
Subject: Re: Type conversion error: Unable to convert given STRING to Float.
Posted by [Michael Galloy](#) on Tue, 05 Jul 2011 15:55:56 GMT
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On 7/5/11 8:36 AM, Zac wrote:

> Can anyone tell me why IDL thinks that the variable in the for loop
> below is a string?

See below, but I think it is the opposite, you have an integer and are treating it like a string.

> Here's the offending part of the script. After I've opened the input
> file, I'm trying to loop over the one of the dimensions in the file
> (in this case the vertical layers of a file that contains gridded, 3-d
> aircraft emissions). I want to plot the emissions at each layer. I
> can hard code the layer number in the script and it works fine. When
> I try to implement the for loop, IDL is complaining that "lay" is a
> string.

>
> In addition, I tried to take the for loop out altogether and just add
> in a variable for the layer number, something like:

>
> lay = 2

>
> This gives the same type conversion error

>
> What am I doing wrong here?

>
> Thanks in advance, Zac
> ...

>
> ni=n_elements(lon)
> nj=n_elements(lat)
> nz=n_elements(lev)

>
> for lay=0,nz-1 do begin
> air_pl=air[*,*,lay]
>
> myct, 1, range=[0.4,1], /reverse

>
> !P.font(0)=0

>
> minvar=0
> maxvar=1E9

>
> layr=lay+1
>
> Open_Device, /ps, /Color, filename="+outdir+'/emissions_'+sim

```
> +'_air_level_'+layr+'_'+pol+'.ps'
```

You are doing string operations above, but layr is an int.

```
> tvmap, air_pl, lon, lat, BLACK=1, NColors=225, Bottom = 20, /coasts, $
>   Title='Layer '+layr+' Aircraft '+pol+' Emissions - '+simtitle,$
>   /Continents,/Cylindrical,/SAMPLE,/isotropic, $
>   /CBAR, Divisions=3, min_valid=minvar, $
>   mindata=minvar, maxdata=maxvar, $
>   CBFORMAT='(e12.2)', CBMAX=maxvar, CBMIN=minvar,CBUNIT='molec/cm2-
> sec',$
>   /landscape, /grid, /countries, xthick=4,$
>   ythick=4, thick=1.2, charthick=2, charsize=1, csfac=0.7,
>   tcsfac=0.
> close_device
>
> endfor   ; layer loop
>
> endfor   ; pollutant loop
>
```

Mike

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Modern IDL, A Guide to Learning IDL: <http://modernidl.idldev.com>

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