Subject: Re: 24-bit color contour

Posted by David Fanning on Sat, 10 Nov 2001 02:53:39 GMT

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tom (tom2959@21cn.com) writes:

- > Hi, is it possible for me to draw a 24-bits color filled contour plot on a
- > 24-bits screen or PS file? It is usually a 8-bits contour or grey contour.

The question that comes up for me is not "is it possible"? But, rather "why in the world would you want to do it?"

Let me see if I understand this. You want a filled contour plot with more than 256 colors, implying that you are going to use more than 256 contour intervals. Have you given any thought to how big that window is going to have to be to get any kind of resolution on your filled contour plot?

Or, do you mean you wish to specify the contour colors as 24-bit values? This is possible in object graphics, but no one I know uses contour plots in object graphics because there is no way to label contour intervals there. It is not possible in direct graphics, but again, I can't think of any reason *why* it should be possible. No practical filled contour plot would have more than 256 colors. And even it it did, on a 24-bit display you would just change color tables and continue layering on more contours in more colors.

Perhaps I'm missing the gist of this question entirely. All I can say in my defense is that it *is* Friday night. :-)

Cheers.

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/

Toll-Free IDL Book Orders: 1-888-461-0155

Subject: Re: 24-bit color contour Posted by tom on Sat, 10 Nov 2001 08:13:54 GMT

View Forum Message <> Reply to Message Thanks. Sometimes, the contour plot was displayed by adding on a TV or TVscl plot. For example. data=fltarr(n,n) tv.data./true contour.data may be wrong. How to to display the data in a 24 bit color? "David Fanning" <david@dfanning.com> wrote in message news:MPG.165644a245c2f9e5989763@news.frii.com... > tom (tom2959@21cn.com) writes: > >> Hi, is it possible for me to draw a 24-bits color filled contour plot on >> 24-bits screen or PS file? It is usually a 8-bits contour or grey contour. > The question that comes up for me is not "is it possible"? But, rather "why in the world would you want to do it?" Let me see if I understand this. You want a filled > contour plot with more than 256 colors, implying that > you are going to use more than 256 contour intervals. > Have you given any thought to how big that window is > going to have to be to get any kind of resolution on > your filled contour plot? > > Or, do you mean you wish to specify the contour > colors as 24-bit values? This is possible in object > graphics, but no one I know uses contour plots in > object graphics because there is no way to label > contour intervals there. It is not possible in > direct graphics, but again, I can't think of any > reason *why* it should be possible. No practical > filled contour plot would have more than 256 colors. > And even it it did, on a 24-bit display you would > just change color tables and continue layering on > more contours in more colors. > Perhaps I'm missing the gist of this question > entirely. All I can say in my defense is that > it *is* Friday night. :-)

> Cheers,

- > David
- >
- > --
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Subject: Re: 24-bit color contour

Posted by David Fanning on Sat, 10 Nov 2001 15:38:59 GMT

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tom (tom2959@21cn.com) writes:

- > Sometimes, the contour plot was displayed by adding on a TV or TVscl plot.
- > For example,
- > data=fltarr(n,n)
- > tv.data./true
- > contour,data
- > may be wrong. How to to display the data in a 24 bit color?

Well, your example is certainly wrong, because a 24-bit image is a 3D array, not a 2D. But there is no problem at all putting a 24-bit image underneath a contour plot. The question really is this: what are you going to contour? Not the 24-bit image, since that is made up of color triples and doesn't represent (almost certainly) a physical quantity.

If you had a 24-bit image that you will to place under a contour plot, and a 2D array of some physical quantity you wish to contour, then you can do this:

plotPosition =[0.15, 0.15, 0.9, 0.9]
TVImage, image24, Position=plotPosition
Contour, data, /NoErase, XStyle=1, YStyle=1, \$
Position=plotPosition

That will work on the display and in PostScript. (In fact, the same commands will work with a 2D image as well.) The TVImage program can be found on my web page:

http://www.dfanning.com/programs/tvimage.pro

Cheers,

David

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