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Subject: Re: pixel coordinates of a line

Posted by [Alex Schuster](#) on Thu, 28 Jun 2001 12:43:09 GMT

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Marc Schellens wrote:

- > I want to extract pixels along a line.
- > I know start and endpoint (ie. I draw the line in top of the
- > image).
- > How to get the pixel values? Do I have to do it 'by hand'?

Good question. I don't know about such a function in IDL, but I think there should be a routine for that.

What about this:

Your line runs from (x1,y1) to (x2,y2), the image has a size of dimx\*dimy. Let's create a thin, one pixel wide polygon along this line:

```
index = polyfillv( [x1,x2,x2+1,x1+1], [y1,y2,y2,y1], dimx, dimy )
```

(This assumes that  $|x2-x1| \leq |y2-y1|$ ).

Your pixel values are image[index] then. Well, nearly.

Another method would be drawing a real line via PLOTS (preferably in the Z buffer), use TVRD() to get this screen part, use WHERE() to get the indices of this line, and again image[index] is the information you seek.

But let's wait a little for other responses, I'm pretty sure J.D. will come up with another idea involving HISTOGRAM().

Alex

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