
Subject: Problems with CONVOL and 3D data

Posted by [Alberto Martinez](#) on Fri, 08 Feb 2002 12:45:40 GMT

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I have a problem filtering 3D data with convol. Here is the code that doesn't work properly:

(I'm using IDL v5.4 under Windows 2000 Professional)

```
data = INTARR(40,40,40) ; My data example
kernel_1 = [1,2,1]
```

```
kernel_1 = REFORM(kernel_1,3,1,1) ; An array in X direction , 3D
kernel_2 = REFORM(kernel_1,1,3,1) ; The same in Y
kernel_3 = REFORM(kernel_1,1,1,3) ; In Z direction
```

```
result = CONVOL(data, kernel_1) ; No problems
result = CONVOL(data, kernel_2) ; No problems
result = CONVOL(data, kernel_3) ; No problems
```

```
result = CONVOL(FLOAT(data), FLOAT(kernel_2)) ;
> %CONVOL: Kernel's dimensions are incompatible with operand's
```

It seems that the filtering with "kernel_2" only works with data and kernel in integers!

Y direction !

The other kernels work perfectly.

any suggestion, please? Is this a known bug or what?

Thanks.

Alberto.
