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subscripts ?

a simple example :

```
ENVI> a = findgen(10, 20)
```

```
ENVI> kernel = fltarr(3, 3) + 1
```

```
ENVI> b = convol(a[2:8, 4:15], kernel, total(kernel))
```

: this works fine !

```
ENVI> x = POLYFILLV([2,2,8,8], [4,15,15,4], 10, 20)
```

```
ENV|> b = convol(a[x], kernel, total(kernel))
```

```
% CONVOL: Kernel's dimensions are incompatible with operand's.
```

WHY ?

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$$\ddot{l}; \frac{1}{2}\ddot{l}; \frac{1}{2}\ddot{l}; \frac{1}{2}$$

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Tom Wassenaar wrote:

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> WHY ?
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```

Tom -

CONVOL() operates on arrays, and it could just as well operate on a limited range of an array, but this would still be a rectangular region.

For what you want, I would recommend making a copy of your array, or better yet a copy of the smallest rectangular region that contains your region of interest(*), and applying your convolution to the copy. Then use this copy to update the pixels in the ROI of your original array.

(*) If your copy is a subregion, be sure it is larger than the region of your polygon. Add half the size of your kernel (3/2 or 1 in your case) pixels in all directions, so that the convolution is applied to all pixels within the region. (If you don't do this then the boundary pixels of your ROI are not processed.)

Dave

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```

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