
Subject: update vert_colors of new graphics

Posted by [Markus Schmassmann](#) on Wed, 30 Aug 2017 15:36:28 GMT

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Hi everybody,

I have a series of images with an overplotted line with changing color.
While I know how to update the underlying image and the coordinates of
the line I have problems updating the colors.

A single image is plotted using the "new" graphics with:

```
help, x,y,c,conti
% X      double    [0,256,1501]
% Y      double    [0,256,1501]
% C      byte      [0,256,1501]
% CONTI  float     [100,100,1501]
cwheel=byte( colortable( reform( [ !color.red,!color.orange, $
    !color.yellow,!color.green,!color.blue,!color.purple,!color. red ], $
    [3,7] ),/transpose ) )
```

```
i=800
i1=image(conti[*,*],i)
p1=plot( [x[0,*,i], y[0,*,i]], overplot=i2, $
    vert_colors=c[0,*,i], rgb_table=cwheel )
```

```
; and updated with
for i=0,1500 do begin
    i1.putData, conti[*,*],i
    p1.putData, [x[0,*,i],y[0,*,i]]
;;; ----> UPDATE VERT_COLORS HERE<----- ;;;
endfor
```

; but I don't know how to update the VERT_COLORS
; a limited workaround is keeping VERT_COLORS constant
; but changing the RGB_TABLE as follows:

```
i=800
i2=image(conti[*,*],i)
p2=plot([x[0,*,i], y[0,*,i]],overplot=i2,vert_colors=bindgen(256), $
    rgb_table=cwheel[*],c[0,*,i]))
```

```
for i=0,1500 do begin
    i2.putData, conti[*,*],i
    p2.putData, [x[0,*,i],y[0,*,i]]
    p2.rgb_table=cwheel[*],c[0,0:255,i]]
endfor
```

; but this works only if for every time step there are at most 256

; values to plot

does anybody know how to properly update VERT_COLORS ?

Any help would be appreciated, thanks, Markus

Subject: Re: update vert_colors of new graphics
Posted by [Dick Jackson](#) on Fri, 01 Sep 2017 14:33:05 GMT
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On Wednesday, 30 August 2017 08:36:32 UTC-7, Markus Schmassmann wrote:

```
> Hi everybody,
>
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> i=800
> i1=image(conti[*,*],i)
> p1=plot( [x[0,*],i], y[0,*],i], overplot=i2, $
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> ; and updated with
> for i=0,1500 do begin
>   i1.putData, conti[*,*],i]
>   p1.putData, [x[0,*],i],y[0,*],i]]
>   ;; ----> UPDATE VERT_COLORS HERE<----- ;;
> endfor
>
> ; but I don't know how to update the VERT_COLORS
> ; a limited workaround is keeping VERT_COLORS constant
> ; but changing the RGB_TABLE as follows:
>
> i=800
> i2=image(conti[*,*],i)
> p2=plot([x[0,*],i], y[0,*],i],overplot=i2,vert_colors=bindgen(256), $
```

```

>      rgb_table=cwheel[* ,c[0,*,i]])
>
> for i=0,1500 do begin
>   i2.putData, conti[* ,i]
>   p2.putData, [x[0,*,i],y[0,*,i]]
>   p2.rgb_table=cwheel[* ,c[0,0:255,i]]
> endfor
>
> ; but this works only if for every time step there are at most 256
> ; values to plot
>
>
> does anybody know how to properly update VERT_COLORS ?
>
> Any help would be appreciated, thanks,           Markus

```

Hi Markus,

Using this version, I don't have any trouble adjusting VERT_COLORS or RGB_TABLE:

IDL Version 8.5.1, Microsoft Windows (Win32 x86_64 m64).

See if this works for you (put into a file, compile and run):

```

; Set up variables
h = 100           ; height of test image
vc = bindgen(256) ; indices of vert_colors
cwheel=byte( colortable( reform( [ !color.red,!color.orange, $
    !color.yellow,!color.green,!color.blue,!color.purple,!color. red ], $
    [3,7] ),/transpose ) )

; Make background image
img = image(bytescl(Lindgen(256,h)),dimensions=[256,h]*3,position=[ 0,0,1,1])

; Make coloured squiggle across image
p = plot(overplot=img,thick=3,randomu(seed,256)*h,vert_colors=vc , $
    rgb_table=cwheel)

; Cycle colours around by shifting vert_colors
img.window_title='Cycle colours around by shifting vert_colors...'
wait, 2
for i=0b, 255b do p.vert_colors=shift(vc, i)

; Dim and brighten colours by scaling rgb_table
img.window_title='Dim and brighten colours by scaling rgb_table...'
wait, 2
for i=-1.0,1.0,0.01 do p.rgb_table=byte(cwheel*abs(i))

```

end

Does that work for you?

(For anyone wondering about my spelling: I speak English with a Canadian accent, and I speak IDL with an American accent :-)

Cheers,
-Dick

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