
Subject: Re: How to read data with format codes?

Posted by [Adam Solomon](#) on Sun, 14 Mar 2010 01:20:44 GMT

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On Mar 13, 8:04 pm, David Fanning <n...@dfanning.com> wrote:

> Adam Solomon writes:

>> Hi all, I've been pulling my hair out over using readf with a format

>> code. So I have a data file with three columns of floats, all

>> separated by a |. Here's an example:

>

>> | 355.9559189095| -79.4625574877| 0.279817 |

>> | 355.5057979042| -79.4067330132| 0.189663 |

>> | 359.5215546187| -79.7976864503| 0.161308 |

>> | 357.7890741750| -79.6427829568| 0.026100 |

>> | 354.7163524970| -79.3099884939| 0.026578 |

>> | 354.6329916471| -79.3061286761| 0.025486 |

>> | 0.0561720211 | -79.8234642170| 0.025670 |

>> | 357.3786228505| -79.5728335169| 0.000030 |

>> | 356.7569554568| -79.5138546776| 0.199416 |

>> | 355.0388858964| -79.3264538270| 0.190393 |

>> | 354.8099356150| -79.2912157538| 0.026006 |

>> | 352.5968356937| -79.0184276231| 0.207497 |

>> | 352.4362834602| -79.0094360366| 0.217226 |

>> | 0.1800716026 | -79.8081762850| 0.091767 |

>> | 359.0525340400| -79.7227001135| 0.205676 |

>> | 354.7045386126| -79.2652363648| 0.119250 |

>

>> So every format code I've used which has even come close to working

>> runs into issues at one point or another, probably because of the

>> variable spacing. I want to read this file into three arrays, or a

>> 3xlots array, or whatever - just any way to read in this data!! It's

>> unbelievable that such a simple task is proving to be so difficult.

>

>> I won't bore you with all the format codes I've tried (none of which

>> have worked) but here's the most recent example:

>

>> data=fltarr(3,rows-100);the 100 is so i don't run into EOF issues yet,

>> just for testing

>> readf,lun,data,format='(3(2x,F0.0))'

>

>> The problems with this particular one are that when the first column

>> is longer (as in most of these examples), the minus sign doesn't get

>> read in the second column, and there may be issues reading the third

>> column (not sure; will look into it some more).

>

>> What's the appropriate way to read these data in?

>

> If you really want a format code, I'm not your man.

```
> They always totally confuse me. :-)
>
> I would read this "irregular" file like this.
>
> rows = File_Lines('example.dat')
> data = DblArr(3,rows)
> oneLine = ""
> OpenR, lun, 'example.dat', /GET_LUN
> FOR j=0,rows-1 DO BEGIN
>     ReadF, lun, oneLine
>     parts = StrSplit(oneLine, '|', /EXTRACT)
>     data[*,j] = Double(parts[1:3])
> ENDFOR
> Free_Lun, lun
>
> Cheers,
>
> David
>
> --
> 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.")
```

Thanks! I was going to do that but I read on this website - dfanning something or other - to avoid for loops in IDL :) Figured a format code would save time since there's on the order of 10^6 data points here, but I guess that's nothing compared to all the time I'm spending writing the damn code!

Adam
