
Subject: Re: how to draw streamline

Posted by [Michael Galloy](#) on Mon, 17 Mar 2008 14:27:07 GMT

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On Mar 16, 11:22 pm, wfz...@bjmb.gov.cn wrote:

```
>
>> 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:
>>>> 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 site
>>>> http://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
>
>>> 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
>
>> 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 little confused, 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 think you are talking about OSTR (image-guided streamlines) in this diagram:

<http://michaelgalloy.com/wp-content/uploads/2008/03/flow.png>

I have thought about making implementations of some of the visualizations in that diagram. I have a (very slow) implementation for LIC:

<http://michaelgalloy.com/2007/12/09/lic-flow-code.html>

Mike

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