
Subject: create a loop on IDL

Posted by [smnadoum](#) on Thu, 16 Jun 2016 06:08:57 GMT

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Hi, I am new to IDL. I need help in creating a loop for a code that I am working on.

Here is my code:

```
pro soil_timeseries, dir, soil, outarr
files = file_search(dir, '*.bsq', count = nfiles)
file= 'F:\soil\MCD43A4.2000.049_soil.bsq'
```

```
outarr = [ ]
```

```
    get_lun, read_lun
    openr, read_lun, file
    a = assoc(read_lun, intarr(2400,2400))
```

```
    for i = 0, nfiles - 1 do begin
        print, 'files ', i
        file = files(i)
```

```
    soil= a[i]
```

```
    roi= soil[28,1759]*0.0001
    outarr = [outarr, roi]
```

```
endfor
free_lun
close, /all
return
end
```

It only reads one file, how can I get the code to read all of the files. I have 534 files, however, it is only ready one that is specified in the code:file= 'F:\soil\MCD43A4.2000.049_soil.bsq'. I don't know if I am doing the right thing with:'for i = 0, nfiles - 1 do begin' because it doesn't seems to work (read all of the files)

Thank you.

Subject: Re: create a loop on IDL

Posted by [natha](#) on Thu, 16 Jun 2016 14:17:39 GMT

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I am not exactly sure of what you are doing but check my code:

```
pro soil_timeseries, dir, soil, outarr

files = file_search(dir, '*.bsq', count = nfiles)
file= 'F:\soil\MCD43A4.2000.049_soil.bsq\'

outarr = [ ]
data=intarr(2400,2400,/nozero)

for i = 0, nfiles - 1 do begin

    print, files(i)

    openr, lun, files(i), /get_lun
    get_lun, read_lun

    soil = assoc(read_lun, data)

    roi = soil[28,1759]*0.0001
    outarr = [outarr, roi]

    free_lun

endfor

return
end
```

Subject: Re: create a loop on IDL

Posted by [smnadoum](#) on Thu, 16 Jun 2016 19:37:05 GMT

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Thank you very much. Your code makes more sense than mine.

I am trying to write a code to read all 534 bsq files and extract data for specific pixel values. I am creating a time series for soil data for 12 years. I am very new to IDL.. been unsuccessful in writing this code.

- 1) read the bsq data
- 2) write the data in an array
- 3) extract the data specific pixel values.

I don't really know if the code I have is complete yet.

Subject: Re: create a loop on IDL

Posted by [andrewcool777](#) on Sat, 18 Jun 2016 06:01:10 GMT

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On Friday, 17 June 2016 05:07:08 UTC+9:30, Shereen Nadoum wrote:

> Thank you very much. Your code makes more sense than mine.

>

> I am trying to write a code to read all 534 bsq files and extract data for specific pixel values.

> I am creating a time series for soil data for 12 years. I am very new to IDL.. been unsuccessful in writing this code.

> 1) read the bsq data

> 2)write the data in an array

> 3) extract the data specific pixel values.

>

> I don't really know if the code I have is complete yet.

Shereen,

Try this.

Regards,

Andrew

```
pro soil_timeseries, dir, soil, outarr

files = file_search(dir, '*.bsq', count = nfiles)
help,files

If files[0] EQ '' then begin
    message,'No files found'
Endif

; file= 'F:\soil\MCD43A4.2000.049_soil.bsq\'

; how many files were found?
nfiles = N_Elements(files)

; as you have 534 files, and are reading just 1 element from the data in each file, then create an
; array that is simply 534 elements long

outarr = FLTARR(nfiles)
data=intarr(2400,2400,/nozero)

for i = 0, nfiles - 1 do begin
    print, i, ' ', files(i)
    openr, read_lun, files(i), /get_lun
    READF,read_lun, data
```

```
; this is reading just 1 element out of a 2D array)
; so copy single element into "ith" position of output array
  outarr[i] = data[28,1759]*0.0001
  free_lun,read_lun
endfor
```

```
end
```
