Subject: Re: IDL: Wrong data type when reading ncdf file in IDL
Posted by Kwang. Jae LEE on Wed, 31 Mar 2010 06:33:49 GMT
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I didn't know about what the short type data is.
is there no way to read short type data in IDL with NCDF_VARGET
commend??
IDL default is to save the short type data into fix type..

plz let me know

regards

Subject: Re: IDL: Wrong data type when reading ncdf file in IDL
Posted by Maxwell Peck on Wed, 31 Mar 2010 06:50:57 GMT
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I'm not sure if I full understand your post but the data is probably
stored as 2 byte integers. The scale is used to obtain the actual
physical value, i.e. scalef * data. Try this on a small part of your
dataset and hopefully the output is somewhere in the range of 270-300
K

Max

On Mar 31, 3:49 pm, "Kwang. Jae LEE" <iglea...@gmail.com> wrote:
> Hi
>
> I tried to read ncdf fomatted data in IDL
>
> below is well-known data in meterology
>
> File : sst.mnmean.nc
> ----------
> id=NCDF_OPEN(file)
> NCDF_VARGET, id,'sst', data
> NCDF_ATTGET, id, 'sst', 'missing_value', miss
> NCDF_ATTGET, id, 'sst', 'scale_factor', scalef
> NCDF_ATTGET, id, 'sst', 'add_offset', offset
> NCDF_CLOSE, id
> ----------
>
> IDL> help, data, scalef, offset
> DATA INT = Array[180, 89, 1874]
> SCALEF FLOAT = 0.0100000
> OFFSET FLOAT = 0.00000

>
> vaiable 'sst' is float or short data type checking from 'Grads' and
> 'ncdump -h commend'
> SST data is taken as interger form.
> but when I read another varible in IDL like above, it has no problem
>
> anybody who has same problem or has answer from my question
> plz, help ^^

Subject: Re: IDL: Wrong data type when reading ncdf file in IDL
Posted by Kwang. Jae LEE on Wed, 31 Mar 2010 07:10:06 GMT
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thanks for your answer
yeah, I can get real value with 'scalef'
before that, my problem is..

when I use NCDF_VARGET commend.
varible have to be stored in real attribute as which is written
'short'
but the result I read is stored as fix type.
fix type is integer, but short type is real as i konw..

i'm just begginer. there's something wrong i konw ?

plz many commnet ^^

Subject: Re: IDL: Wrong data type when reading ncdf file in IDL
Posted by Maxwell Peck on Wed, 31 Mar 2010 07:18:41 GMT
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I'm not completely familiar with ncdf_varget but short is probably
referring to a short integer not a floating point number. This just
means its a 2 byte integer (i.e. data type 2 in IDL speak). It is
common for data of this type to be stored in this way in scientific
data formats.

I'm not sure what you're issue is. It appears from above it is being
read in correctly. When you multiply data * scalef it will become a
floating point array and give you the correct result.

On Mar 31, 6:10 pm, "Kwang. Jae LEE" <iglea...@gmail.com> wrote:
> thanks for your answer
> yeah, I can get real value with 'scalef'
> before that, my problem is..

>
> when I use NCDF_VARGET commend.
> varible have to be stored in real attribute as which is written
> 'short'
> but the result I read is stored as fix type.
> fix type is integer, but short type is real as i konw..
>
> i'm just begginer. there's something wrong i konw ?
>
> plz many commnet ^^

Subject: Re: IDL: Wrong data type when reading ncdf file in IDL
Posted by Kwang. Jae LEE on Wed, 31 Mar 2010 08:01:55 GMT
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thanks I did it.
I had multiplied data * scalef, only for no-missing data, but its
data type still remain as 'fix'
that was my problem.

now I took whole value multiplied, it is changed into float type.
I didn't expect the way above can be a problem.

I appreciate your kind answer ^^
