Subject: READ_ASCII truncating data

Posted by Simon Mitchell on Wed, 12 Mar 2014 12:36:48 GMT

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Hi All,

I have an issue with READ_ASCII truncating data (IDL 8,01 Win7 64bit).

I am sure it is something to do with regional settings, the decimal place is set to "," instead of "."

The file that I am reading is space delimeter (HEX char 20) and my READ_ASCII statement reflects this (ie is default for the delimeter)

red_data = READ_ASCII(redfile, DATA_START = 6, COUNT = nl)

An example of the data from the input file is: 0,4571 1334,62 9,356

But when looking at the array after reading, the values are 0,0 1334,0 9,0

The same issue occurs if I include DELIMETER=string(20)

I do know that if I change the win7 regional settings to have the decimal place "." the data is read correctly without truncating.

But I do not want to change the settings as I have other software which does not work if it is changed.

Also, if the input file is changed to replace the "," with "." then the file is read correctly.

Would anyone have any idea as to why the READ_ASCII is behaving this way and have a solution?

Is it a mistake that I have made in the code, or is there some settings that need to be changed in IDL?

I cannot find any reference to this problem anywhere and there is nothing on regionalizing decimal place characters that I can find.

Many thanks in advance

SM

Subject: Re: READ_ASCII truncating data

Posted by David Fanning on Wed, 12 Mar 2014 13:02:40 GMT

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Simon Mitchell writes:

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- > Also, if the input file is changed to replace the "," with "." then the file is read correctly.
- > Would anyone have any idea as to why the READ_ASCII is behaving this way and have a solution?
- > Is it a mistake that I have made in the code, or is there some settings that need to be changed in IDL?
- > I cannot find any reference to this problem anywhere and there is nothing on regionalizing decimal place characters that I can find.

You can simply open READ ASCII up and have a look at why it is behaving like this. I find this bit of code near the top of the file and without investigating too thoroughly imagine this would be a good place to start:

```
; If there are no strings in the line, just split on
; commas and return.
if (ARRAY_EQUAL(isQuote, 0b)) then begin
 return, STRTOK(lineIn, STRING(44b), /EXTRACT, /PRESERVE NULL)
endif
```

I think if it were me, I would just write a short routine to read this file myself, line by line, as READ_ASCII does, but I would do the substitutions of commas for decimal points myself with Mike Galloy's wonderful routine STR_REPLACE (found in the public folder of the Coyote Library because of its usefulness):

```
IDL> line = '123,4 18,456'
IDL> modified line = str replace(a, ',', '.', /Global)
```

IDL> print, modified_line 123.4 18.456 IDL> data = fltarr(2) IDL> reads, modified_line, data IDL> print, data 123.400 18.4560

Cheers,

David

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David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")