Subject: Re: write more efficient for loop
Posted by Michael Galloy on Fri, 07 Aug 2015 13:50:07 GMT
View Forum Message <> Reply to Message

On 8/7/15 7:25 AM, g.nacarts@gmail.com wrote:
> Hi
>
> I used the Profiler, /SYSTEM & Profiler to identify which part of
> the code takes long time. I am using nested for loop (takes about 1950 sec).
>
> N = 215L
>
> Image_2 = make_array(N,N,/double)
>
> for i=0L, N-1 do begin
> for j=0L, N-1 do begin
> x = round(i + A[i, j])
> y = round(j + B[i, j])
> if (x ge 0) && (y ge 0) then begin
> Image_2[i,j] = Image_1[x, y]
> endif
> endfor
> endfor
>
> I was wondering if there is a more efficient way to write the above.
> I don't have a lot of experience in programming.

Is image_1 n by n also? Here's some totally untested code, but hopefully
it provides some inspiration:

```
x = round(rebin(reform(findgen(n), 1), n, n) + a)
y = round(rebin(reform(1, findgen(n)), n, n) + b)
ind = where(x ge 0 and y ge 0, count)
if (count gt 0) then begin
  image_2[ind] = image_1[x[ind], y[ind]]
endif
```

Mike
--
Michael Galloy
www.michaelgalloy.com
Modern IDL: A Guide to IDL Programming (http://modernidl.idldev.com)