Subject: actual size of plot in iplot window
Posted by Paul Woodford on Fri, 06 Apr 2007 02:03:06 GMT
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Is there any way to make the plot in an iplot window actually occupy the
majority of the window? Perhaps I'm thick, but this has been bugging me
for a while, and I can't figure out how to do it.

Paul

Subject: Re: actual size of plot in iplot window
Posted by Michael Galloy on Fri, 06 Apr 2007 17:07:57 GMT
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On Apr 5, 8:03 pm, Paul Woodford <cpwoodf...@spamcop.net> wrote:
> Is there any way to make the plot in an iplot window actually occupy the
> majority of the window? Perhaps I'm thick, but this has been bugging me
> for a while, and I can't figure out how to do it.

Yes, I would appreciate an easy way to do this too, like an XMARGIN
and YMARGIN keywords that work like the PLOT commands'. Currently, I
get the visualization layer and set the VIEWPLANE_RECT property to get
the margins I want.

There is a FIT_TO_VIEW keyword in IDL 6.4 which will make the
visualization to take up the *entire* view.

Mike
--
www.michaelgalloy.com

Subject: Re: actual size of plot in iplot window
Posted by Michael Galloy on Fri, 06 Apr 2007 20:29:53 GMT
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On Apr 6, 11:07 am, "mgal...@gmail.com" <mgal...@gmail.com> wrote:
> On Apr 5, 8:03 pm, Paul Woodford <cpwoodf...@spamcop.net> wrote:
>
>> Is there any way to make the plot in an iplot window actually occupy the
>> majority of the window? Perhaps I'm thick, but this has been bugging me
>> for a while, and I can't figure out how to do it.
>
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> and YMARGIN keywords that work like the PLOT commands'. Currently, I
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> the margins I want.
>
> There is a FIT_TO_VIEW keyword in IDL 6.4 which will make the
> visualization to take up the *entire* view.
>
> Mike
> --www.michaelgalloy.com

I had to refactor what I was doing to make it a bit more general, but here is what I'm currently doing. This is not completely general, but might give you hand on what you're doing:

```
;+
; Wrapper routine for iPlot which handles margins for the plot also.
;
; @param x {in}{required}{type=1D numeric array}
;       x-coordinates of data if y param is passed or y-coordinates
of data
;       if only x is passed
; @param y {in}{optional}{type=1D numeric array}
;       y-coordinates of data
; @keyword xmargin {in}{optional}{type=fltarr(2)}{default=[0.1, 0.1]}
;         size of left and right margins in window normal units
; @keyword ymargin {in}{optional}{type=fltarr(2)}{default=[0.1, 0.1]}
;         size of bottom and top margins in window normal units
; @keyword _extra {in}{optional}{type=keywords}
;         keywords to iPlot
;-
pro iplot_with_margins, x, y, xmargin=xmargin, ymargin=ymargin,
_extra=e
  compile_opt strictarr

  myXMargin = n_elements(xmargin) eq 0 ? [0.1, 0.1] : xmargin
  myYMargin = n_elements(ymargin) eq 0 ? [0.1, 0.1] : ymargin

  case n_params() of
  0 : iplot, _strict_extra=e
  1 : iplot, x, _strict_extra=e
  2 : iplot, x, y, _strict_extra=e
  endcase
  toolID = itGetCurrent(tool=oTool)

  visIds = oTool->findIdentifiers('*', /visualization)
  visLayerId = strmid(visIds[0], 0, strpos(visIds[0], '/', /
reverse_search))
  oVisLayer = oTool->getByIdentifier(visLayerId)
```

```
  xsize = 1.4 / (1.0 - myXMargin[0] - myXMargin[1])
  ysize = 0.98 / (1.0 - myYMargin[0] - myYMargin[1])
  xstart = - myXMargin[0] * xsize - 1.4 / 2
  ystart = - myYMargin[0] * ysize - 0.98 / 2

  oVisLayer->setProperty, viewplane_rect=[xstart, ystart, xsize,
ysize]
end
```

Mike
--
www.michaelgalloy.com

Subject: Re: actual size of plot in iplot window -- getting rid of background rectangle in exported EPS
Posted by Benjamin Hornberger on Tue, 10 Apr 2007 15:39:26 GMT
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Paul Woodford wrote:
> Is there any way to make the plot in an iplot window actually occupy the
> majority of the window? Perhaps I'm thick, but this has been bugging me
> for a while, and I can't figure out how to do it.
>
> Paul

As a related question -- the fact that the iPlot doesn't fully fill the window is particularly annoying when exporting a postscript file, because the iTools include a white rectangle of the size of the window in the PS file. Therefore, when including the PS file in LaTeX or elsewhere directly, there is a huge white background around the plot.

Does anybody know if / how it is possible to get rid of that rectangle (in IDL)? I usually open the PS file in Illustrator and delete the rectangle, with the typical consequence that the file size increases by a factor of 10 (plus, it has to be done each time after the graph is edited).

Alternatively, sometimes I just zoom the graph to fill the window nicely, then the background rectangle doesn't really bother, but that's not really satisfying either. In the end, it would be nice to be able to use the iGraph directly without much fudging ...

Thanks,
Benjamin

Subject: Re: actual size of plot in iplot window
Posted by Paul Woodford on Sun, 15 Apr 2007 03:29:13 GMT
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In article <1175891393.084712.75280@o5g2000hsb.googlegroups.com>,
"mgalloy@gmail.com" <mgalloy@gmail.com> wrote:

> I had to refactor what I was doing to make it a bit more general, but
> here is what I'm currently doing. This is not completely general, but
> might give you hand on what you're doing:

[snipped]

Thank you, your routine does the job for me.

Paul

Subject: Re: actual size of plot in iplot window
Posted by Paul Woodford on Fri, 27 Apr 2007 03:56:59 GMT
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In article <1175891393.084712.75280@o5g2000hsb.googlegroups.com>,
"mgalloy@gmail.com" <mgalloy@gmail.com> wrote:

> I had to refactor what I was doing to make it a bit more general, but
> here is what I'm currently doing. This is not completely general, but
> might give you hand on what you're doing:

I hate to look a gift horse in the mouth here, but I just discovered
that if I save a plot created with Michael's iplot_with_margins routine
as a .isv file, and then load that file, the plot has shrunk back to its
regular iplot dimensions. The same shrinking happens when I export to a
PNG. The size of the plot on the screen does not change when I do
either the save or the export, however. Does anyone have an idea what
may be happening?

If it matters, I'm running IDL 6.3 on Mac OS X 10.4.9.

Paul
