
Subject: Re: hist_norm

Posted by [penteado](#) on Wed, 03 Nov 2010 01:46:00 GMT

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On Nov 2, 11:28 pm, le.dav...@tiscali.it wrote:

```
> Hi folks,  
> I am trying to use "hist_norm.pro" in a code like that (my first  
> time):  
>  
> pro istog, howmanyt  
>  
>   t = fltarr(howmanyt)  
>   N = 20.  
>   for k=0, howmanyt-1, 1 do begin  
>     t[k] = total(randomu(seed, N))  
>   endfor  
>  
>   a = intarr(howmanyt) + 1  
>   hist_norm, t, condition = a  
> end  
>  
> I can't figure out why it does not work. Can you help me?  
> Thanks in advance.
```

You need to say more. In what way does it not work? Where does hist_norm come from? (hist_norm is not in the IDL standard library)

Subject: Re: hist_norm

Posted by [le.davide](#) on Wed, 03 Nov 2010 02:10:14 GMT

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Hi, thanks for your quick answer.

I found hist_norm.pro here: <http://sprg.ssl.berkeley.edu/~fastsw/idlUtil/misc/>
it does not work in the sense that if I run the small code showed in the first post I get:

```
% Variable is undefined: DEFINED.  
% Execution halted at: HIST_NORM      69 /Users/davide/  
IDLWorkspace71/Default/astron/pro/hist_norm.pro  
%          ISTOG      10 /Users/davide/  
IDLWorkspace71/Default/Default/istog.pro  
%          $MAIN$
```

instead of an histogram.

On Nov 2, 9:46 pm, Paulo Penteado <pp.pente...@gmail.com> wrote:

```
> On Nov 2, 11:28 pm, le.dav...@tiscali.it wrote:
```

```
>
>
>
>> Hi folks,
>> I am trying to use "hist_norm.pro" in a code like that (my first
>> time):
>
>> pro istog, howmanyt
>
>> t = fltarr(howmanyt)
>> N = 20.
>> for k=0, howmanyt-1, 1 do begin
>>   t[k] = total(randomu(seed, N))
>> endfor
>
>> a = intarr(howmanyt) + 1
>> hist_norm, t, condition = a
>> end
>
>> I can't figure out why it does not work. Can you help me?
>> Thanks in advance.
>
> You need to say more. In what way does it not work? Where does
> hist_norm come from? (hist_norm is not in the IDL standard library)
```

Subject: Re: hist_norm

Posted by [penteado](#) on Wed, 03 Nov 2010 02:16:03 GMT

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On Nov 3, 12:10 am, le.dav...@tiscali.it wrote:

```
> Hi, thanks for your quick answer.
> I found hist_norm.pro here:http://sprg.ssl.berkeley.edu/~fastsw/idlUtil/misc/
> it does not work in the sense that if I run the small code showed in
> the first post I get:
> % Variable is undefined: DEFINED.
> % Execution halted at: HIST_NORM      69 /Users/davide/
> IDLWorkspace71/Default/astron/pro/hist_norm.pro
> %          ISTOG      10 /Users/davide/
> IDLWorkspace71/Default/Default/istog.pro
> %          $MAIN$
>
> instead of an histogram.
>
```

You seem to be missing

<http://sprg.ssl.berkeley.edu/~fastsw/idlUtil/misc/defined.pr o>

Subject: Re: hist_norm

Posted by [le.davide](#) on Wed, 03 Nov 2010 02:37:00 GMT

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This seems to be a long chain... I added the file "defined.pro", as you suggested. Hence, it turned out that I was missing something else: "hist.pro". Now I have "hist.pro" and:

1. when I compile it I get:

% 1 Compilation error(s) in module HIST.

```
str(nbins_guess,form="(l)")+' bins, for ' + $  
      ^
```

% Syntax error.

At: /Users/davide/IDLWorkspace71/Default/astron/pro/hist.pro, Line 110

% 1 Compilation error(s) in module HIST.

2. IDL> istog, 1000

% Attempt to call undefined procedure/function: 'HIST'.

% Execution halted at: HIST_NORM 92 /Users/davide/
IDLWorkspace71/Default/astron/pro/hist_norm.pro

% ISTOG 10 /Users/davide/

IDLWorkspace71/Default/Default/istog.pro

% \$MAIN\$

On Nov 2, 10:16 pm, Paulo Penteado <pp.pente...@gmail.com> wrote:

> On Nov 3, 12:10 am, le.dav...@tiscali.it wrote:

>

>> Hi, thanks for your quick answer.

>> I found hist_norm.pro here: <http://sprg.ssl.berkeley.edu/~fastsw/idlUtil/misc/>

>> it does not work in the sense that if I run the small code showed in

>> the first post I get:

>> % Variable is undefined: DEFINED.

