
Subject: Re: number keyword in legend

Posted by [simona bellavista](#) on Fri, 16 Dec 2011 16:17:59 GMT

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Hi again,

On Dec 16, 5:15 pm, simona bellavista <afy...@gmail.com> wrote:

> Hi,

>

> I use IDL v7.0 and the built-in procedure legend.

^^

just to say that it is not built-in, I took it from

<http://www.astro.washington.edu/docs/idl/>

Subject: Re: number keyword in legend

Posted by [David Fanning](#) on Fri, 16 Dec 2011 16:20:12 GMT

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simona bellavista writes:

> I use IDL v7.0 and the built-in procedure legend.

> I am trying to make the horizontal lines in legend shorter by using

> the number keyword, but I realized that it can just increase the

> length. By horizontal lines I mean the lines you get by specifying the

> linestyle keyword.

>

> I have also tried to use leg.pro from sterner, but it looks like it

> doesn't work with the ps device, does it?

I don't believe there *is* a built-in LEGEND procedure in IDL 7, and I don't know much of anything about Ray Sterner's routines, except that it would surprise me a GREAT deal if one of Ray's programs didn't work in PostScript!

All that said, I think most people use AL_Legend from the NASA Astronomy Library:

http://www.idlcoyote.com/cg_tips/al_legend.php

Cheers,

David

--

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

Subject: Re: number keyword in legend
Posted by [simona bellavista](#) on Fri, 16 Dec 2011 16:39:46 GMT
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>
> I don't believe there **is** a built-in LEGEND procedure
> in IDL 7

Right, I took the legend.pro function from astronomy library, this one

<http://www.astro.washington.edu/docs/idl/cgi-bin/getpro/library02.html?LEGEND>

> All that said, I think most people use AL_Legend
> from the NASA Astronomy Library:
>
> http://www.idlcoyote.com/cgi_tips/al_legend.php
>

isn't it for idl v8? I think they just renamed the nasa legend.pro routine when the built-in legend was introduced in v8. btw I tried to see if al_legend works with v7 and I would say it doesn't.

Subject: Re: number keyword in legend
Posted by [David Fanning](#) on Fri, 16 Dec 2011 16:40:31 GMT
[View Forum Message](#) <> [Reply to Message](#)

simona bellavista writes:

> On Dec 16, 5:15 pm, simona bellavista <afy...@gmail.com> wrote:
>> Hi,
>>
>> I use IDL v7.0 and the built-in procedure legend.
> ~~~~~
> just to say that it is not built-in, I took it from
>
> <http://www.astro.washington.edu/docs/idl/>

Yes, that will be VERY old. I'd get the latest AL_LEGEND

from the NASA Library. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: number keyword in legend

Posted by [David Fanning](#) on Fri, 16 Dec 2011 16:41:38 GMT

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simona bellavista writes:

- > isn't it for idl v8? I think they just renamed the nasa legend.pro
- > routine when the built-in legend was introduced in v8. btw I tried to
- > see if al_legend works with v7 and I would say it doesn't.

I would say you probably have a programmer error. :-)

Cheers,

David

--

David Fanning, Ph.D.

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Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: number keyword in legend

Posted by [simona bellavista](#) on Fri, 16 Dec 2011 16:49:59 GMT

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- > I would say you probably have a programmer error. :-)

Ok, it is more than possible that I did some mistakes. But look, I tried the function in the interactive shell

(I work on linux, just to specify, and again in IDL v7.0)

```
IDL> window, 0, retain=2
IDL> plot, dindgen(100)
IDL> al_legend,['Plus sign','Asterisk','Period'],psym=[1,2,3]
% Compiled module: AL_LEGEND.
% Compiled module: SETDEFAULTVALUE.
% Compiled module: CGPLOTS.
% Compiled module: SETDECOMPOSEDSTATE.
% Compiled module: DECOMPOSEDCOLOR.
% Compiled module: CGCOLOR.
% Compiled module: STRSPLIT.
% Compiled module: CGSNAPSHOT.
% Compiled module: SYMCAT.
% Compiled module: CGTEXT.
% Compiled module: CGDEFCHARSIZE.
% Compiled module: STR_SIZE.
% Compiled module: ERROR_MESSAGE.
```

