
Subject: Re: newbie question.. again :)

Posted by [Haje Korth](#) on Wed, 09 Jul 2003 13:31:56 GMT

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Alex,

I am not quite sure what you are trying to do and I for sure do not know what a .csv file is, but here is an idea: The area you extravt is a 2-d array with dimensions xdim and ydim if rectangular. If I understand you correctly your number of collumns x is xdim*ydim. In order to map the 2d array into a 1d array, which is one row in your file, you use 'reform(2d-array,xdim*ydim)'. In order to process all your files you just loop through them.

Haje

PS: I curse at IDL all the time, so don't feel bad! :-) (I still think it is a great product though.)

--

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e-mail: haje.korth@jhuapl.edu

"Alexandra Panton" <alex_panton@hotmail.com> wrote in message
news:dee4362e.0307090052.2ce7f506@posting.google.com...

> This is probably a really obvious question, but I can't find the
> answer to it anywhere :) and I have been cursing my computer, idl and
> the world in general for a couple of days so thought I'd see if anyone
> can help me out!
>
> all i want to do is extract the same area from 500+ images - this i
> can do fine but i want to add each extracted portion to the next line
> in an array so i can generate a .csv file with x columns and y rows =
> to the number of images. see very simple! I can generate the rows and
> columns ok just i get a file with all the same data
>
> if someone can help me out with what function i should be looking for
> i will be eternally grateful!
>

> cheers
>
> alex

Subject: Re: newbie question.. again :)
Posted by [Timm Weitkamp](#) on Wed, 09 Jul 2003 14:28:37 GMT
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Today at 09:31 -0400, Haje Korth wrote:

> Alex,
> I am not quite sure what you are trying to do and I for sure do not know
> what a .csv file is

I think a .csv file is a "comma-separated values" Ascii file.

> but here is an idea: The area you extravt is a 2-d
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> 'reform(2d-array,xdim*ydim)'. In order to process all your files you just
> loop through them.

Or, even simpler (assuming that you want to map a 2D array "a" into a 1D array "b"): b = a[*].

Alex: I understand you already wrote some code but it doesn't work as you would like it to. Would you mind posting it and pointing out to us the part where you're stuck?

Timm

--

Timm Weitkamp <<http://people.web.psi.ch/weitkamp>>

Subject: Re: newbie question.. again :)
Posted by [alex_panton](#) on Wed, 09 Jul 2003 21:12:25 GMT
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hey thanks for replying:) i didn't post my code 'cos its a bit on the messy side bare in mind i have only been using this for about 2 weeks ! I re read my post hmm, I have like 91 files, I want to extract the same 5 by 5 area on each image. Put this all into one row (this is cool can do this) what i can't do is get say, image2 to go into row 2 .. if that makes sense? .csv or anything really just want to be able

to export it to something evil like a spreadsheet :)

here goes

```
store=('g:\goes9_processed\btcloudfree\subtraction')
outstore=('g:\test')
cd, store
y=3
x=1
files02=findfile('*2.tiff', count=num02files)
print, num02files
```

```
while(num02files gt y) do begin
  cd, store
  InfileName02=files02(y)
  print, Infilename02
  ok=query_tiff(Infilename02) ;checks to see if the tiff file exists
```

```
  if (ok eq 1) then begin
```

```
    tiffread=read_tiff(Infilename02) ; reads tiff
    storage_array=make_array(25,y ,/byte) ;my array that i want to
write to
    radiancevalues=extrac(tiffread,145,180,5,5) ;extracts a 5 by 5
array from the coordinates given
    radiancevalues=rebin(radiancevalues,25,1) ;puts it all on one line
    len02=strlen(InfileName02)
    striptext02=strmid(Infilename02,0,len02-7)
    stats=moment(radiancevalues)
    outname=striptext02+'test'+'.csv' ;configures the output filename
    storage_array=radiancevalues[*] ;*trying* to get radiance values
into one array but can't get it to work *sighs*
    cd, outstore
    openw,1,outname, width=2000 ;opens outputfile
```

```
    for i=0,num02files-1 do begin
      printf,1,storage_array,stats, format='(25(f,""),f)'
    endfor
    close,1
    free_lun,1
  ;endfor
```

```
endif else begin
  print, 'no matching file name found in directory'
endelse
```

```
y=y+1
```

endwhile

end

..and google groups messed up my format something chronic, my apologies

cheers for any help you can give

alex

Timm Weitkamp <timm.weitkamp@nowhere> wrote in message
news:<Pine.LNX.4.44.0307091614210.15330-100000@localhost.localdomain>...

> Today at 09:31 -0400, Haje Korth wrote:

>

>> Alex,

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>> what a .csv file is

>

> I think a .csv file is a "comma-separated values" Ascii file.

