Subject: Re: Selective Convolution
Posted by wlandsman on Wed, 14 Jul 2010 13:13:14 GMT
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On Jul 13, 2:32 pm, James <donje...@gmail.com> wrote:

> My first thought was setting the empty space to NaN values, but the
> NaN keyword to CONVOL does the opposite of what I want - it replaces
> NaN values with the convolution of real values, and ignores NaN values
> in the convolution of "good" elements. I don't ever want to replace a
> NaN value with a convolved value, but I would like to treat NaN values
> as zeroes when calculating the convolution of "good" elements.
>
> So, I'm thinking I might have to write a C routine for selective
> convolution. Any other ideas for how to overcome this?

Presumably you know where the NaN values are in the input array. So can't you just set these values back to NaN after the convolution? Convol will still perform (unnecessary) calculations for invalid pixels that are surrounded by at least one valid pixel within the kernel area. But it won't perform any calculations for invalid pixels that are completely surrounded by invalid pixels. If 90% of your pixels are invalid, then this might still save you CPU time.

--Wayne