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Subject: CT image without scaling  
Posted by [Dete van Eeden](#) on Thu, 24 Sep 2015 15:12:20 GMT  
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Hi

How can I display a CT image on idl without it being scaled to 0,255?

Thank you

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Subject: Re: CT image without scaling  
Posted by [David Fanning](#) on Thu, 24 Sep 2015 15:41:51 GMT  
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Dete van Eeden writes:

> How can I display a CT image on idl without it being scaled to 0,255?

I'd try:

TV, image

Or, if the data is not in the range 0 to 255 already, scale it yourself with `BytScl` to whatever range you want within the values 0 to 255 required to put an image on the display.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Seppure ma de ni thue. ("Perhaps thou speakest truth.")

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Subject: Re: CT image without scaling  
Posted by [Dete van Eeden](#) on Thu, 24 Sep 2015 15:59:09 GMT  
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On Thursday, September 24, 2015 at 5:41:56 PM UTC+2, David Fanning wrote:

> Dete van Eeden writes:

>

>> How can I display a CT image on idl without it being scaled to 0,255?

>

> I'd try:

>  
> TV, image  
>  
> Or, if the data is not in the range 0 to 255 already, scale it yourself  
> with BytScl to whatever range you want within the values 0 to 255  
> required to put an image on the display.  
>  
> Cheers,  
>  
> David  
> --  
> David Fanning, Ph.D.  
> Fanning Software Consulting, Inc.  
> Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>  
> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Thank you, the values range from 1000 to -1000 since it is a CT image and it is displayed in hounsfield units

how many greyscale values will tv, image display?

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Subject: Re: CT image without scaling

Posted by [Dete van Eeden](#) on Thu, 24 Sep 2015 16:00:44 GMT

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On Thursday, September 24, 2015 at 5:59:12 PM UTC+2, Dete van Eeden wrote:

> On Thursday, September 24, 2015 at 5:41:56 PM UTC+2, David Fanning wrote:

>> Dete van Eeden writes:

>>

>>> How can I display a CT image on idl without it being scaled to 0,255?

>>

>> I'd try:

>>

>> TV, image

>>

>> Or, if the data is not in the range 0 to 255 already, scale it yourself

>> with BytScl to whatever range you want within the values 0 to 255

>> required to put an image on the display.

>>

>> Cheers,

>>

>> David

>> --

>> David Fanning, Ph.D.

>> Fanning Software Consulting, Inc.

>> Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

>> Sepore ma de ni thue. ("Perhaps thou speakest truth.")

>  
> Thank you, the values range from 1000 to -1000 since it is a CT image and it is displayed in  
hounsfield units  
>  
> how many greyscale values will tv, image display?

But How do I display the image in this new rescaled values again?

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Subject: Re: CT image without scaling  
Posted by [David Fanning](#) on Thu, 24 Sep 2015 16:07:22 GMT  
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Dete van Eeden writes:

>  
> On Thursday, September 24, 2015 at 5:41:56 PM UTC+2, David Fanning wrote:  
>> Dete van Eeden writes:  
>>  
>>> How can I display a CT image on idl without it being scaled to 0,255?  
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>>  
>> Or, if the data is not in the range 0 to 255 already, scale it yourself  
>> with BytScl to whatever range you want within the values 0 to 255  
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>> David Fanning, Ph.D.  
>> Fanning Software Consulting, Inc.  
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>  
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hounsfield units  
>  
> how many greyscale values will tv, image display?

All non-true-color images are displayed with values ranging from 0 to 255. Often, with CT and other medical images, you want to "window and level" the image.

Here are a couple of articles you might find helpful:

[http://idlcoyote.com/ip\\_tips/xstretch.php](http://idlcoyote.com/ip_tips/xstretch.php)  
[http://www.idlcoyote.com/oographics\\_tips/contrastzoom.html](http://www.idlcoyote.com/oographics_tips/contrastzoom.html)

Cheers,

David

--

David Fanning, Ph.D.  
Fanning Software Consulting, Inc.  
Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>  
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

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Subject: Re: CT image without scaling  
Posted by [lecacheux.alain](#) on Thu, 24 Sep 2015 16:14:34 GMT  
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> But How do I display the image in this new rescaled values alain?

The image function in the statement "im = image(your-image\_array)" will open a window on your screen. The variable "im" is the corresponding IDL graphics object. Changing any of its property (like MIN\_VALUE) will dynamically change the display. For instance, doing im.MIN\_VALUE=-500 will redisplay your image in range [-500,1000], then doing im.MAX\_VALUE=500, in range [-500,500]. IDL himself adjusts automatically the 256 available grayscale levels behind the scene.

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