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

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/

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

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
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Cheers,
David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
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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

how many greyscale values will tv, image display?

hounsfield units

Subject: Re: CT image without scaling Posted by Dete van Eeden on Thu, 24 Sep 2015 16:00:44 GMT View Forum Message <> Reply to Message

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 alain?

Subject: Re: CT image without scaling Posted by David Fanning on Thu, 24 Sep 2015 16:07:22 GMT View Forum Message <> Reply to Message

## 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?
>>
>> 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?
```

All and the control of the control o

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://www.idlcoyote.com/ographics\_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.")

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.