
Subject: Re: Widgets and contour plots

Posted by [clive_cook59](#) on Tue, 11 Jan 2005 17:09:50 GMT

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Ben Tupper wrote:

> Clive Cook wrote:

>> Hi,

>>

>> I am trying to write a widget program were buy passing the cursor over a

>> contour plot a varying 2d plot changes according to the value where the

>> cursor lies. I have a contour window with two boxes below that display the

>> corresponding x and y values from the cursor location. So, i want to take

>> the x value to produce a corresponding plot of the contour values against

>> the y value.

>>

>> How do i take the x value and use that to generate a new plot?

>>

>

> Hi,

>

> I'm not sure I completely understand what your needs are. In general, you can

> transform your mouse location into data space location using CONVERT_COORD.

> From there you have to have some way of 'getting' the interpolated values of

> your contour for that location. You can use the well known Fanningistic

> approach to storing valuable program info in the the top level base's UVALUE

> property.

>

> Is that close?

>

> Ben

>

> ***START***

> MyDrawEvent, ev

>

> ;get your valuable info

> Widget_Control, ev.top, GET_UVALUE = info, /NO_COPY

> ;set the current device state to match the draw widget's

> Widget_Control, ev.ID, GET_VALUE = winNum

```

> Wset, winNum
>
> ;convert from cursor coords to data coords
> xy = CONVERT_COORD(ev.x, ev.y, /DEVICE, /TO_DATA)
>
> ;pass your favorite routine to 'get' you contour data
> theseContourValues = GetMyContourValues(info.ContourData, xy)
>
> ;set the current window to you other window for plotting
> Widget_Control, info.myOtherDrawWidget, GET_VALUE = myOtherWinNum
> Wset, myOtherWindowNumber
> ;plot 'contour values against the y value.'
> Plot, XY[1], theseContourValues
>
> ;put your valuable info back in a safe place
> Widget_Control, ev.top, SET_UVALUE = info, /NO_COPY
>
> End ;myDrawEvent
>
>
> ****FINI***

```

Hi Ben,

Thanks for the advice. My problem now is that i seem to have problems locating the value of my draw widget (the 2d line plot window)so that i can set that as the active window. When i configure my widget base i draw 1 large widget and then thecontour window in the top left in a new widget base, followed by a second draw widget to the left in a new widget base (contains the 2d line plot), followed my a widget below containing test boxes that display the values of the data at the points of the cursor. I am getting confused as to how to obtain the values of my various draw widgets, any help would be useful.

I have tried using Dave Fannings methods but i am a little confused with this.

many thanks

Clive Cook