
Subject: Re: readf,1,format=

Posted by [David Fanning](#) on Sun, 09 Dec 2007 16:07:58 GMT

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

woopik@interia.pl writes:

```
> sorry a type error but nothing change when i use FMTp for both
> (FMT is quite similar)
>
> function read_local ,file
> FMT=
> '(I5,2X,D13.8,2X,D13.8,3X,F8.2,3X,F8.2,3X,F7.2,3X,F7.2,3X,F6
> .2,3X,F6.2,3X,F6.2,3X,F6.2,4X,F6.2,3X,F6.2,3X,F6.2,2X,F6.2)'
> spawn, ['wc', '-l', file], result, /noshell
> nlines = long(result(0))
> ttab = MAKE_ARRAY(nlines-5,15,/DOUBLE)
> OPENR,1,file
> line=""
> readf,1,line
> for i=1,nlines-5 do begin
>   READF,1,FORMAT=FMT, n,ra,dec, l1,l2,l3,l4,l5,l6,l7,l8,l9,l10,l11,l12
>   ttab[i-1,0]=n & ttab[i-1,1]=ra & ttab[i-1,2]=dec
>   ttab[i-1,3]=l1 & ttab[i-1,4]=l2 & ttab[i-1,5]=l3
>   ttab[i-1,6]=l4 & ttab[i-1,7]=l5 & ttab[i-1,8]=l6
>   ttab[i-1,9]=l7 & ttab[i-1,10]=l8 & ttab[i-1,11]=l9
>   ttab[i-1,12]=l10 & ttab[i-1,13]=l11 & ttab[i-1,14]=l12
> endfor
> CLOSE , 1
> print,FORMAT=FMT,ttab[0,*]
> RETURN,ttab
> end
```

Well, this is most interesting. There is a mismatch between your variables (n, ra, dec, etc.) and your FORMAT statement. In other words, ra and dec, since they are undeclared in the program, are by default floats. Your format statement is going to try to read them as doubles. The "rules" of input state that IDL "tries to do what you want to do". Here, it thinks what you are trying to do, is stuff a double into a float, and it does this correctly. The variable ttab is a double, but it has been stuffed with a floating value (from ra and dec).

The solution is to declare the variables on your READF statement to be what you want to read into. That is, doubles. However, I completely agree with Vince that what you REALLY want to do is read this data in another way, rather than line by line, practically the worst way to read data in IDL (ala READ_ASCII). I think I would take his structure advice.

That will also solve your problem here.

Cheers,

David

P.S. Here is the program I used to test your program with the data you sent yesterday:

```
function read_local ,file
  FMT='(I5,2X,D13.8,2X,D13.8)'
  nlines = File_lines(file)
  ttab = MAKE_ARRAY(3,nlines,/DOUBLE)
  n = 0L
  ra = 0.0D0
  dec = 0.0D0
  OPENR,1,file
  for l=0,nlines-1 do begin
    READF,1,FORMAT=FMT, n,ra,dec
    ttab[0,l]=n & ttab[1,l]=ra & ttab[2,l]=dec
  endfor
  CLOSE , 1
  print,FORMAT=FMT,ttab
  RETURN,ttab
end
```

--

David Fanning, Ph.D.

Fanning Software Consulting, Inc.

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

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