Traceback Report from CGTEXT:

```
    % Keyword ADDCMD not allowed in call to: XYOUTS
    % Execution halted at:  CGTEXT          258 /mypath/idl/coyote/
cgtext.pro
    %                AL_LEGEND          492 /mypath/idl/Default/
al_legend.pro
    %                $MAIN$
% Variable is undefined: WIDTH.
% Error occurred at: AL_LEGEND          494
  /mypath/idl/Default/al_legend.pro
%                $MAIN$
% Execution halted at: $MAIN$
IDL>
```

Subject: Re: number keyword in legend

Posted by [simona bellavista](#) on Fri, 16 Dec 2011 17:00:18 GMT

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of course, I just needed an updating. I wonder what's wrong today ...
btw, have a nice day
I'll do it another time

On Dec 16, 5:49 pm, simona bellavista <afy...@gmail.com> wrote:

>> I would say you probably have a programmer error. :-)

>

> Ok, it is more than possible that I did some mistakes. But look, I

> tried the function in the interactive shell

```

> (I work on linux, just to specify, and again in IDL v7.0)
>
> IDL> window, 0, retain=2
> IDL> plot, dindgen(100)
> IDL> al_legend,['Plus sign','Asterisk','Period'],psym=[1,2,3]
> % Compiled module: AL_LEGEND.
> % Compiled module: SETDEFAULTVALUE.
> % Compiled module: CGPLOTS.
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> % Compiled module: STR_SIZE.
> % Compiled module: ERROR_MESSAGE.
>
> Traceback Report from CGTEXT:
>
> % Keyword ADDCMD not allowed in call to: XYOUTS
> % Execution halted at: CGTEXT      258 /mypath/idl/coyote/
> cgtxt.pro
> %          AL_LEGEND      492 /mypath/idl/Default/
> al_legend.pro
> %          $MAIN$
> % Variable is undefined: WIDTH.
> % Error occurred at: AL_LEGEND      494
> /mypath/idl/Default/al_legend.pro
> %          $MAIN$
> % Execution halted at: $MAIN$
> IDL>

```

Subject: Re: number keyword in legend

Posted by [David Fanning](#) on Fri, 16 Dec 2011 17:01:11 GMT

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simona bellavista writes:

```

> Ok, it is more than possible that I did some mistakes. But look, I
> tried the function in the interactive shell
> (I work on linux, just to specify, and again in IDL v7.0)
>
> IDL> window, 0, retain=2
> IDL> plot, dindgen(100)
> IDL> al_legend,['Plus sign','Asterisk','Period'],psym=[1,2,3]

```

```

> % Compiled module: AL_LEGEND.
> % Compiled module: SETDEFAULTVALUE.
> % Compiled module: CGPLOTS.
> % Compiled module: SETDECOMPOSEDSTATE.
> % Compiled module: DECOMPOSEDCOLOR.
> % Compiled module: CGCOLOR.
> % Compiled module: STRSPLIT.
> % Compiled module: CGSNAPSHOT.
> % Compiled module: SYMCAT.
> % Compiled module: CGTEXT.
> % Compiled module: CGDEFCHARSIZE.
> % Compiled module: STR_SIZE.
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> cgtxt.pro
> %          AL_LEGEND      492 /mypath/idl/Default/
> al_legend.pro
> %          $MAIN$
> % Variable is undefined: WIDTH.
> % Error occurred at: AL_LEGEND      494
> /mypath/idl/Default/al_legend.pro
> %          $MAIN$
> % Execution halted at: $MAIN$

```

Well, I don't know. I'm running in IDL 7, too.

```

IDL> plot, dindgen(100)
IDL> al_legend,['Plus sign','Asterisk','Period'],psym=[1,2,3]
IDL> print, !version
{ x86_64 Win32 Windows Microsoft Windows 7.1.2 Oct 28 2009 64 64}

```

Works fine here. Did you download the latest this morning?