>> % Execution halted at: HIST_NORM 69 /Users/davide/

>> IDLWorkspace71/Default/astron/pro/hist_norm.pro

>> % ISTOG 10 /Users/davide/

>> IDLWorkspace71/Default/Default/istog.pro

>> % \$MAIN\$

>

>> instead of an histogram.

>

> You seem to be missing

>

> <http://sprg.ssl.berkeley.edu/~fastsw/idlUtil/misc/defined.pr> o

Subject: Re: hist_norm

Posted by [penteado](#) on Wed, 03 Nov 2010 02:47:47 GMT

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On Nov 3, 12:37 am, le.dav...@tiscali.it wrote:

```
> This seems to be a long chain... I added the file "defined.pro", as
> you suggested. Hence, it turned out that I was missing something else:
> "hist.pro". Now I have "hist.pro" and:
>
> 1.when I compile it I get:
> % 1 Compilation error(s) in module HIST.
>
>      str(nbins_guess,form="(l)")+' bins, for ' + $
>      ^
> % Syntax error.
> At: /Users/davide/IDLWorkspace71/Default/astron/pro/hist.pro, Line
> 110
> % 1 Compilation error(s) in module HIST.
>
> 2. IDL> istog, 1000
> % Attempt to call undefined procedure/function: 'HIST'.
> % Execution halted at: HIST_NORM      92 /Users/davide/
> IDLWorkspace71/Default/astron/pro/hist_norm.pro
> %      ISTOG      10 /Users/davide/
> IDLWorkspace71/Default/Default/istog.pro
> %      $MAIN$
```

Now you are missing

<http://sprg.ssl.berkeley.edu/~fastsw/idlUtil/misc/str.pro>

It is a fair guess that you will encounter other dependencies.

Subject: Re: hist_norm

Posted by [David Fanning](#) on Wed, 03 Nov 2010 02:48:31 GMT

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le.davide@tiscali.it writes:

```
> This seems to be a long chain... I added the file "defined.pro", as
> you suggested. Hence, it turned out that I was missing something else:
> "hist.pro". Now I have "hist.pro" and:
```

Yes, it's a library. Better get them all and put them on your IDL path. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: hist_norm

Posted by [le.davide](#) on Wed, 03 Nov 2010 02:51:34 GMT

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Could you tell me which is the library and where can I find it?

Thanks.

On Nov 2, 10:48 pm, David Fanning <n...@dfanning.com> wrote:

> le.dav...@tiscali.it writes:

>> This seems to be a long chain... I added the file "defined.pro", as

>> you suggested. Hence, it turned out that I was missing something else:

>> "hist.pro". Now I have "hist.pro" and:

>

> Yes, it's a library. Better get them all and put

> them on your IDL path. :-)

>

> Cheers,

>

> David

>

> --

> David Fanning, Ph.D.

> Fanning Software Consulting, Inc.

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

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

Subject: Re: hist_norm

Posted by [le.davide](#) on Wed, 03 Nov 2010 02:54:45 GMT

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The library is "misc" (which contains all the files above)?

On Nov 2, 10:51 pm, le.dav...@tiscali.it wrote:

> Could you tell me which is the library and where can I find it?

> Thanks.

>
> On Nov 2, 10:48 pm, David Fanning <n...@dfanning.com> wrote:
>
>> le.dav...@tiscali.it writes:
>>> This seems to be a long chain... I added the file "defined.pro", as
>>> you suggested. Hence, it turned out that I was missing something else:
>>> "hist.pro". Now I have "hist.pro" and:
>
>> Yes, it's a library. Better get them all and put
>> them on your IDL path. :-)
>
>> Cheers,
>
>> David
>
>> --
>> David Fanning, Ph.D.
>> Fanning Software Consulting, Inc.
>> Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
>> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
>
>

Subject: Re: hist_norm
Posted by [David Fanning](#) on Wed, 03 Nov 2010 02:58:42 GMT
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le.davide@tiscali.it writes:

> Could you tell me which is the library and where can I find it?

