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
> acomplished 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

Dick Jackson / dick@d-jackson.com
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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,
>
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>
> 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
>

Subject: Re: newbie: sub-array extraction
Posted by Ben Rogers on Sun, 16 Oct 2005 22:02:15 GMT
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Thanks Dick,

much appreciated!

Subject: Re: newbie: sub-array extraction
Posted by gqshen2008@gmail.com on Wed, 19 Oct 2005 18:59:07 GMT
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This document is what I am looking for, thank you!