Subject: Different charsize for axis title and labels?
Posted by Paul Levine on Sun, 15 Sep 2013 19:21:36 GMT

Another simple axis labeling question that is probably very basic but
is confounding me:

Can the size of the text in axis titles be set independently from axis
labels? [XYZ]CHARSIZE sets both. Must I simply leave the title out of
the call to AXIS and instead use XYOUTS (or cgText)?

Thanks in advance

Subject: Re: Different charsize for axis title and labels?
Posted by dg86 on Sun, 15 Sep 2013 21:29:47 GMT

On Sunday, September 15, 2013 3:21:36 PM UTC-4, Paul Levine wrote:
> Another simple axis labeling question that is probably very basic but
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> is confounding me:
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> the call to AXIS and instead use XYOUTS (or cgText)?
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>
> Thanks in advance

I enthusiastically second this request. I typically want axis labels a few
points larger than tick labels for publication-quality plots.   It should
be possible to expose the properties of the axis label independently
of those of the tick labels.

All the best,

David

Subject: Re: Different charsize for axis title and labels?
Posted by David Fanning on Sun, 15 Sep 2013 22:28:20 GMT

David Grier writes:

>
> On Sunday, September 15, 2013 3:21:36 PM UTC-4, Paul Levine wrote:
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>> is confounding me:
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> I enthusiastically second this request. I typically want axis labels a few
> points larger than tick labels for publication-quality plots.   It should
> be possible to expose the properties of the axis label independently
> of those of the tick labels.

Try the [XYZ]Charsize keywords. These are scaled in relationship to the
value established by the CHARSIZE keyword.

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Different charsize for axis title and labels?
Posted by dg86 on Mon, 16 Sep 2013 01:22:59 GMT

On Sunday, September 15, 2013 6:28:20 PM UTC-4, David Fanning wrote:
> David Grier writes:

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>>

>

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>

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\> Cheers,
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\> --
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\> David Fanning, Ph.D.
\>
\> Fanning Software Consulting, Inc.
\>
\> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
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Setting charsize and [x,y,z]charsize works for direct graphics. In function graphics, however, the only accessible property is FONT_SIZE, which sets the same size for both the axis title and the tick labels. This seems to be a limitation of the underlying AXIS object which has the property TICKFONT_SIZE, but not a separate property for the title font size.

Perhaps if there were some way to get access to the IDLgrAxis object that must be the basis for AXIS, it would be possible to set properties for the title, which is an IDLgrText object. I haven't cracked that nut yet, unfortunately.

All the best,

David

Subject: Re: Different charsize for axis title and labels?
Posted by Paul Levine on Mon, 16 Sep 2013 05:26:06 GMT
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On 2013-09-15 22:28:20 +0000, David Fanning said:

> David Grier writes:
>
>>
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> value established by the CHARSIZE keyword.
>
> Cheers,
>
> David

Unless I am doing something wrong (quite possible!), it seems that
[XYZ]CHARSIZE, as I mentioned in my first post, scales both the axis
labels and the axis title simultaneously. I would like to make the
axis labels very small without affecting the axis title.

Subject: Re: Different charsize for axis title and labels?
Posted by David Fanning on Mon, 16 Sep 2013 12:38:27 GMT
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Paul Levine writes:

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> [XYZ]CHARSIZE, as I mentioned in my first post, scales both the axis
> labels and the axis title simultaneously. I would like to make the
> axis labels very small without affecting the axis title.

Yes, I misunderstood your original question. Sorry.

In direct graphics, the only way to do this would be in two steps in
which you draw the axis title in the second step with cgText or its
equivalent. The difficulty here is that the algorithm for where to place
the title text seems very difficult to come by. At least it has eluded
me for quite a number of years now. Of course, I have been known to be a
little overly anal about this kind of thing, so you might have better
luck. :-)

Cheers,

David

--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: Different charsize for axis title and labels?
Posted by Paul Levine on Mon, 16 Sep 2013 18:43:21 GMT
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On 2013-09-16 12:38:27 +0000, David Fanning said:

> Paul Levine writes:
>
>> Unless I am doing something wrong (quite possible!), it seems that
>> [XYZ]CHARSIZE, as I mentioned in my first post, scales both the axis
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> equivalent. The difficulty here is that the algorithm for where to place
> the title text seems very difficult to come by. At least it has eluded
> me for quite a number of years now. Of course, I have been known to be a
> little overly anal about this kind of thing, so you might have better
> luck. :-)
>
> Cheers,
>

> David

Thanks, the solution you mentioned (using cgText to place the title
after the plot or axis command is run) is what I have been doing in the
mean time, and does indeed lead to the difficulty of figuring out where
to place it. Specifically, it is the yloc that I end up needing to
find using trial and error (xloc of 0.5 using normalized coordinates
with alignment=0.5 seems to work for the horizontal placement).

The onle thing I have not yet tried, and was thinking might work, would
be to place the axis title with an additional call to axis (or cgAxis).
I will let you know if I get anywhere with that