
Subject: Re: Legend for plot

Posted by [penteado](#) on Thu, 17 Sep 2009 02:57:02 GMT

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On Sep 16, 2:49 am, "b.a" <u4565...@anu.edu.au> wrote:

> What I mean, is to have the plot (and oplots) and the legend inside
> one window in my GUI. Actually my interface has several parts and one
> is a widget draw that will contain all the curves to be plotted. The
> problem is that when each curve is plotted, even though they have
> different colours, it is not clear which one is which. So I have to
> place a legend in there. I can't really use XYOUTS because I might
> have several plots which interrupt each other and I don't know where
> to place the XYOUTS :(
>
> Is it at all possible to place a legend inside a widget_draw which
> contains plots? The code that you wrote is what I want plus I need to
> put the plots in the same window.
>
> Thanks a lot.

Ok, now your initial question is more clear: how to put a legend into your plot in the draw widget. You can go about it with object graphics or direct graphics. I do not remember if there is a built in way to do it in direct graphics (have not used them in years), but I know there is a routine for that in IDLAstro (<http://idlastro.gsfc.nasa.gov/>), though doing that way still required you to keep track of which lines/symbols/colors were used on each plot, to use the same in the legend.

With object graphics, you can make and set yourself all the plot, axes, symbols and legends, or use `iplot` to make the plots and put the legends in them, then copy its view object to your draw widget. Taking your example, it would be something like:

```
pro demolegend
```

```
x1 = [1,2,3,4,5]  
y1 = [4,5,6,7,8]
```

```
x2 = [2,3,4,4.5,5]  
y2 = [4,5,6,7,8]
```

```
tlb = Widget_Base(column=1, XSIZE=350, YSIZE= 400,$  
XOFFSET=250, YOFFSET= 300)
```

```
dr_window = WIDGET_DRAW(tlb, UVALUE= 'draw', $  
XSIZE= 348, YSIZE=200, GRAPHICS_LEVEL = 2)
```

```
Widget_Control, tlb, /realize
```

WIDGET_CONTROL, dr_window, GET_VALUE = mywindow

```
;make the plots in an invisible itool
iplot,y2,x2,color=[255,0,0],name='one ',insert_legend=[0.,0.],$
  dimensions=[348,200],$
  /no_saveprompt,/disable_splash,user_interface='none'
iplot,y1,x1,color=[0,0,255],name='two ',/insert_legend,/over
;get the itool object
id=itgetcurrent(tool=ot)
;unselect the currently selected object, if any
osel=ot->getselecteditems(count=nosel,/all)
for i=0,nosel-1 do osel[i]->select,/unselect
;get the view object from the itool (assuming all plotting has been
done)
myview=ot->getbyidentifier(ot->findidentifiers('* /WINDOW /VIEW_1'))
mywindow->Draw, myview
;close the itool
itdelete,id
```

Xmanager, 'demolegend', tlb

end

Note that the legend is not being created by this program, it is made by iplot.