
Subject: Re: IDLanROI Confusion

Posted by [Mark Hadfield](#) on Wed, 04 Apr 2001 23:55:14 GMT

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"Craig Markwardt" <craigmnet@cow.physics.wisc.edu> wrote in message
news:onitkkcp6b.fsf@cow.physics.wisc.edu...

>

> More than likely the region of interest becomes pixelated into square

> pixels. It's pretty clear to me that this will give a greater

> perimeter than a true circle since there are more horizontal and

> vertical segments than are required.

>

> What happens if you make the circle much much bigger? I think then

> the answers will converge to what you expect.

I don't.

Consider a pixelated diagonal line segment. The length along the pixel edges
will exceed the true (along-diagonal) length by $\sqrt{2}$, however fine you
pixelate it.

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