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

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> J. Xu

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

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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:

|> >Path:
|> > uuneo.neosoft.com!news.uh.edu!swrinde!gatech!rutgers!news.co lumbia.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>
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|> You might want to also specify a different color for each variable. E-mail me
|> for details if interested.
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|> Leonard
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|>
|>
|>
|>

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