Subject: Re: Full Image Display

Posted by David Fanning on Fri, 23 Jan 2004 20:24:22 GMT

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Gauray writes:

- > Could anyone please tell me...how do we display a image in IDL?
- > Right now i am using the 'TV' function but it is not displaying the
- > full image. It is actually displaying only a 512*512 portion of the
- > image (irrespective of the actual size of the image provided it is
- > more than 512*512). Can anyone tell me why does it happen so & also
- > suggest a better alternative for the 'TV' function.

I'm guessing your window is only 512 by 512 (or something like it). If you want something smarter than TV there are several alternatives, TVImage, IMDISP, PLOTIMAGE, etc. Here is one:

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

These will take into consideration the size of the window when displaying the data and make the image smaller if need be.

Cheers.

David

--

David W. Fanning, Ph.D.

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

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Subject: Re: Full Image Display

Posted by btt on Fri, 23 Jan 2004 20:26:50 GMT

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Gaurav wrote:

- > Hello everybudy!
- > Could anyone please tell me...how do we display a image in IDL?
- > Right now i am using the 'TV' function but it is not displaying the
- > full image. It is actually displaying only a 512*512 portion of the
- > image (irrespective of the actual size of the image provided it is
- > more than 512*512). Can anyone tell me why does it happen so & also
- > suggest a better alternative for the 'TV' function.

>

Hello,

The TV command is drawing the entire image, but I expect you window size is not matched to the image size. Any portion of you image that isn't displayed is drawn 'off-canvas' so to speak. Try the following...

```
dim = SIZE(image, /DIM)
Window, /FREE, xsize = dim[0], ysize = dim[1]
TV, image
```

If you have a very large image, you should consider spending time at www.gumley.com and www.dfanning.com where you can find more robust image display software for IDL. Come to think of it, you should spend some time at those sites just for general IDL know-how.

Cheers, Ben

Subject: Re: Full Image Display
Posted by gauravjn123 on Sat, 24 Jan 2004 18:15:03 GMT
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Thanks for the help....first i tried the method suggested by Mr. Ben Tupper....but it dint work out (i tried it with dim(1) & dim (2) also)it was just displaying a blank window.

Then i tried to work with TVIMAGE.pro & it is working fine. Yet there is this problem of the window size...whatever be the true size of the image, it is always displayed in a 512 x 512 window

Cheers Gauray

Ben Tupper btupper@bigelow.org wrote in message news:...

- > Gaurav wrote:
- >> Hello everybudy!
- >> Could anyone please tell me...how do we display a image in IDL?
- >> Right now i am using the 'TV' function but it is not displaying the
- >> full image. It is actually displaying only a 512*512 portion of the
- >> image (irrespective of the actual size of the image provided it is
- >> more than 512*512). Can anyone tell me why does it happen so & also
- >> suggest a better alternative for the 'TV' function.

>>

>

> Hello.

> The TV command is drawing the entire image, but I expect you window size
> is not matched to the image size. Any portion of you image that isn't
> displayed is drawn 'off-canvas' so to speak. Try the following...
> dim = SIZE(image, /DIM)
> Window, /FREE, xsize = dim[0], ysize = dim[1]
TV, image
>
If you have a very large image, you should consider spending time at
> www.gumley.com and www.dfanning.com where you can find more robust image
> display software for IDL. Come to think of it, you should spend some
> time at those sites just for general IDL know-how.

Cheers,Ben

Subject: Re: Full Image Display
Posted by David Fanning on Sat, 24 Jan 2004 21:13:32 GMT
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Gaurav writes:

- > Thanks for the help....first i tried the method suggested by Mr. Ben
- > Tupper....but it dint work out (i tried it with dim(1) & dim (2) also
- >)it was just displaying a blank window.

>

- > Then i tried to work with TVIMAGE.pro & it is working fine. Yet
- > there is this problem of the window size...whatever be the true size
- > of the image, it is always displayed in a 512 x 512 window

Well, you could do a couple of things. You could make the window some other size:

Window, XSize=400, YSize=200 TVImage, image

Or, you could put it in a resizeable graphics window:

FSC_Window, 'TVImage', image

You will need the FSC_Window program:

http://www.dfanning.com/programs/fsc_window.zip

You would be able to save your image in various formats and print it if you use this program.

Cheers.

David

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Subject: Re: Full Image Display Posted by Fotis on Mon, 26 Jan 2004 08:04:10 GMT

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David Fanning wrote:

>

- > Well, you could do a couple of things. You could make
- > the window some other size:

>

- Window, XSize=400, YSize=200 >
- TVImage, image >

>

Or, you could put it in a resizeable graphics window:

>

FSC_Window, 'TVImage', image >

You will need the FSC_Window program:

> >

http://www.dfanning.com/programs/fsc_window.zip

- > You would be able to save your image in various
- formats and print it if you use this program. >

>

> Cheers.

>

> David

Would FSC_Window output the whole image and not just what is contained in the 400x200 window?

Does this mean that if a window is resizable, it is possible to grab the whole image?

I am interested in saving the full size of an image (e.g. 2000x1500)

BUT WITH annotations (contours, scale bar, etc.)?

What I have done so far is the following: I can save the whole image but without annotations. I can save annotations but only that part of the image which is seen in the display window.

Can you achieve both tasks simultaneously?

And a question about color_define.
In your web page the colours are nicely split in 16 intervals.
I had also set 16 intervals but in my case some mixing of the colours is seen. Is there some keyword to set which I may not be using?
Cheers,
Fotis

__

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Subject: Re: Full Image Display
Posted by David Fanning on Mon, 26 Jan 2004 14:36:54 GMT
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Fotis Mavromatakis writes:

- > Would FSC_Window output the whole image and not just
- > what is contained in the 400x200 window?
- > Does this mean that if a window is resizable, it is possible
- > to grab the whole image?

Typically in IDL one answers questions like this with 10 seconds of experimentation, but, yes that's what it does. Although "grab" is an odd word to use. I would have used "display".

- > I am interested in saving the full size of an image (e.g. 2000x1500)
- > BUT WITH annotations (contours, scale bar, etc.) ?
- > What I have done so far is the following: I can save the whole
- > image but without annotations. I can save annotations but only
- that part of the image which is seen in the display window.
- Can you achieve both tasks simultaneously?

Assuming you have an IDL procedure that can draw something in a graphics window of any size (in general this means annotations are positioned with data or normalized coordinates and not device coordinates, like you would do if you wanted your program to display in a PostScript window), then, yes, FSC_Window can display it in a resizeable graphics window. The only limitation FSC_Window makes is that your display procedure have no more than three positional parameters. You can have an unlimited number of keyword parameters.

There is a program called HISTOIMAGE that comes with my book, for example, that draws an image, a histogram plot of the image, and a colorbar in the same window. This is put into a resizeable graphics window like this:

IDL> FSC_Window, 'histoimage', image

- > And a question about color_define.
- > In your web page the colours are nicely split in 16 intervals.
- > I had also set 16 intervals but in my case some mixing of the
- > colours is seen. Is there some keyword to set which I may not
- > be using?

I don't know. You will have to give me more details about what you are doing. Are you asking whether I fudge pictures? No, never. It plays havoc with your credibility. :-)

Cheers,

David

--

David W. Fanning, Ph.D.

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