Well, they are not making this easy for you, that's for sure.
It looks to me like this is the "library" page:

<http://sprg.ssl.berkeley.edu/fast/scienceops/fastidl.html>

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: hist_norm

Posted by [Jeremy Bailin](#) on Wed, 03 Nov 2010 05:00:10 GMT

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On Nov 2, 9:28 pm, le.dav...@tiscali.it wrote:

```
> Hi folks,  
> I am trying to use "hist_norm.pro" in a code like that (my first  
> time):  
>  
> pro istog, howmanyt  
>  
>   t = fltarr(howmanyt)  
>   N = 20.  
>   for k=0, howmanyt-1, 1 do begin  
>     t[k] = total(randomu(seed, N))  
>   endfor  
>  
>   a = intarr(howmanyt) + 1  
>   hist_norm, t, condition = a  
> end  
>  
> I can't figure out why it does not work. Can you help me?  
> Thanks in advance.
```

On an unrelated note, because my IDL optimization neurons cringe at unnecessary for loops, you might want to replace the first part of that with:

```
N = 20L  
t = rebin(randomu(seed, N*howmanyt), howmanyt) * N
```

Whether that makes any difference depends on how large howmanyt is.

-Jeremy.

Subject: Re: hist_norm

Posted by [le.davide](#) on Wed, 03 Nov 2010 14:05:23 GMT

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On Nov 3, 1:00 am, Jeremy Bailin <astroco...@gmail.com> wrote:

```
> On Nov 2, 9:28 pm, le.dav...@tiscali.it wrote:  
>  
>  
>  
>> Hi folks,  
>> I am trying to use "hist_norm.pro" in a code like that (my first  
>> time):
```

```

>
>> pro istog, howmanyt
>
>>  t = filtarr(howmanyt)
>>  N = 20.
>>  for k=0, howmanyt-1, 1 do begin
>>    t[k] = total(randomu(seed, N))
>>  endfor
>
>>  a = intarr(howmanyt) + 1
>>  hist_norm, t, condition = a
>> end

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>> I can't figure out why it does not work. Can you help me?
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> On an unrelated note, because my IDL optimization neurons cringe at
> unnecessary for loops, you might want to replace the first part of
> that with:
>
> N = 20L
> t = rebin(randomu(seed, N*howmanyt), howmanyt) * N
>
> Whether that makes any difference depends on how large howmanyt is.
>
> -Jeremy.

```

Thanks very much. "howmanyt" is something like 10^5 .

Anyway, I downloaded all the required files (I suppose that because now I don't have any error or warning), nevertheless the graphical result is something far from the expected histogram.

Subject: Re: hist_norm
 Posted by [David Fanning](#) on Wed, 03 Nov 2010 14:27:22 GMT
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le.davide@tiscali.it writes:

```

> Anyway, I downloaded all the required files (I suppose that because
> now I don't have any error or warning), nevertheless the graphical

```

> result is something far from the expected histogram.

I can well believe it. :-)

Depending upon why you are using Hist_Norm anyway, you might be interested in downloading yet *another* library and giving Histoplot a shot. A "normalized" histogram plot can be created by setting the FREQUENCY keyword:

Histoplot, data, /Frequency

You can learn more about it here:

http://www.dfanning.com/graphics_tips/histoplot.html

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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

Subject: Re: hist_norm

Posted by [jeanh](#) on Wed, 03 Nov 2010 15:08:01 GMT

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>>> for k=0, howmanyt-1, 1 do begin

>

> Thanks very much. "howmanyt" is something like 10^5.

>

> Anyway, I downloaded all the required files (I suppose that because

> now I don't have any error or warning), nevertheless the graphical

> result is something far from the expected histogram.

Be careful with the data type... you need longs, not integers! (for k and howmanyt)

Jean

Subject: Re: hist_norm

Posted by [penteado](#) on Wed, 03 Nov 2010 15:51:28 GMT

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On Nov 3, 12:27 pm, David Fanning <n...@dfanning.com> wrote:

> le.dav...@tiscali.it writes:

>> Anyway, I downloaded all the required files (I suppose that because
>> now I don't have any error or warning), nevertheless the graphical
>> result is something far from the expected histogram.

>

> I can well believe it. :-)

>

> Depending upon why you are using Hist_Norm anyway, you
> might be interested in downloading yet *another* library
> and giving Histoplot a shot. A "normalized" histogram
> plot can be created by setting the FREQUENCY keyword:

I found it curious that though the mentioned hist.pro (not the
hist.pro from JHUAPL, by the way), though using histogram() (as one
would expect) comes with the comment

"This is a radical departure from the IDL HISTOGRAM function, which is
for something else, as far as anyone can tell."

Subject: Re: hist_norm

Posted by [David Fanning](#) on Wed, 03 Nov 2010 16:04:57 GMT

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Paulo Penteado writes:

> I found it curious that though the mentioned hist.pro (not the
> hist.pro from JHUAPL, by the way), though using histogram() (as one
> would expect) comes with the comment

>

> "This is a radical departure from the IDL HISTOGRAM function, which is
> for something else, as far as anyone can tell."

I think it is the result of frustration. I felt exactly
the same way when I was building the Histoplot procedure. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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