
Subject: Re: Can this be done using array operations instead?

Posted by [Juggernaut](#) on Thu, 02 Apr 2009 15:58:30 GMT

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On Apr 2, 10:34 am, robintw <r.t.wil...@rmpic.co.uk> wrote:

> Hi,

>

> I'm quite new to IDL and I've written a function to calculate some

> statistics for an image file in ENVI. The function has to be

> calculated for the 3x3 square around every pixel in the image. At the

> moment I'm using a couple of nested for loops to do that - is there a

> way to do it using array operations instead?

>

> What I suppose I'm asking for is a way to call a particular function

> for every element of an array - is that possible. I know it's possible

> to do `NewArray = OldArray * 2`, which is calling the `+` function on

> every element of the array, but is there a way to call my user-defined

> function on each element?

>

> I can post code if that would help.

>

> Cheers,

>

> Robin

I don't know exactly what "function" you're wanting to perform on these pixels but CONVOL will operate in such a way.

```
IDL> x = indgen(3,3)
```

```
IDL> print, convol(x, [[1,1,1],[1,0,1],[1,1,1]], /center)
```

```
0    0    0
0   32    0
0    0    0
```

This will add up the surrounding pixels giving you the value as the new center pixel...don't know if that's helpful but enjoy.