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>> 'reform(2d-array,xdim*ydim)'. In order to process all your files you just

>> loop through them.

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> Or, even simpler (assuming that you want to map a 2D array "a" into a 1D

> array "b"): b = a[*].

>

> Alex: I understand you already wrote some code but it doesn't work as you

> would like it to. Would you mind posting it and pointing out to us the

> part where you're stuck?

>

> Timm

Subject: Re: newbie question.. again :)

Posted by [Timm Weitkamp](#) on Thu, 10 Jul 2003 03:24:24 GMT

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Alex,

What follows below may or may not run like this (it should, but it's sort of late here now). But I hope it helps anyway.

Timm

<<http://people.web.psi.ch/weitkamp>>

```
storeDir = 'g:\goes9_processed\btcloudfree\subtraction'
cd, storeDir
files02=findfile('*2.tiff', count=num02files)
```

```
; You want one single output .csv file, right? So you'll have to open it
; *outside* the loop that goes over the images
```

```
outfilename = 'g:\test\out.csv'
openw, uOut, /get_lun
```

```
; Now loop over all the Tiffs, and every time write one more line
; to the output file
```

```
for y = 0, num02files-1 do begin
```

```
    ; Read your TIFF image in a 2D array
```

```
    tiff = read_tiff(files02[y])
```

```
    ; Extract a 5x5 region of interest
```

```
    radianceValues = tiff[145:145+4, 180:180+4]
```

```
    ; Calculate moments
```

```
    stats = MOMENT(radianceValues)
```

```
    ; Concatenate 5x5 image data and moments
    ; into one single 1D array. This will be
    ; the line to write to the .csv file.
```

```
    outValues = [radiancevalues[*], stats]
```

```
    ; How many numbers are there in that line?
    ; (need this information for the format code)
```

```
    nVal = N_ELEMENTS(outValues)
    formStr = '(' + STRTRIM(nVal,2) + '(F1, :, ", ")'
```

```
    fileLine = STRING(outValues, FORMAT=formStr)
```

```
printf, uOut, fileLine
```

```
endfor
```

```
free_lun, uOut
```

On 09.07.03 at 14:12 -0700, Alexandra Panton wrote:

```
> hey thanks for replying:) i didn't post my code 'cos its a bit on the
> messy side bare in mind i have only been using this for about 2 weeks
> ! I re read my post hmm, I have like 91 files, I want to extract the
> same 5 by 5 area on each image. Put this all into one row (this is
> cool can do this) what i can't do is get say, image2 to go into row 2
> .. if that makes sense? .csv or anything really just want to be able
> to export it to something evil like a spreadsheet :)
>
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> y=3
> x=1
> files02=findfile('*2.tiff', count=num02files)
> print, num02files
>
>
> while(num02files gt y) do begin
>   cd, store
>   InfileName02=files02(y)
>   print, Infilename02
>   ok=query_tiff(Infilename02) ;checks to see if the tiff file exists
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>   if (ok eq 1) then begin
>
>     tiffread=read_tiff(Infilename02) ; reads tiff
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>     radiancevalues=extrac(tiffread,145,180,5,5) ;extracts a 5 by 5
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>     len02=strlen(InfileName02)
>     striptext02=strmid(Infilename02,0,len02-7)
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>     outname=striptext02+'test'+'.csv' ;configures the output filename
>     storage_array=radiancevalues[*] ;*trying* to get radiance values
```

```

> into one array but can't get it to work *sighs*
> cd, outstore
> openw,1,outname, width=2000 ;opens outputfile
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> endif else begin
>   print, 'no matching file name found in directory'
>   endelse
>
> y=y+1
> endwhile
>
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> ..and google groups messed up my format something chronic, my
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> Timm Weitkamp <timm.weitkamp@nowhere> wrote in message
news:<Pine.LNX.4.44.0307091614210.15330-100000@localhost.localdomain>...
>> Today at 09:31 -0400, Haje Korth wrote:
>>
>>> Alex,
>>> I am not quite sure what you are trying to do and I for sure do not know
>>> what a .csv file is
>>
>> I think a .csv file is a "comma-separated values" Ascii file.
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>>> 'reform(2d-array,xdim*ydim)'. In order to process all your files you just
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>> Or, even simpler (assuming that you want to map a 2D array "a" into a 1D
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>>
>> Timm
>

Subject: Re: newbie question.. again :)
Posted by [alex_panton](#) on Thu, 10 Jul 2003 13:34:41 GMT
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thank you for you wonderful words of wisdom :) a couple of tweaks and
i now have a working program thank you so much !

cheers

alex

Timm Weitkamp <tim.m.weitkamp@nowhere> wrote in message
news:<Pine.LNX.4.44.0307100404290.16258-100000@localhost.localdomain>...

> Alex,
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