
Subject: Re: Multiple widget_draw's and bad convert_coord

Posted by [btt](#) on Tue, 24 Jul 2001 20:16:42 GMT

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> convert_coord always returns the
> coordinates from the last plot even if I'm clicking in the first plot,

Hi Todd,

Yes, in direct graphics the *LAST* coordinate conversion parameters (scaling and offset values for the plot) are saved... earlier parameters get bumped out and like my hero, Bill Bradely, are quickly forgotten.

I have amended your code below (I've never used common blocks before... it worked here but you never know what my wealth of brute force and ignorance will lead to.)

You could perform the device to data calculation directly... the online help 'Direct Graphics 2d Coordinate Conversion' has a table with the necessary conversions listed. Liam Gumley (www.Gumley.com) has some frame tools that will save the important stuff for each window setup... then you can simply advance/retreat through your 'frames'.

Ben

```
;;----- Begin test code -----
pro bad_test_event, ev, base
;add the last 4 items to the common block
common windowstuff, win1, win2, widget1, widget2, XS1, XS2, YS1, YS2

if( tag_names( ev, /structure_name ) eq 'WIDGET_DRAW' ) then begin
  case ev.id of
    widget1: begin
      wset, win1
      ;RESTORE the values of !X.S and !Y.S before the conversion
      !X.S = XS1
      !Y.S = YS1
      result = convert_coord( ev.x, ev.y, /device, /to_data )
      print, result
    end
    widget2: begin
      wset, win2
      ;RESTORE the values of !X.S and !Y.S before the conversion
      !X.S = XS2
      !Y.S = YS2
      result = convert_coord( ev.x, ev.y, /device, /to_data )
      print, result
    end
  end
end
```

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    endcase
  endif
end ;; bad_test_event

pro bad_test

;add 4 extra items to the common block
common windowstuff, win1, win2, widget1, widget2, XS1, XS2, YS1, YS2

base = widget_base( /column )
widget1 = widget_draw( base, xsize=300, ysize=300, /button_events )
widget2 = widget_draw( base, xsize=300, ysize=300, /button_events )

widget_control, base, /realize

widget_control, widget1, get_value = win1
widget_control, widget2, get_value = win2

wset, win1
plot, findgen(50), findgen(50)^2
;SAVE the coordiante transform parameters established by a call to PLOT
XS1 = !X.S
YS1 = !Y.S

wset, win2
;SAVE the coordiante transform parameters established by a call to PLOT
plot, findgen(50)+50, sin(findgen(50)/49.*!pi)
XS2 = !X.S
YS2 = !Y.S

wset, win1
xmanager, 'bad_test', base

end
;; ----- End test code -----

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Ben Tupper
Bigelow Laboratory for Ocean Sciences
180 McKown Point Rd.
W. Boothbay Harbor, ME 04575
btupper@bigelow.org

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