
Subject: Re: newbie: sub-array extraction

Posted by [Dick Jackson](#) on Fri, 14 Oct 2005 04:17:58 GMT

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Hi Ben,

"Ben Rogers" <ben.jordanrogers@gmail.com> wrote in message
news:1129254169.767522.77270@g43g2000cwa.googlegroups.com...

> [...] I am looking to extract a 5x5 array around a central pixel to
> calculate some background statistics. Is this something best
> accomplished with for loops or is there an idl function that does
> something similar already?

Certainly. The section in Online Help that you might want is "subscripts",
but here's an example for you.

```
nX = 10  
nY = 10  
array = BlndGen(nX, nY)
```

```
pixX = 4  
pixY = 6
```

```
subArray = array[pixX-2:pixX+2, pixY-2:pixY+2]  
Print, subArray
```

... and I get:

```
42 43 44 45 46
```

```
52 53 54 55 56
```

```
62 63 64 65 66
```

```
72 73 74 75 76
```

```
82 83 84 85 86
```

To be more careful, truncating the array if the pixel[X|Y] is too close to
the edge:

```
pixX = 1  
pixY = 9
```

```
subArray = array[(pixX-2)>0:(pixX+2)<(nX-1), (pixY-2)>0:(pixY+2)<(nY-1)]  
Print, subArray
```

... and I get:

70 71 72 73

80 81 82 83

90 91 92 93

Hope this helps!

Cheers,

--

-Dick

Dick Jackson / dick@d-jackson.com
D-Jackson Software Consulting / http://www.d-jackson.com
Calgary, Alberta, Canada / +1-403-242-7398 / Fax: 241-7392
