Subject: Re: Can i avoid the loop, help me speed up, thanks Posted by Vince Hradil on Mon, 04 Aug 2008 21:31:17 GMT

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On Aug 4, 3:44 pm, "ben.bighair" <ben.bigh...@gmail.com> wrote:
> On Aug 4, 9:29 am, Rongchang Chen <chenrc1...@gmail.com> wrote:
>
>
>> I wrote a procedure to create sinograms from projections in
>> tomography, the main part of procedure please see below.
>> For large size and number projections, it's very very slow.
>> Can i avoid the loop(one is OK) to speed up,or another way to create
>> sinograms?
>> Thank you very much!!
   ******
>> n_sinogra:number of sinogram
>> n projection:number of projection
>> files_projection:a string vector contain Directory and name of
>> projection
>> files sino:a string vector contain Directory and name of sinogram
>> for jj = 0,n_sinogram-1 do begin
      print, 'now creating', jj+1, 'th sinogram'
      sino = fltarr(sizepro[0],n_projection)
>>
>
      for ii=0, n projection-1 do begin
        image = float(read image(files projection[ii]))
>>
        some processing of image
>>
        sino(*,ii) = image(*,jj)
>>
      endfor
>>
>
      write_tiff,files_sino(jj),sino,/short,/float
>>
>> endfor
       *****
> Hi,
I don't think it is possible for anyone to penetrate where you are
> having trouble with the given information. I think you might try
> using the builtin PROFILER routine for a start. It should reveal to
  you where you are spending most of your time.
>
Unrelated to the speed issue, you seem to be specifying TIFF output
> simultaneously as a SHORT integer and a FLOAT. What type of image do
> you want to be saving?
>
```

- > Cheers,
- > Ben

I agree with Ben - the question is: what is in the "some processing of image" step? If this can be "vectorized", then you might be able to avoid some looping.