
Subject: Re: Read ASCII File with tab separator
Posted by [Michael Galloy](#) on Wed, 02 Mar 2011 17:50:08 GMT
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On 3/2/11 10:30 AM, Michael Galloy wrote:

> On 3/2/11 10:01 AM, naoh wrote:

>> Hi everyone,

>>

>> I'm trying to read an ascii file with tabs as separator. The catch is
>> that when the value equals zero, it is not actually written into the
>> file. Example 1 gives the file as it should look like if zeros were
>> present. Example 2 gives the actual file ('0' 'TAB' have been replaced
>> by 'TAB' only).

>> I've used the following code for example 1 but can't figure out how to
>> read example 2 without messing the data up.

>> data = fltarr(4,4)

>> readf, lun, data

>>

>> Thank very much for your help!

>>

>> EXAMPLE 1:

>> 1 0 0 0

>> 2 0 10 10

>> 3 0 12 12

>> 4 0 10 10

>>

>> EXAMPLE 2:

>> 1

>> 2 10 10

>> 3 12 12

>> 4 10 10

>

> [507]> d = read_ascii('test.txt', missing_value=0, delimiter=string(9B))

> [508]> help, d

> ** Structure <15b14b8>, 1 tags, length=64, data length=64, refs=1:

> FIELD1 FLOAT Array[4, 4]

> [509]> print, d.field1

> 1.00000 0.00000 0.00000 0.00000

> 2.00000 0.00000 10.0000 10.0000

> 3.00000 0.00000 12.0000 12.0000

> 4.00000 0.00000 10.0000 10.0000

>

> Mike

By the way, here is another (slightly more verbose) way of doing this
that gives a bit more control over data types, etc:

[501]> t = { version: 1., datastart:0L, delimiter:9B, missingvalue:0L,

```

commentsymbol:", fieldcount:4L, fieldtypes:lonarr(4) + 3L,
fieldnames:'col' + strtrim(sindgen(4), 2), fieldlocations:lindgen(4),
fieldgroups:lindgen(4) }
[502]> data = read_ascii('test.txt', template=t)
[504]> help, data
** Structure <201e848>, 4 tags, length=64, data length=64, refs=1:
  COL0      LONG      Array[4]
  COL1      LONG      Array[4]
  COL2      LONG      Array[4]
  COL3      LONG      Array[4]
[505]> print, data.col0
    1      2      3      4
[506]> print, data.col1
    0      0      0      0
[507]> print, data.col2
    0     10     12     10
[508]> print, data.col3
    0     10     12     10

```

You could also read into a single big array:

```

[515]> t = { version: 1., datastart:0L, delimiter:9B, missingvalue:0L,
commentsymbol:", fieldcount:4L, fieldtypes:lonarr(4) + 3L,
fieldnames:'col' + strtrim(sindgen(4), 2), fieldlocations:lindgen(4),
fieldgroups:lonarr(4) }
[516]> data = read_ascii('test.txt', template=t)
[517]> help, data
** Structure <1597048>, 1 tags, length=64, data length=64, refs=1:
  COL0      LONG      Array[4, 4]
[518]> print, data.col0
    1      0      0      0
    2      0     10     10
    3      0     12     12
    4      0     10     10

```

Mike

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