Subject: Square pixels in surface/lego plots
Posted by bmac on Fri, 07 Mar 1997 08:00:00 GMT
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Let us say I have a rectangular array,

SAO56102=fltarr(60,30)

that I wish to make a lego-style surface plot of.

What's the simplest way to make sure the pixels come out reasonably
square? If you just do

surface,SAO56102,/lego

in a default-sized window/plot region the pixels are elongated and
rectangular and look terrible. surface seems to elongate the image independently
in each direction to fill the window.

The only options I've been able to come up with are

(a) By trial-and-error, change the size of the WINDOW or the
plotting region in postscript output until the image looks reasonable
(and then have to find a different size if I change, for example, the
viewing angle, or add axis labels, or for each new array...)

(b) Pad the array to be square and use a squarish window

(c) Use the yrange to make the axis of the graph square -

surface,SAO56102,/lego,yrange=[-15,45],ystyle=1

Any easier approaches?

Bruce

Subject: Re: Square pixels in surface/lego plots
Posted by davidf on Sun, 09 Mar 1997 08:00:00 GMT
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Bruce Macintosh writes:

> Let us say I have a rectangular array that I wish to make a
> lego-style surface plot of.
>

> What's the simplest way to make sure the pixels come out reasonably
> square?

Download the program ASPECT from my web page and then make
a plot with a square aspect ratio, like this:

```
SURFACE, Dist(60,30), /Lego, Position=Aspect(1.0)
```

David

David Fanning, Ph.D.
Fanning Software Consulting
2642 Bradbury Court, Fort Collins, CO 80521
Phone: 970-221-0438 Fax: 970-221-4762
E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: http://www.dfanning.com

Subject: Re: square
Posted by davidf on Fri, 14 Mar 1997 08:00:00 GMT
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Hayet Merouani writes:

> I have an image of mammogram and I want to divide this image into squares.
> Anyone knew how to do that?

Use array subscripts.

```
squareSubImage = image(50:149, 75:224)
```

Cheers!

David

David Fanning, Ph.D.
Fanning Software Consulting
2642 Bradbury Court, Fort Collins, CO 80521
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Coyote's Guide to IDL Programming: http://www.dfanning.com

Subject: Re: Square pixels in surface/lego plots
Posted by Bruce Macintosh on Mon, 24 Mar 1997 08:00:00 GMT
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David Fanning wrote:
>
> Bruce Macintosh writes:
>
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>
> SURFACE, Dist(60,30), /Lego, Position=Aspect(1.0)
>
> David
>

This turns out not to quite work. David's program does
calculate (nicely) the plot size to deal with funny-shaped windows,
but doesn't deal with oddly-shaped arrays going into surface.
For example,

figt=dist(60,10)
window,0,xs=500,ys=500
surface,figt,/lego,pos=aspect(1.0)

certainly doesn't produce square lego pixels.

Any alternative suggestions? This is vexing...If IDL 5 has a
/iso keyword I'd even be willing to start installing the beta.

(Please email as well as post replies - my newsfeed is unreliable.)

Bruce Macintosh
bmac@igpp.llnl.gov

Subject: Re: Square pixels in surface/lego plots
Posted by paulcs on Wed, 26 Mar 1997 08:00:00 GMT
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Bruce,

Have you tried using the Create_view/center_view routine?
IDL: create_view
WAVE: center_view

Bruce Macintosh <bmac@igpp.llnl.gov> writes:

> David Fanning wrote:
>>
>> Bruce Macintosh writes:
>>
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> Any alternative suggestions? This is vexing...If IDL 5 has a
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> (Please email as well as post replies - my newsfeed is unreliable.)

> Bruce Macintosh
> bmac@igpp.llnl.gov
--
Paul C. Sorenson
paulcs@netcom.com