Subject: Re: Particle_Trace question ?
Posted by Michael Galloy on Tue, 18 Mar 2008 23:23:09 GMT
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On Mar 18, 4:56 pm, millward.geo...@gmail.com wrote:
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Here's an example of using PARTICLE_TRACE:

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; defines u, v, x, and y
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data = fltarr(2, 128, 64)
data[0, *, *] = u
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; define starting points
seeds = [[32, 32], [64, 32], [96, 32]]

particle_trace, data, seeds, verts, conn, max_iterations=30

; plot the underlying vector field
velovect, u, v, x, y

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i = 0
sz = size(verts, /structure)
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  plots, x[verts[0, conn[i+1:i+nverts]]], y[verts[1, conn[i+1:i
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    color='0000FF'x, thick=2, linestyle=2
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endwhile
```

Mike
--
www.michaelgalloy.com
Tech-X Corporation
Software Developer II

Subject: Re: Particle_Trace question ?
Posted by millward.george on Wed, 19 Mar 2008 01:32:11 GMT
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Mike

Aha - so the seeds are just integer positions within the 2D array -
got it - thanks !!

Does it matter what the directions of U and V are - maybe not - hmm ?

Thanks for the demo code - that example needs to make it into the
reference guide.

Cheers,

George.

Subject: Re: Particle_Trace question ?
Posted by Douglas G. Dirks on Wed, 19 Mar 2008 23:09:42 GMT
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Hi George,

I've made what I hope are some clarifications to the PARTICLE_TRACE reference documentation. Here's the meat of it:

Data
A three- or four-dimensional array that defines the vector field. Data can be of dimensions [2, dx, dy] for a two-dimensional vector field or [3, dx, dy, dz] for a three-dimensional vector field, where:
- Data[0,*,*] or Data[0,*,*,*] contains the X components of the two- or three-dimensional vector field (commonly referred to as U).
- Data[1,*,*] or Data[1,*,*,*] contains the Y components of the two- or three-dimensional vector field (commonly referred to as V).
- Data[2,*,*,*] contains the Z components of the three-dimensional vector field (commonly referred to as W).

Seeds
An array of two- or three-element vectors ([2, n] or [3, n]) specifying the indices of the n points in the Data array at which the tracing operation is to begin. The result will be n output paths.

And, with Mike's kind permission, I am including a (very slightly modified) version of his example in the docs as well. These changes will show up in the next release of the IDL help system.

Best wishes,
Doug

Douglas G. Dirks
IDL Documentation Group * ITT Visual Information Solutions
4990 Pearl East Circle * Boulder, CO 80301
ddirks@ittvis.com

Subject: Re: Particle_Trace question ?
Posted by wfzhao on Thu, 20 Mar 2008 08:40:45 GMT
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> --www.michaelgalloy.com
> Tech-X Corporation

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Hi,
I copy your code and save as a pro fle and run in IDL,but nothing is
display.
if I want to display the image created from your code in a temporary
window, what can I do?

thanks.

Subject: Re: Particle_Trace question ?
Posted by Michael Galloy on Thu, 20 Mar 2008 13:29:56 GMT
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wfzhao@bjmb.gov.cn wrote:

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```

It should display an image. Are there any error messages when you run it?

The easiest way to start might be to just copy and paste the code from
the original message onto the command line. Does that work?

Mike
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www.michaelgalloy.com
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Software Developer II