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: number keyword in legend
Posted by [David Fanning](#) on Fri, 16 Dec 2011 17:02:52 GMT
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simona bellavista writes:

```
> Ok, it is more than possible that I did some mistakes. But look, I
> tried the function in the interactive shell
> (I work on linux, just to specify, and again in IDL v7.0)
>
> IDL> window, 0, retain=2
> IDL> plot, dindgen(100)
> IDL> al_legend,['Plus sign','Asterisk','Period'],psym=[1,2,3]
> % Compiled module: AL_LEGEND.
> % Compiled module: SETDEFAULTVALUE.
> % Compiled module: CGPLOTS.
> % Compiled module: SETDECOMPOSEDSTATE.
> % Compiled module: DECOMPOSEDCOLOR.
> % Compiled module: CGCOLOR.
> % Compiled module: STRSPLIT.
> % Compiled module: CGSNAPSHOT.
> % Compiled module: SYMCAT.
> % Compiled module: CGTEXT.
> % Compiled module: CGDEFCHARSIZE.
> % Compiled module: STR_SIZE.
> % Compiled module: ERROR_MESSAGE.
>
> Traceback Report from CGTEXT:
>
> % Keyword ADDCMD not allowed in call to: XYOUTS
> % Execution halted at: CGTEXT      258 /mypath/idl/coyote/
> cgtxt.pro
> %          AL_LEGEND      492 /mypath/idl/Default/
> al_legend.pro
> %          $MAIN$
> % Variable is undefined: WIDTH.
> % Error occurred at: AL_LEGEND      494
> /mypath/idl/Default/al_legend.pro
> %          $MAIN$
> % Execution halted at: $MAIN$
```

Now that I look more closely at your error, I would
say you need to update your Coyote Library ASAP. LOTS
of new features for you! ;-)

http://www.idlcoyote.com/programs/zip_files/coyoteprograms.zip

Cheers,

David

--

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

Subject: Re: number keyword in legend
Posted by [simona bellavista](#) on Fri, 16 Dec 2011 17:10:07 GMT
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OK,

but the bottom line is: the number keyword cannot decrease the length
of my lines under a certain value.
this value is set by charsize, in the sense that:

charsize increases ----> length of lines increases

On Dec 16, 6:02 pm, David Fanning <n...@dfanning.com> wrote:

```
> simona bellavista writes:
>> Ok, it is more than possible that I did some mistakes. But look, I
>> tried the function in the interactive shell
>> (I work on linux, just to specify, and again in IDL v7.0)
>
>> IDL> window, 0, retain=2
>> IDL> plot, dindgen(100)
>> IDL> al_legend,['Plus sign','Asterisk','Period'],psym=[1,2,3]
>> % Compiled module: AL_LEGEND.
>> % Compiled module: SETDEFAULTVALUE.
>> % Compiled module: CGPLOTS.
>> % Compiled module: SETDECOMPOSEDSTATE.
>> % Compiled module: DECOMPOSEDCOLOR.
>> % Compiled module: CGCOLOR.
>> % Compiled module: STRSPLIT.
>> % Compiled module: CGSNAPSHOT.
>> % Compiled module: SYMCAT.
>> % Compiled module: CGTEXT.
>> % Compiled module: CGDEFCHARSIZE.
>> % Compiled module: STR_SIZE.
>> % Compiled module: ERROR_MESSAGE.
>
>> Traceback Report from CGTEXT:
>
```

```
>> % Keyword ADDCMD not allowed in call to: XYOUTS
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>> cgtext.pro
>> %          AL_LEGEND      492 /mypath/idl/Default/
>> al_legend.pro
>> %          $MAIN$
>> % Variable is undefined: WIDTH.
>> % Error occurred at: AL_LEGEND      494
>> /mypath/idl/Default/al_legend.pro
>> %          $MAIN$
>> % Execution halted at: $MAIN$
>
> Now that I look more closely at your error, I would
> say you need to update your Coyote Library ASAP. LOTS
> of new features for you! ;-)
```

>

> [http://www.idlcoyote.com/programs/zip_files/coyoteprograms.z ip](http://www.idlcoyote.com/programs/zip_files/coyoteprograms.zip)

>

> Cheers,

>

> David

>

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

> Coyote's Guide to IDL Programming:<http://www.idlcoyote.com/>

> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: number keyword in legend
Posted by [David Fanning](#) on Fri, 16 Dec 2011 17:27:19 GMT
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simona bellavista writes:

> OK,

>

> but the bottom line is:the number keyword cannot decrease the length

> of my lines under a certain value.

> this value is set by charsize, in the sense that:

>

> charsize increases ----> length of lines increases

I have no idea what you are talking about! What, exactly,
are you trying to do? :-)

Can you show me an example?

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: number keyword in legend

Posted by [simona bellavista](#) on Fri, 16 Dec 2011 17:46:43 GMT

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>
> I have no idea what you are talking about! What, exactly,
> are you trying to do? :-)
>
> Can you show me an example?
>

:)

OK, if you try this:

```
IDL> lines = indgen(6)
```

```
IDL> items = 'linestyle '+strtrim(lines,2)
```

```
IDL> plot, dindgen(10)
```

```
IDL> al_legend,items,linestyle=lines, charsize=1
```

You'll see that a plot with a legend will appear, where in the legend there are some lines with different styles. The charsize specifies the font size in the legend.

