Subject: Re: Questions about NG image with (log) axis
Posted by Xin Tao on Wed, 07 Aug 2013 09:22:29 GMT
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Thank you very much, Fab.

The purpose of dlinear is to create an array (in my case) from 10 to 100 linearly with 300 elements.
It's equivalent to

x=10.0+dindgen(300)*(100-10.0)/(300-1)

Best,

Xin

On Wednesday, August 7, 2013 2:53:30 PM UTC+8, Fabien wrote:
> Hi Xin Tao,
>
>
>
> On 08/07/2013 08:38 AM, Xin Tao wrote:
>
>> data = dist(300)
>
>>
>
>> My question 1: What determines the size of the image?
>
>> If I have
>
>>
>
>> x=dindgen(300)*2
>
>> y=dindgen(300)
>
>>
>
>> then im=image(data, x, y, axis_style=2) will give me an elongated image.
>
>>
>
>> If I have
>
>> x=dindgen(300)
>
>> y=dindgen(300)

>
>>
>
>> then im=image(data, x, y, axis_style=2) will give me an square image.
>
>>
>
>> This behavior of the IMAGE function is strange to me.
>
>
>
> This is documented here I think:
>
>
>
> ASPECT_RATIO
>
> A floating point value indicating the ratio of the Y dimension to the X
>
> dimension in data units. If this property is set to a nonzero value, the
>
> aspect ratio will be preserved as the graphic is stretched or shrunk.
>
> The default value is 0 for all graphics except images, meaning that the
>
> aspect ratio is not fixed, but is allowed to change as the graphic is
>
> stretched or shrunk.
>
>
>
> IDL> y=dindgen(300)
>
> IDL> x=dindgen(300)*2
>
> IDL> im=image(data, x, y, axis_style=2, ASPECT_RATIO=2.)
>
>
>
> is quadratic
>
>
>
>>
>
>> My question 2: This looks like a bug.
>
>>

>
>> If I have
>
>>
>
>> x=dlinear(10, 100, 300) ;; create an array from 10 to 100 with 300 elements
>
>> y=dindgen(300)
>
>>
>
>> and
>
>>
>
>> im=image(data, x, y, /xlog, axis_style=2)
>
>>
>
>> the image x axis has a value from 10^20, 10^40, ..., 10^100. This is certainly wrong to me.
>
>
>
> I don't know what dlinear does so I can't say anything here.
>
>
>
> Cheers,
>
>
>
> Fab
