Subject: sec : U Re: "marching ants" rubberband box
Posted by Andrew Cool on Fri, 06 Sep 2002 01:35:48 GMT
View Forum Message <> Reply to Message

"Ted Graves" <graves@helix.mgh.harvard.edu> wrote in message
news:dcd95cfc.0209040921.76329af2@posting.google.com...
> Hi all,
>
> Just wondering if anyone had implemented (or knew of a simple way to
> implement) a "marching ants" rubberband box. I'm working on a program
> involving ROI analysis and would like a better of identifying the
> selected ROI than just changing its color. I didn't see anything on
> this subject in David's tips archive or elsewhere in the IDL-verse.
> Perhaps it is not efficient within an IDL framework ... I can't see
> any way to do it short of essentially rewriting PLOTS. Any clever
> ideas appreciated!
>
>
>
>
>
>
> Ted
> graves@helix.mgh.harvard.edu
Ted Graves wrote:
>
> Hi all,
>
> Just wondering if anyone had implemented (or knew of a simple way to
> implement) a "marching ants" rubberband box. I'm working on a program
> involving ROI analysis and would like a better of identifying the
> selected ROI than just changing its color. I didn't see anything on
> this subject in David's tips archive or elsewhere in the IDL-verse.
> Perhaps it is not efficient within an IDL framework ... I can't see
> any way to do it short of essentially rewriting PLOTS. Any clever
> ideas appreciated!
>
> Ted
> graves@helix.mgh.harvard.edu

Hi Ted,

No doubt one of the Gurii will produce a decent "marching ants"
soon, but in the meantime here's a simple Direct Graphics attempt
with the ants "marking time", i.e. marching on the spot.

Andrew

```
PRO Marching_Ants1

; A.D. Cool  05-Sep-02  Marching Ants "Marking Time"

   loadct,0
   roi_ex ; an amended example from RSI doco

END


PRO roi_ex

  Device,decomp=0
  device,set_graphics = 3
; Load and display an image.
   img=READ_DICOM(FILEPATH('mr_knee.dcm',SUBDIR=['examples','da ta']))
  img_size = SIZE(img)
  window,xsize=img_size(1)*2,ysize=img_size(2)*2
  TV, REBIN(img,img_size(1)*2,img_size(2)*2)

; Print instructions.
  PRINT,'To create a region:'
  PRINT,' Left mouse: select points for the region.'
  PRINT,' Right mouse: finish the region.'

; Collect first vertex for the region.
  CURSOR, xOrig, yOrig, /UP, /DEVICE

  Device,set_graphics = 6

  PLOTS, xOrig, yOrig, PSYM=1, /DEVICE
  xc = xorig & yc = yorig

;Continue to collect vertices for region until right mouse button.
  x1 = xOrig
  y1 = yOrig
  while !MOUSE.BUTTON ne 4 do begin
     x0 = x1
     y0 = y1
     CURSOR, x1, y1, /UP, /DEVICE
     xc = [xc,x1] & yc = [yc,y1]
     x2 = x1
     while x2 eq x1 AND !MOUSE.BUTTON ne 4 Do Begin
       PLOTS,xc,yc,linestyle = 2,/DEVICE , COLOR = !P.COLOR,thick=1
       wait,0.1
```

```
      CURSOR, x2, y2, /NOWAIT, /DEVICE
    endwhile
  endwhile
  PLOTS, [x1,xOrig], [y1,yOrig], /DEVICE
  xc = [xc,xorig] & yc = [yc,yOrig]

  Device,set_graphics = 3

; Blink on/off using Linestyle=2 for Dashed lines.
  print,'Hold down Mouse button 1 to finish.'
  XYOUTS,0.5,0.9,'Hold down Mouse button 1 to finish.',align=0.5

; Blink away until user presses MB 1
  Device,set_graphics = 6
  While !MOUSE.BUTTON NE 1 Do begin
    PLOTS,xc,yc,linestyle = 2,/DEVICE , COLOR = !P.COLOR,thick=1
    CURSOR, x1, y1,/nowait, /DEVICE
    wait,0.3
    PLOTS,xc,yc,linestyle = 0,/DEVICE,COLOR = !P.COLOR,thick=1
  End

; replot in solid colour
  Device,set_graphics = 3
  PLOTS,xc,yc,linestyle = 0,/DEVICE,COLOR = !P.COLOR
  print,'Fin!'
END
```


 ---------- ----------
-
 Andrew D. Cool
 Electromagnetics & Propagation Group
 Intelligence, Surveillance & Reconnaissance Division Transmitted on
 Defence Science & Technology Organisation 100% recycled
 PO Box 1500, Edinburgh electrons
 South Australia 5111

 Phone : 061 8 8259 5740 Fax : 061 8 8259 6673
 Email : andrew.cool@no-spam.dsto.defence.gov.au
 ---------- ----------
-