## Subject: Re: Communication between different widget bases Posted by davidf on Fri, 02 Mar 2001 18:17:39 GMT

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Michael Baca (mbaca@bos.fti-net.com) writes:

- > I have a program that allows the user to view a TVSCL of a data cube with
- > intensity obtained at (x,y) position (rows/columns) over time. Typically the
- > user plots the intensity at all positions at a single slice in time, i.e.
- > TVSCL, A(\*,\*,n). I would like to allow the user to open a new window that
- > will show the intensity plot vs. time for the position under the mouse
- > pointer. Regrettably, I have already used up all of the space in my current
- > WIDGET\_BASE and I do not have room to add another draw widget. I would like
- > to open a new WIDGET\_BASE with a draw widget that will change as the mouse
- > moves over the image.

>

- > Does anyone have any suggestions? Most of the work I have done before
- > spawned new WIDGET BASEs that ran independent of the original one. I can
- > already pop up a plot of the point under the mouse after a mouse release
- > event, but that's not what I had in mind. I want the plot to change as the
- > user moves the mouse to new positions. Is there any way to have real-time
- > communication between two widget bases?

I guess there would probably be a dozen different ways to do this. But the simplest is to just write the pop-up window as a function that returns information you are interested in. For example, if you call the function from within a widget event handler, it might be written like this:

FUNCTION INTENSITY PLOT, time, intensity, Group Leader=gleader tlb = Widget Base(Group Leader=gleader) drawID = Widget\_Draw(tlb, XSize=400, YSize=400) Widget\_Control, tlb, /Realize Widget\_Control, drawID, Get\_Value=wid WSet, wid Plot, time, intensity RETURN, {tlb:tlb, drawID:drawID, wid:wid} **END** 

Suppose you have a field in the info structure of your main program where you store this information:

info.iplot = Intensity\_Plot(time, intensity, Group\_Leader=event.top)

Then, when you want to update the plot, all you have to do it this:

IF Widget\_Valid(info.iplot.drawID) THEN BEGIN
WSet, info.iplot.wid
Plot, time, intensity
ENDIF ELSE BEGIN
info.iplot = Intensity\_Plot(time, intensity, Group\_Leader=event.top)
ENDELSE

You might even want to close the pop-up window for some reason:

Widget\_Control, info.iplot.tlb, /Destroy

Cheers,

David

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Coyote's Guide to IDL Programming: http://www.dfanning.com/

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Subject: Re: Communication between different widget bases Posted by Michael Baca on Fri, 02 Mar 2001 21:01:09 GMT

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Daid,

Thank you for the idea. So far, this appears to do exactly what I need. Thanks.

Mike