
Subject: CMIP5 files - time

Posted by [limiqt](#) on Mon, 07 Oct 2013 18:29:08 GMT

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Hi everyone,

I was wondering if you could help me with the following. I am using monthly CMIP5 files. These files are ncdf files. These files have a variable (data) changing with time and the time info embedded in the .nc files.

Im doing this:

```
filein='pr_Amon_HadGEM2-ES_piControl_r1i1p1_198412-200911.nc '  
ncid = ncdf_open(fileIn)  
ncim = ncdf_varid(ncid, 'pr')  
NCDF_VARGET, ncid, ncim, _data  
sdata=size(_data)  
nc=sdata(1) & nl=sdata(2) & nt=sdata(3)  
print, nc, nl, nt
```

I get : 192 145 300

The dimensions in the file are time, lat, lon and pr

I need to read the time from the .nc file and associate each time to the variable. Eg:

time 0 (198412) should be 192x145x0

time 1 (198501) should be 192x145x1

..

..

time 299 (200911) should be 192x145x299

I was wondering if someone could help me solving this problem.

Thanks

Lim.

Subject: Re: CMIP5 files - time

Posted by [David Fanning](#) on Thu, 10 Oct 2013 13:46:18 GMT

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limiqt@gmail.com writes:

> I was wondering if you could help me with the following. I am using monthly CMIP5 files. These files are ncdf files. These files have a variable (data) changing with time and the time info embedded in the .nc files.

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> Im doing this:

> filein='pr_Amon_HadGEM2-ES_piControl_r1i1p1_198412-200911.nc '

```

> ncid = ncdf_open(fileIn)
> ncim = ncdf_varid(ncid, 'pr')
> NCDF_VARGET, ncid, ncim, _data
> sdata=size(_data)
> nc=sdata(1) & nl=sdata(2) & nt=sdata(3)
> print, nc, nl, nt
>
> I get : 192      145      300
>
> The dimensions in the file are time, lat, lon and pr
>
> I need to read the time from the .nc file and associate each time to the variable. Eg:
> time 0 (198412) should be 192x145x0
> time 1 (198501) should be 192x145x1
> ..
> ..
> time 299 (200911) should be 192x145x299
>
> I was wondering if someone could help me solving this problem.

```

I'm not sure what problem we are talking about. Read the time variable out of the file. It will be associated with the arrays as you expect it to be.

If you don't know the name of the time variable, you can browse the file with `ncdf_browser` from the Coyote Library.

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Subject: Re: CMIP5 files - time

Posted by [SonicKenking](#) on Fri, 11 Oct 2013 00:33:40 GMT

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On Tuesday, October 8, 2013 5:29:08 AM UTC+11, Lim wrote:

```

> Hi everyone,
>

```

```

>

```

```

> I was wondering if you could help me with the following. I am using monthly CMIP5 files. These
files are ncdf files. This files have a variable (data) changing with time and the time info embedded
in the .nc files.
>

```

```

>

```

```
>
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> NCDF_VARGET, ncid, ncim, _data
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> sdata=size(_data)
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> nc=sdata(1) & nl=sdata(2) & nt=sdata(3)
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>
>
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> I get : 192      145      300
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>
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>
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>
> time 0 (198412) should be 192x145x0
>
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>
> ..
>
> ..
>
> time 299 (200911) should be 192x145x299
>
>
>
> I was wondering if someone could help me solving this problem.
>
>
>
> Thanks
>
```

>
>
> Lim.

Do you mean something like the following?

```
for i=0,299 do (scope_varfetch("time_"+strtrim(i,2), /enter)) = _data[*,*,i]
```

Subject: Re: CMIP5 files - time

Posted by [Fabzi](#) on Fri, 11 Oct 2013 10:10:28 GMT

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On 10/11/2013 02:33 AM, SonicKenking wrote:

> Do you mean something like the following?

> for i=0,299 do (scope_varfetch("time_"+strtrim(i,2), /enter)) = _data[*,*,i]

I think we should stop suggesting scope_varfetch in this group, but this may be just my opinion... I am 99% sure that when you read climate data from CF compliant NCDF files, scope_varfetch is definitely not needed. The question from lim is not clearly formulated.

Subject: Re: CMIP5 files - time

Posted by [David Fanning](#) on Fri, 11 Oct 2013 12:26:45 GMT

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Fabien writes:

> I think we should stop suggesting scope_varfetch in this group, but this
> may be just my opinion... I am 99% sure that when you read climate data
> from CF compliant NCDF files, scope_varfetch is definitely not needed.
> The question from lim is not clearly formulated.

Amen to this! I'm a 100% sure it's not needed. :-)

Cheers,

David

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")