Now if you try

```
IDL> al_legend,items,linestyle=lines, charsize=2
```

another legend will appear on the top, with larger fonts and longer lines.

Now, I would like to be able to change the font size, so to make my labels readable, but not having gigantic lines.

Subject: Re: number keyword in legend

Posted by [David Fanning](#) on Fri, 16 Dec 2011 17:58:50 GMT

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simona bellavista writes:

```
> OK, if you try this:
>
> IDL> lines = indgen(6)
> IDL> items = 'linestyle '+strtrim(lines,2)
> IDL> plot, dindgen(10)
> IDL> al_legend,items,linestyle=lines, charsize=1
>
> You'll see that a plot with a legend will appear, where in the legend
> there are some lines with different styles. The charsize specifies the
> font size in the legend.
> Now if you try
>
> IDL> al_legend,items,linestyle=lines, charsize=2
>
> another legend will appear on the top, with larger fonts and longer
> lines.
>
> Now, I would like to be able to change the font size, so to make my
> labels readable, but not having gigantic lines.
```

Ah, OK, I see what you mean.

But, now we are out of my domain of expertise entirely, and we enter Wayne's realm. He will be in touch with us shortly, no doubt. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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Sepore ma de ni thui. ("Perhaps thou speakest truth.")

Subject: Re: number keyword in legend

Posted by [David Fanning](#) on Fri, 16 Dec 2011 18:14:28 GMT

[View Forum Message](#) <> [Reply to Message](#)

David Fanning writes:

>
> simona bellavista writes:
>
>> OK, if you try this:
>>
>> IDL> lines = indgen(6)
>> IDL> items = 'linestyle '+strtrim(lines,2)
>> IDL> plot, dindgen(10)
>> IDL> al_legend,items,linestyle=lines, charsize=1
>>
>> You'll see that a plot with a legend will appear, where in the legend
>> there are some lines with different styles. The charsize specifies the
>> font size in the legend.
>> Now if you try
>>
>> IDL> al_legend,items,linestyle=lines, charsize=2
>>
>> another legend will appear on the top, with larger fonts and longer
>> lines.
>>
>> Now, I would like to be able to change the font size, so to make my
>> labels readable, but not having gigantic lines.
>
> Ah, OK, I see what you mean.
>
> But, now we are out of my domain of expertise entirely, and
> we enter Wayne's realm. He will be in touch with us shortly,
> no doubt. :-)

Well, maybe I can answer this question! How about something like this:

```
lines = indgen(6)
items = 'linestyle '+strtrim(lines,2)
cgplot, dindgen(10)
al_legend,items,linestyle=lines, charsize=2, pspacing=1.0
```

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting, Inc.

Subject: Re: number keyword in legend
Posted by [wlandsman](#) on Fri, 16 Dec 2011 18:20:09 GMT
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Use the LINSIZ Ekeyword. For example, set linsize = 0.5 to make the lines half their default length. --Wayne

On Friday, December 16, 2011 12:58:50 PM UTC-5, David Fanning wrote:

```
> simona bellavista writes:
>>
>> IDL> al_legend,items,linestyle=lines, charsize=2
>>
>> another legend will appear on the top, with larger fonts and longer
>> lines.
>>
>> Now, I would like to be able to change the font size, so to make my
>> labels readable, but not having gigantic lines.
>
> Ah, OK, I see what you mean.
>
> But, now we are out of my domain of expertise entirely, and
> we enter Wayne's realm. He will be in touch with us shortly,
> no doubt. :-)
>
> Cheers,
>
> David
>
>
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
```

Subject: Re: number keyword in legend
Posted by [simona bellavista](#) on Fri, 16 Dec 2011 18:24:17 GMT
[View Forum Message](#) <> [Reply to Message](#)

Thank you! That's exactly what I was looking for!

On Dec 16, 7:14 pm, David Fanning <n...@dfanning.com> wrote:

> David Fanning writes:

>>

> Well, maybe I can answer this question! How about something like
> this:

>

> lines = indgen(6)

> items = 'linestyle '+strtrim(lines,2)

> cgplot, dindgen(10)

> al_legend,items,linestyle=lines, charsize=2, pspacing=1.0

>

> Cheers,

>

> David

>

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

> Coyote's Guide to IDL Programming:<http://www.idlcoyote.com/>

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