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
>> 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
>
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