
Subject: multi-surface plot

Posted by [jun](#) on Tue, 04 Jul 1995 07:00:00 GMT

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Does anyone know a way to make a multi-surface plot in IDL?

We have 4 2D arrays $z1(x,y)$, $z2(x,y)$, $z3(x,y)$ and $z4(x,y)$, and we want to plot all 4 surfaces in one plot. These are surfaces at different height. It would be interesting to plot them together in one plot so that people can compare them.

Thanks in advance.

Cheers,

J. Xu

Subject: Re: multi-surface plot

Posted by [todd](#) on Thu, 06 Jul 1995 07:00:00 GMT

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In article <3tbvof\$ink@apakabar.cc.columbia.edu>, jun@eureka.columbia.edu (Jun Xu) writes:

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|>

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|>

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|>

I've used the Z-buffer device to plot multiple isosurfaces (using the `shade_volume/polyshade` combination) into a single image. I suspect this is also possible with the various surface making procedures.

--

Todd Ratcliff
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Los Angeles, CA 90095-1567 todd@artemis.ess.ucla.edu
(310)825-3118 <http://artemis.ess.ucla.edu/~todd/home.html>

Subject: Re: multi-surface plot
Posted by [lkramer](#) on Thu, 06 Jul 1995 07:00:00 GMT
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In article <3tbvof\$ink@apakabar.cc.columbia.edu> jun@eureka.columbia.edu (Jun Xu) writes:

> Path:
> uuneo.neosoft.com!news.uh.edu!swrinde!gatech!rutgers!news.columbia.edu!eureka.co
> lumbia.edu!jun
> From: jun@eureka.columbia.edu (Jun Xu)
> Newsgroups: comp.lang.idl-pvwave
> Subject: multi-surface plot
> Date: 4 Jul 1995 18:02:55 GMT
> Organization: columbia astronomy department
> Lines: 15
> Sender: jun@parsifal.phys.columbia.edu (Jun Xu)
> Distribution: world
> Message-ID: <3tbvof\$ink@apakabar.cc.columbia.edu>
> NNTP-Posting-Host: parsifal.phys.columbia.edu
> Keywords: multi-surface plot

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May I suggest:

SURFACE,Z1,/SAVE

```
SURFACE,Z2,/T3D,XSTYLE=4,YSTYLE=4,ZSTYLE=4,/NOERASE
SURFACE,Z3,/T3D,XSTYLE=4,YSTYLE=4,ZSTYLE=4,/NOERASE
SURFACE,Z4,/T3D,XSTYLE=4,YSTYLE=4,ZSTYLE=4,/NOERASE
```

You might want to also specify a different color for each variable. E-mail me for details if interested.

Leonard

Leonard Kramer, Ph.D. Physicist.
AGAR Corporation, (Process Measurement & Control)
POB 802127 Houston, TX 77280-2127
email: lkramer@neosoft.com

Subject: Re: multi-surface plot
Posted by [jun](#) on Fri, 07 Jul 1995 07:00:00 GMT
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Thanks many people for contributing their ideas on the multi-surface plot problem. Inspired by Dr. L. Kramer, I tried the following way which works pretty well for me:

```
IDL> surface, Z1, ZRANGE=[100,300], /nodata, /save ;setup coordinates
IDL> surface, Z1, ZRANGE=[100,300], /T3D, xstyle=4, ystyle=4, zstyle=4, /noerase
IDL> surface, Z2, ZRANGE=[100,300], /T3D, xstyle=4, ystyle=4, zstyle=4, /noerase
... .. (repeat this on Z3 and Z4)
```

It's even better if you use different color for each surface.
Because many people expressed their interest in this problem, I think it might be good to post this solution.

Finally, Thanks, Leonard. Great idea!

In article <lkramer.4.009623B3@neosoft.com>, lkramer@neosoft.com (Leonard Kramer) writes:
> In article <3tbvof\$ink@apakabar.cc.columbia.edu> jun@eureka.columbia.edu (Jun Xu) writes:

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>
> Leonard
>
>
>
>
>

|> -----
|> Leonard Kramer, Ph.D. Physicist.
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|> POB 802127 Houston, TX 77280-2127
|> email: lkramer@neosoft.com
