
Subject: Re: Derivative along one dimension of a data cube?

Posted by [yoyoteng](#) on Sun, 29 Jul 2007 19:29:30 GMT

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On Jul 28, 11:30 am, Ryan <RyanA1...@gmail.com> wrote:

> Hi folks,
> I am working with some hyperspectral images and would like to take the
> derivative of all the spectra in the cube. Is there a faster way to do
> this than looping through the x,y dimensions and calling deriv on
> every individual wavelength dimension?
>
> Thanks!
> Ryan

there was an article about that a while ago

http://groups.google.com/group/comp.lang.idl-pvwave/browse_thread/thread/a7a6f803034f08af/df26a1f9c46df9d6?lnk=gst&q=hessian&rnum=1#df26a1f9c46df9d6

since you have a cube, try using

```
cube=your_data
deriv_kernel=[-1, 0, 1] & size=3
x_deriv_kernel = REFORM(deriv_kernel,size,1,1)
Lx=CONVOL(cube, x_deriv_kernel)
```

:) hope this was what you wanted.
