Subject: Re: antialias fonts

Posted by Ken Mankoff on Sun, 06 Mar 2005 21:44:11 GMT

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Hi Bringfried,

On Sun, 6 Mar 2005, Bringfried Stecklum wrote:

- > But since antialiasing is common nowadays I thought I have
- > overlooked the corresponding IDL capabilities.

Short answer: You have, unfortunately, overlooked nothing. :(

Long answer: You can generate AA fonts in postscript or Object Graphics. Object graphics won't work if you are using the MAP_* routines, and PS isn't good if you want quick display/results. For nice fast Anti Aliased fonts to your screen, you have overlooked nothing.

-k.

http://spacebit.dyndns.org/

Subject: Re: antialias fonts

Posted by Michael Wallace on Mon, 07 Mar 2005 07:49:32 GMT

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Ken Mankoff wrote:

> Hi Bringfried,

> On Sun, 6 Mar 2005, Bringfried Stecklum wrote:

>> But since antialiasing is common nowadays I thought I have overlooked

>> the corresponding IDL capabilities.

> Short answer: You have, unfortunately, overlooked nothing. :(

Anti-aliasing is not supported in direct graphics. Everything is either "pixel on" or "pixel off." There's no gray* area to allow for AA.

- * = pun intended.
- > Long answer: You can generate AA fonts in postscript or Object Graphics.
- > Object graphics won't work if you are using the MAP_* routines,

Object graphics won't work if you're tied to any direct graphics

routine, MAP * or otherwise.

> and PS isn't good if you want quick display/results.

Not really. You just have to run your entire program and then just do a quick command on the system to see the file. It's just one additional line to type in. For example,

IDL> create_me_plot, data, FILENAME="myfile.ps" IDL> \$display myfile.ps

Of course, I'm assuming that the stated command creates a file for you. And I'm also assuming that you're using an operating system that allows you to quickly go to a command line like that. ;-)

-Mike

Subject: Re: antialias fonts
Posted by Jim Pendleton on Mon, 07 Mar 2005 14:45:25 GMT
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"Ken Mankoff" <mankoff@gmail.com> wrote in message news:Pine.OSX.4.61.0503061640490.28119@gouda.local...

> Hi Bringfried,

>

- > On Sun, 6 Mar 2005, Bringfried Stecklum wrote:
- >> But since antialiasing is common nowadays I thought I have overlooked the
- >> corresponding IDL capabilities.

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> Short answer: You have, unfortunately, overlooked nothing. :(

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- > Long answer: You can generate AA fonts in postscript or Object Graphics.
- > Object graphics won't work if you are using the MAP * routines, and PS
- > isn't good if you want quick display/results. For nice fast Anti Aliased
- > fonts to your screen, you have overlooked nothing.

Avert your eyes now if you fear hacks!

One technique would involve rendering (or capturing) just the text portion of your display to a bitmap that you'd TVRD into a buffer. You'd then might create a mask and stick that into an IDLgrImage for a texture mapped

IDLgrSurface.

(Capturing of the text could either be performed by drawing only the text, or, more likely, rendering the text in a specific color that you can filter to create the mask for use the the texture map.)

You'd set up your IDLgrView in an IDLgrBuffer to match the dimensions of your image, then "jitter" the image by repeatedly translating your model back and forth in very small increments, capturing the data at each step to a buffer array, averaging the resulting buffer.

Next you'd alpha blend your original image with the antialiased text image buffer, where the opacity of each "text" pixel is a function of its pixel value

in the buffer. You could let Object Graphics do the blending, but it's not necessary since alpha blending is a quick array operation whose functional form is described in the "Alpha Channel and Objects" documentation.

Jim P.

Subject: Re: antialias fonts

Posted by Jim Pendleton on Mo

Posted by Jim Pendleton on Mon, 07 Mar 2005 15:03:46 GMT View Forum Message <> Reply to Message

"Jim Pendleton" <jimpendleton@earthlink.net> wrote in message news:90ZWd.3584\$cN6.3353@newsread1.news.pas.earthlink.net...

>

> Possibly a lot of nonsense.

It may have been best to avert your eyes.

There may be some grains of truth in the preceding post, but the technique, alas, may have been too naive.

Jim P.