
Subject: Re: newbie: sub-array extraction

Posted by [Dick Jackson](#) on Fri, 14 Oct 2005 16:20:04 GMT

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Another tip for the self-announced newbie: in Online Help under Contents, find:

Programmer's Guides

Building IDL Applications

Application Programming

Writing Efficient IDL Programs

Lots of good stuff for the new IDL user.

Cheers,

-Dick

"Dick Jackson" <dick@d-jackson.com> wrote in message
news:WjG3f.179148\$1i.83985@pd7tw2no...

> 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 = BIndGen(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
>
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>
```
