Subject: Re: How to scale image in idl?

Posted by peter on Tue, 14 May 1996 07:00:00 GMT

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Watcher (dliu@cs.tufts.edu) wrote:

- : I've used tv and tvscl to display the image, however it is too honest to
- : the size of the image itself. Is there a way to scale the image so that
- : it fits the display window?

Use CONGRID to interpolate the image matrix to the window size.

Peter

Subject: Re: How to scale image in idl?

Posted by Liam Gumley on Wed, 15 May 1996 07:00:00 GMT

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## Watcher wrote:

>

- > I've used tv and tvscl to display the image, however it is too honest to
- > the size of the image itself. Is there a way to scale the image so that
- > it fits the display window?

Get yourself a copy of the ESRG library from

ftp://ftp.crseo.ucsb.edu/pub/idl

and check out the the TVIM procedure. I now use it almost exclusively instead of TV or TVSCL.

Cheers,

Liam.

Subject: Re: How to scale image in idl?

Posted by David Foster on Wed, 15 May 1996 07:00:00 GMT

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peter@hpl.hp.com (Peter Webb) wrote:

>

- > Watcher (dliu@cs.tufts.edu) wrote:
- > : I've used tv and tvscl to display the image, however it is too honest to
- > : the size of the image itself. Is there a way to scale the image so that
- > : it fits the display window?

>

> Use CONGRID to interpolate the image matrix to the window size.

You can also use EXPAND to change the size of an image. It's similar to CONGRID and I don't know which one is faster. They have slightly different options available.

If the window size is an integer multiple of the image size then use the REBIN function as it is significantly faster, especially for large images.

Dave Foster
UCSD Brain Image Analysis Lab
foster@bial1.ucsd.edu

Subject: Re: How to scale image in idl?
Posted by Thomas A. McGlynn on Thu, 16 May 1996 07:00:00 GMT
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## David Foster wrote:

>

> peter@hpl.hp.com (Peter Webb) wrote:

>>

- >> Watcher (dliu@cs.tufts.edu) wrote:
- >> : I've used tv and tvscl to display the image, however it is too honest to
- >> : the size of the image itself. Is there a way to scale the image so that
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>

- > If the window size is an integer multiple of the image size
- > then use the REBIN function as it is significantly faster,
- > especially for large images.

>

- > Dave Foster
- > UCSD Brain Image Analysis Lab
- > foster@bial1.ucsd.edu

But if you use REBIN (and maybe CONGRID) read the documentation carefully and see if what happens to the last column/row is acceptable. When data is expanded by an integral factor, the last column/row will be repeated the integral number of times even if the other pixels are being interpolated. I find the behaviour counter-intuitive but it is fully documented.

Tom McGlynn

Subject: Re: How to scale image in idl? Posted by Rachel Howe on Thu, 16 May 1996 07:00:00 GMT View Forum Message <> Reply to Message

## Watcher wrote:

>

- > I've used tv and tvscl to display the image, however it is too honest to
- > the size of the image itself. Is there a way to scale the image so that
- > it fits the display window?

>

> Thank you.

>

> Daben

You can use EXPAND,image,xsize,ysize,newimage

where xsize and ysize are the desired dimensions of the new image in pixels. (It works even if xsize and ysize are less than the original size of image, though obviously with some loss of information).

Rachel