Subject: Re: bug in contour?
Posted by R.Bauer on Wed, 17 Oct 2001 11:38:13 GMT
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Jacques wrote:
>
> Hi all
>
> Has anyone else run into a problem with the zlog keyword in contour? Or
> can someone tell me where I am going wrong? It seems that if the keyword
> is set, then any further contour plots are plotted using a log scale
> irrespective of what value is sent to zlog. A way around it is to set
> !z.type to 0 after each call to contour, but that shouldn't be the way
> to do it.
>
> There is some simple code below to illustrate the point.
>
> Thanks
> Jacques
>
> IDL Version 5.4 (linux x86). (c) 2000, Research Systems, Inc.
>
> IDL> contour, dist(50)
> IDL> contour, dist(50), /zlog
> % CONTOUR: Warning: Infinite plot range.
> IDL> contour, dist(50)
> % CONTOUR: Warning: Infinite plot range.
> IDL> contour, dist(50), zlog=0
> % CONTOUR: Warning: Infinite plot range.
> IDL> !z.type=0
> IDL> contour, dist(50)
> IDL> contour, dist(50), zlog=0

IDL5.4.1 has the same bug but idl5.5beta2 is ok.

regards
Reimar

--
Reimar Bauer

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Forschungszentrum Juelich
email: R.Bauer@fz-juelich.de
http://www.fz-juelich.de/icg/icg1/
 ========== ======

a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg1/idl_icglib/idl_lib_intro.h tml

http://www.fz-juelich.de/zb/text/publikation/juel3786.html
========== ======

read something about linux / windows
http://www.suse.de/de/news/hotnews/MS.html

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Subject: Re: bug in contour?
Posted by Craig Markwardt on Wed, 17 Oct 2001 15:09:33 GMT
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Jacques <jfb37@NOSPAM.cam.ac.uk> writes:

> Hi all
>
> Has anyone else run into a problem with the zlog keyword in contour? Or
> can someone tell me where I am going wrong? It seems that if the keyword
> is set, then any further contour plots are plotted using a log scale
> irrespective of what value is sent to zlog. A way around it is to set
> !z.type to 0 after each call to contour, but that shouldn't be the way
> to do it.
>
> There is some simple code below to illustrate the point.
... removed code ...

I am not sure this is a bug. It is similar to the behavior of other
/XLOG, /YLOG keywords, in the sense that once they are set, then any
overplots are also performed in logarithmic coordinates. Since XLOG
and YLOG are "sticky," I could see why ZLOG might be too. I will
grant that the ZLOG behavior is a bit surprising at first approach.

The simple solution is to compute the logarithm yourself. I.e.,

contour, ALOG10(dist(50))

Craig

--
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Craig B. Markwardt, Ph.D. EMAIL: craigmnet@cow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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Subject: Re: bug in contour?
Posted by Jacques on Thu, 18 Oct 2001 07:56:36 GMT
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Reimar Bauer wrote:

> Jacques wrote:
>
>> Hi all
>>
>> Has anyone else run into a problem with the zlog keyword in contour? Or
>> can someone tell me where I am going wrong? It seems that if the keyword
>> is set, then any further contour plots are plotted using a log scale
>> irrespective of what value is sent to zlog. A way around it is to set
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>> There is some simple code below to illustrate the point.
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>> Thanks
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>> % CONTOUR: Warning: Infinite plot range.
>> IDL> contour, dist(50)
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>> IDL> contour, dist(50), zlog=0
>> % CONTOUR: Warning: Infinite plot range.
>> IDL> !z.type=0
>> IDL> contour, dist(50)
>> IDL> contour, dist(50), zlog=0
>>
>
> IDL5.4.1 has the same bug but idl5.5beta2 is ok.
>
> regards
> Reimar
>
>

Thanks Reimar. I guess I'll have to work around it until we get 5.5 (good thing we aren't running any Mac's...)

Jacques

Subject: Re: bug in contour?
Posted by Jacques on Thu, 18 Oct 2001 08:06:52 GMT
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Craig Markwardt wrote:

> Jacques <jfb37@NOSPAM.cam.ac.uk> writes:
>
>
>> Hi all
>>
>> Has anyone else run into a problem with the zlog keyword in contour? Or
>> can someone tell me where I am going wrong? It seems that if the keyword
>> is set, then any further contour plots are plotted using a log scale
>> irrespective of what value is sent to zlog. A way around it is to set
>> !z.type to 0 after each call to contour, but that shouldn't be the way
>> to do it.
>>
>> There is some simple code below to illustrate the point.
>>
> ... removed code ...
>
> I am not sure this is a bug. It is similar to the behavior of other
> /XLOG, /YLOG keywords, in the sense that once they are set, then any
> overplots are also performed in logarithmic coordinates. Since XLOG
> and YLOG are "sticky," I could see why ZLOG might be too. I will

They are only "sticky" within the same plot, which is good (even
necessary). But when a new plot is started, and the keyword is not set
then it should resort to the default, not inherit the properties from
the previous plot. Even worse in this case is that it is impossible to
override this inheritance - even if you explicitly tell it not to use a
log scale (zlog=0). You need to add the !z.type=0 line (or do a surface
plot inbetween or some other similar fix).

> grant that the ZLOG behavior is a bit surprising at first approach.
>
> The simple solution is to compute the logarithm yourself. I.e.,
>
> contour, ALOG10(dist(50))

Unless you want the original values on the contours (an aesthetic thing
in my case...)

> Craig
>

>

Jacques