
Subject: Type conversion error: Unable to convert given STRING to Long.

Posted by [johndraper1993](#) on Mon, 08 Dec 2014 18:46:41 GMT

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Hi, i'm currently having trouble with a particle error which i don't know how to solve.

Here is my code.

h=0.7

omega_m=0.3

zmax=6.

zmin=0.01 ;range of z

nz=100 ;# of plots for z

z=Grid(zmax,zmin,nz)

rho=dblarr(nz) ;floating point array of nz zeros everything

Lmax=48.

Lmin=42. ;range of L

n=100 ; # of points

Lbol=Grid(Lmax,Lmin,n) ;y axis and # of plots

epsilon=0.1 ; sets epsilon

c=3.e10 ;speed of light in cm/s

for k=0,nz-1 do begin

LF=FLbol(TAG, Lbol, z(k)) ;luminosity function

;first integral in Luminosity

yy=(1.-epsilon)/(epsilon*c^2.)*LF*10.^Lbol*3.16e7/(2.e33) ;rho(z)/dt accretion rate multiply this bit by dtdz divide by volume

;multiplied by seconds in a year divided by grammes in solar mass

Int=int_tabulated(Lbol,yy) ;integrate over all Lbol for yy

rho(k)=Int; ;finds accretion

endfor

res=9.777505969*(2./3/h/sqrt(1.-omega_m))*asin(sqrt((1.-omega_m)/omega_m)/(1.+z)^(3./2))
;turns z into Giga years

psi=(.77e-5)*((21.86/res)^8.57)*exp(-21.86/res) ;spheroid SFR multiplied by scale factor 2.5*10^-3
for shank 10^-4 ueda

phi=(1.8e-3)*((29.39/res)^5.5)*exp(-29.39/res) ;disc SFR multiplied by scale factor 2.5*10^-3

window,0

```
plot,res,rho*10000,/Ylog,XTITLE='Time (Gyr)',YTITLE='Log(dp/dt) or SFR (Solar Mass Mpc^-3  
yr^-1)', XRange=[12,0],Yrange=[1e-4,10] ;plot z against phi  
oplot,res,psi,linestyle=2 ;spheroid SFR  
oband,res,0.75*(psi),1.25*phi,color=150
```

The error occurs on the last line, i have obtain the module oband from this website

<http://www.astro.washington.edu/docs/idl/cgi-bin/getpro/libr ary28.html?OBAND>

I'm trying to use it to create an error region of +/- 25% on either side of my line.

Any help would be appreciated, Thanks John
