
Subject: Re: Loops in filenames?

Posted by [Paul van Delst](#) on Wed, 17 May 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Bernard Puc wrote:

```
>
> Simon de Vet wrote:
>>
>> I have a number of text files, 'surfout.01', 'surfout.02' ...
>> 'surfout.12'.
>>
>> I can load any one of them into a 3-d array (model, longitude,
>> latitude). However, since each represents a different month, I would
>> like to put them all together into a 4-d array of (month, model,
>> longitude, latitude).
>>
>> The awkward method would be to just load each one in with its own little
>> code, changing the number each time. I know that there must be a better
>> way.
>>
>> Is it possible to load the files with a loop? I don't know where in the
>> help to look for such info, nor even where to start experimenting.
>
> ;To read a set of files
> filename = 'surfout.'
> EXT = ['01','02','03','04','05','06','07','08','09','10','11','12' ]
> for i = 0, 11 do begin
>     openr,lun,/get_lun,filename+EXT[i]
>     ;Read in values
>     free_lun,lun
> endfor
```

Apologies for pickiness but wouldn't one prefer:

```
filename = 'surfout.'
for i = 0, 11 do begin
    openr,lun,/get_lun,filename+STRING(i+1,FORMAT='(i2.2)')
    ;Read in values
    free_lun,lun
endfor
```

?

It's a slow day....can you tell?

--

Paul van Delst Ph: (301) 763-8000 x7274
CIMSS @ NOAA/NCEP Fax: (301) 763-8545
Rm.202, 5200 Auth Rd. Email: pvandelst@ncep.noaa.gov

Subject: Re: Loops in filenames?

Posted by [Steve Cox](#) on Wed, 17 May 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

In article <3922D26B.FCBD39AF@mathstat.dal.ca>,
Simon de Vet <simon@mathstat.dal.ca> wrote:

- > I'm a little embarrassed to admit that after puzzling over this all
- > morning, I solved the problem about 10 minutes after posting my plea.
- >
- > The technique I'm using is nearly identical to that of David and
- Bernard.
- >
- > Why is it that this ALWAYS happens? Must be another Zen thing...

It's not just the perverse humor of the universe that makes this happen though. There's also the fact that coming up with a concise way to describe one's problem clearly to others is a giant first step toward solving it oneself anyway.

-Steve Cox

Sent via Deja.com <http://www.deja.com/>
Before you buy.

Subject: Re: Loops in filenames?

Posted by [Simon de Vet](#) on Wed, 17 May 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Simon de Vet wrote:

- > Is it possible to load the files with a loop? I don't know where in the
- > help to look for such info, nor even where to start experimenting.

I'm a little embarrassed to admit that after puzzling over this all morning, I solved the problem about 10 minutes after posting my plea.

The technique I'm using is nearly identical to that of David and Bernard.

Why is it that this ALWAYS happens? Must be another Zen thing...

Simon

Subject: Re: Loops in filenames?

Posted by [Bernard Puc](#) on Wed, 17 May 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Simon de Vet wrote:

>
> I have a number of text files, 'surfout.01', 'surfout.02' ...
> 'surfout.12'.
>
> I can load any one of them into a 3-d array (model, longitude,
> latitude). However, since each represents a different month, I would
> like to put them all together into a 4-d array of (month, model,
> longitude, latitude).
>
> The awkward method would be to just load each one in with its own little
> code, changing the number each time. I know that there must be a better
> way.
>
> Is it possible to load the files with a loop? I don't know where in the
> help to look for such info, nor even where to start experimenting.

```
;To read a set of files
filename = 'surfout.'
EXT = ['01','02','03','04','05','06','07','08','09','10','11','12']
for i = 0, 11 do begin
  openr,lun,/get_lun,filename+EXT[i]
  ;Read in values
  free_lun,lun
endfor
```

--

Bernard Puc	AETC, INC.
bpuc@va.aetc.com	1225 Jefferson Davis Highway #800
(703) 413-0500	Arlington, VA 22202

Subject: Re: Loops in filenames?

Posted by [davidf](#) on Wed, 17 May 2000 07:00:00 GMT

[View Forum Message](#) <> [Reply to Message](#)

Simon de Vet (simon@mathstat.dal.ca) writes:

> I have a number of text files, 'surfout.01', 'surfout.02' ...
> 'surfout.12'.
>

- > I can load any one of them into a 3-d array (model, longitude,
- > latitude). However, since each represents a different month, I would
- > like to put them all together into a 4-d array of (month, model,
- > longitude, latitude).
- >
- > The awkward method would be to just load each one in with its own little
- > code, changing the number each time. I know that there must be a better
- > way.
- >
- > Is it possible to load the files with a loop? I don't know where in the
- > help to look for such info, nor even where to start experimenting.

I should think something like this might work:

```
files = Findfiles('surfout.*', Count=numFiles)
files = files[Sort(files)]
FOR j=0,numFiles-1 DO BEGIN
OpenR, lun, files[j], /Get_Lun
    etc.
    etc.
    Free_Lun, lun
ENDFOR
```

Be sure to check the file names before you use this code. Findfiles returns names in a strange order sometimes. It seems almost random to me. You might have to experiment with a better way to sort the names if the order is important to you.

Cheers,

David

--

David Fanning, Ph.D.
Fanning Software Consulting
Phone: 970-221-0438 E-Mail: davidf@dfanning.com
Coyote's Guide to IDL Programming: <http://www.dfanning.com/>
Toll-Free IDL Book Orders: 1-888-461-0155
