
Subject: Re: Display two images on one position : or even three!

Posted by [Martin Downing](#) on Wed, 02 Jan 2002 21:54:58 GMT

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Hi Oliver,

I've been following this thread trying to work out exactly what you want to do with your images :)

Coming from a background of 8bit graphics, I have often opt for creating a color table of greyscale with a few bright colors for overlay at one end of the colortable. However, I dont think that is what you want as it looks like you are wanting to use more than one color table for different bits of the image. Ok so heres how: take advantage of Graphics functions and use GXor

The following shows a distace image displayed with the top values using the hot body scale, middle using grey-scale and lower using black-white color scale, this should give you the idea.

The key point is to OR each region using a image mask so that no area is updated twice

; start with GXcopy

```
IDL> device, set_graphics = 3
```

```
IDL> loadct, 3
```

% LOADCT: Loading table RED TEMPERATURE

```
IDL> tv, im * ((im gt 130))
```

```
IDL> loadct, 0
```

% LOADCT: Loading table B-W LINEAR

; now switch to GXor

```
IDL> device, set_graphics = 7
```

```
IDL> tv, im * ((im le 130) and (im gt 100))
```

```
IDL> loadct, 1
```

% LOADCT: Loading table BLUE/WHITE

```
IDL> tv, im * (im lt 100)
```

hope this is useful - if not its quite pretty anyhoo!

Martin

Martin Downing,
Clinical Research Physicist,
Grampian Orthopaedic RSA Research Centre,
Woodend Hospital, Aberdeen, AB15 6LS.

"Emmler, Oliver" <oemmler@ix.urz.uni-heidelberg.de> wrote in message
news:a0v7vc\$s0g\$1@news.urz.uni-heidelberg.de...

>> But this goes even further afield from "easy" than my
>> previous example, so I'm not sure it would meet
>> your criteria. :-)

>

> Thanks. I tried using your procedures. The scaling of the
colortable/images

> will cause the picture to lose details. I think i have to use the
following

> loop. Is there any way to speed it up ?

>

> FOR x = 0,510 DO BEGIN

> FOR y = 0,510 DO BEGIN

> IF highlight(x,y) NE 0 THEN TV, highlight(x:x+1,y:y+1),x,y

> ENDFOR

> ENDFOR

>

> With Best Regards for the new year,

>

> Oliver

>

>

>

Subject: Re: Display two images on one position : or even three!

Posted by [Emmler, Oliver](#) on Thu, 03 Jan 2002 08:50:18 GMT

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Hi Martin,

That's absolutely, exactly what i was searching for. I want to display a
fMRT with contrast (amplified by slope) over a more detailed anatomical
slice of the same region. I knew there will be a function in IDL to do this
but never heard about the GX functions. Here's the code i use now. It's just
like Christmas !!!

```
DEVICE, SET_GRAPHICS = 3
```

```
LoadCT, ct
```

```
TV, amplified_image * (amplified_image GE x)
```

```
LoadCT, 0
```

```
DEVICE, SET_GRAPHICS = 7
```

TV, reference_image * (amplified_image LT x)

Thanx to You, Craig and David.

> I've been following this thread trying to work out exactly what you want to
> do with your images :)
> Coming from a background of 8bit graphics, I have often opt for creating a
> color table of greyscale with a few bright colors for overlay at one end
of
> the colortable. However, I dont think that is what you want as it looks
like
> you are wanting to use more than one color table for different bits of the
> image. Ok so heres how: take advantage of Graphics functions and use GXor
>
> The following shows a distace image displayed with the top values using
the
> hot body scale, middle using grey-scale and lower using black-white color
> scale, this should give you the idea.
> The key point is to OR each region using a image mask so that no area is
> updated twice
>
> ; start with GXcopy
> IDL> device, set_graphics = 3
> IDL> loadct, 3
> % LOADCT: Loading table RED TEMPERATURE
> IDL> tv, im * ((im gt 130))
> IDL> loadct, 0
> % LOADCT: Loading table B-W LINEAR
> ; now switch to GXor
> IDL> device, set_graphics = 7
> IDL> tv, im * ((im le 130) and (im gt 100))
> IDL> loadct, 1
> % LOADCT: Loading table BLUE/WHITE
> IDL> tv, im * (im lt 100)
> hope this is useful - if not its quite pretty anyhoo!

Subject: Re: Display two images on one position : or even three!

Posted by [Martin Downing](#) on Thu, 03 Jan 2002 18:42:56 GMT

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"Emmler, Oliver" <oemmler@ix.urz.uni-heidelberg.de> wrote in message
news:a115qv\$iiin\$1@news.urz.uni-heidelberg.de...

> Hi Martin,

>

> That's absolutely, exactly what i was searching for. I want to display a

> fMRT with contrast (amplified by slope) over a more detailed anatomical
> slice of the same region. I knew there will be a function in IDL to do
this
> but never heard about the GX functions. Here's the code i use now. It's
just
> like Christmas !!!
>
> DEVICE, SET_GRAPHICS = 3
> LoadCT, ct
> TV, amplified_image * (amplified_image GE x)
> LoadCT, 0
> DEVICE, SET_GRAPHICS = 7
> TV, reference_image * (amplified_image LT x)
>
> Thanx to You, Craig and David.
>

Glad to help, just remember to switch back to
DEVICE, SET_GRAPHICS = 3
When you have finished this stuff.

cheers

Martin
