunderstorm demo has code to calculate streamlines from u,v,w.

I thought so, too. But I played with it for 15 minutes
and didn't get anything like streamlines to appear,
so perhaps you have to be more intuitive than me to
see them. :-)

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: how to draw streamline
Posted by Kenneth P. Bowman on Fri, 07 Mar 2008 13:55:41 GMT
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In article
<92bef8cb-bd54-48b7-b54c-2ff9f4f75bf7@s8g2000prg.googlegroups.com>,
wenfang_zhao@hotmail.com wrote:

> Hi,all
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Here is a sample code to plot 2-D streamlines using VEL.

By default VEL chooses the initial points randomly, but the
source code is available if you want to change that.

Ken Bowman

```
PRO STREAMLINE_DEMO

n  = 50
x  = FINDGEN(n)/(n-1)
y  = FINDGEN(n)/(n-1)

xx = REBIN(x, n, n)
yy = REBIN(REFORM(y, 1, n), n, n)

u  = -SIN(!PI*xx)*COS(!PI*yy)
v  =  COS(!PI*xx)*SIN(!PI*yy)

VEL, u, v, NVECS = 100, NSTEPS = 100, length = 0.5

END
```

Subject: Re: how to draw streamline
Posted by mankoff on Tue, 11 Mar 2008 17:25:55 GMT
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On Mar 7, 12:06 am, David Fanning <n...@dfanning.com> wrote:
> mankoff writes:
>> The thunderstorm demo has code to calculate streamlines from u,v,w.
>
> I thought so, too. But I played with it for 15 minutes
> and didn't get anything like streamlines to appear,
> so perhaps you have to be more intuitive than me to
> see them. :-)
>

I double-tap on my MacBook touchpad. I think this is a right-click? Do
it on one of the image planes and you get "Ribbons" which are
streamlines + extra information.

Subject: Re: how to draw streamline
Posted by chris_torrence@NOSPAM on Thu, 13 Mar 2008 20:32:55 GMT
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On Mar 7, 7:55 am, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:
> In article
> < 92bef8cb-bd54-48b7-b54c-2ff9f4f75...@s8g2000prg.googlegroups .com >,
>
>
>
> wenfang_z...@hotmail.com wrote:
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>
> By default VEL chooses the initial points randomly, but the
> source code is available if you want to change that.
>
> Ken Bowman
>
> PRO STREAMLINE_DEMO
>
> n = 50
> x = FINDGEN(n)/(n-1)
> y = FINDGEN(n)/(n-1)
>
> xx = REBIN(x, n, n)
> yy = REBIN(REFORM(y, 1, n), n, n)
>

> u = -SIN(!PI*xx)*COS(!PI*yy)
> v = COS(!PI*xx)*SIN(!PI*yy)
>
> VEL, u, v, NVECS = 100, NSTEPS = 100, length = 0.5
>
> END

Following on from Ken's example, you might also try,

iVector, u, v, x, y, /STREAMLINES, STREAMLINE_NSTEPS=25

-Chris
ITTVIS

Subject: Re: how to draw streamline
Posted by wfzhao on Mon, 17 Mar 2008 05:22:24 GMT
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> On Mar 7, 7:55 am, "Kenneth P. Bowman" <k-bow...@null.edu> wrote:
>
>
>
>
>
>> In article
>> < 92bef8cb-bd54-48b7-b54c-2ff9f4f75...@s8g2000prg.googlegroups .com >,
>
>> wenfang_z...@hotmail.com wrote:
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>
>> u = -SIN(!PI*xx)*COS(!PI*yy)
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>
>> VEL, u, v, NVECS = 100, NSTEPS = 100, length = 0.5
>
>> END
>
> Following on from Ken's example, you might also try,
>
> iVector, u, v, x, y, /STREAMLINES, STREAMLINE_NSTEPS=25
>
> -Chris

>

thanks for all response from you.
now I am a litttle comfused, what kind of line can be called as wind streamline?
what I want is the consecutive line with arrow, something like the contour plot line with arrow, not the small lines with arrow,I don't know how to describe it more clear? I have a sample image of wind streamline ,which is what I want, but how I can put it on the forum so all of you can have a look and understand what I mean.

I have another question, when drawing a wind streamline, so the speed of X,Y direction will decide the final appearance of wind streamline? I menn, if wind is strong, so the result will be the contour plot line with arrow(long streamline,consecutive), otherwise, the result will be the discrete lines with arrow(shorted streamline, like what is draw by the VEL procedure)?

wenfang