Subject: readcol problems

Posted by Amanda on Wed, 02 Aug 2006 14:07:29 GMT

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I'm pretty new to IDL and don't know much about it.

I'm trying to use the readcol function but I keep getting errors "variable

is undefined", "attempt to call undefined procedure/function: 'NUMLINES'"

and sometimes it can't seem to find my .dat file. I'm guessing I must be

missing some horribly obvious line to get the "variable undefined" error

but I don't know why I keep getting the Numlines error. I don't need it to count the number of lines, I just want to plot x against y.

I'm using a windows version and this is the code I'm using:

PRO test, x, y
readcol, 'test.dat', x, y, f='f,f,'
plot, x, y, psym=2

END

Any help would be greatly appreciated. :)

Subject: Re: readcol problems

Posted by news.verizon.net on Wed, 02 Aug 2006 14:53:16 GMT

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The readcol.pro procedure is part of the IDL Astronomy http://idlastro.gsfc.nasa.gov/ and requires the following other procedures from the Library to be present in your !PATH

PROCEDURES CALLED
GETTOK(), NUMLINES(), STRNUMBER()

You can either download the entire library or grab the procedures you need from the search page http://idlastro.gsfc.nasa.gov/idllibsrch.html

Or as Haje said, there are many other ways to read an ASCII file, including the READ_ASCII() function that comes with IDL.

Amanda wrote:

> I'm pretty new to IDL and don't know much about it.

>

- > I'm trying to use the readcol function but I keep getting errors
- > "variable
- > is undefined", "attempt to call undefined procedure/function:

> 'NUMLINES'"

Subject: Re: readcol problems

Posted by Amanda on Wed, 02 Aug 2006 17:07:12 GMT

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Well I did download numlines.pro but didn't download those other ones.

Didn't realise I needed them.

Subject: Re: readcol problems

Posted by Amanda on Wed, 02 Aug 2006 17:37:08 GMT

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And also, do I need to edit anything in my code? Like put in some sort of numlines command or should it just work if i download the other?

Subject: Re: readcol problems

Posted by Haje Korth on Wed, 02 Aug 2006 17:52:02 GMT

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IMHO, the readcol rotuines sound like complete overkill to me. If you stick with the few lines I wrote above you'll be done in 5 minutes!

Amanda wrote:

- > And also, do I need to edit anything in my code? Like put in some sort
- > of numlines command or should it just work if i download the other?

Subject: Re: readcol problems

Posted by Amanda on Thu, 03 Aug 2006 08:43:38 GMT

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I tried that code and really don't have a clue how to use it.

And I downloaded those other 2 programs but I keep getting the same errors on my original code.

Haje Korth wrote:

- > IMHO, the readcol rotuines sound like complete overkill to me. If you
- > stick with the few lines I wrote above you'll be done in 5 minutes!

>

>

Subject: Re: readcol problems

Posted by Haje Korth on Thu, 03 Aug 2006 12:27:28 GMT

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Alright, let me explain a little more. the routine i wrote above is just the read routine for the data, i.e., an alternative to readcol. There are a million ways to do the job. I prefer the one in my example. it uses structures (that's what the "." is indicating), whioch makes it look more complex, but it really isn't. The advantage is that you can keep all properties of one data point neatly together with accessing separate arrays like x and y and z, etc. Everything in my example will be in one structure array called data, which happens to only contain two coordinates x and y in this case.

```
pro readfile,fname,data
ndat=file_lines(fname)
data_struct={x:0.0,y:0.0}
data=replicate(data_struct,ndat)
openr,runit,fname,/get_lun
readf,runit,data
close,runit
free_lun,runit
return
end
```

What was missing in my example is the driver routine, which can look as simple as this:

```
pro test
fname='testdata.txt' ; this should be the name of your data file
readfile, fname, data ; this calls the read routine to read
testdata.txt
plot,data.x,data.y ; this plots the data passed back by
readfile
return
end
```

Hope this was more clear. Looks like you have some catching up to do. For this I recommend David Fannings Book "IDL Programming Techniques",

which helps you get up to speed with hands-on examples.

Cheers,

Haje

Amanda wrote:

- > I tried that code and really don't have a clue how to use it.
- > And I downloaded those other 2 programs but I keep getting the same
- > errors on my original code.
- >
- > Haje Korth wrote:
- >> IMHO, the readcol rotuines sound like complete overkill to me. If you
- >> stick with the few lines I wrote above you'll be done in 5 minutes!
- >>
- >>