
Subject: Re: number formats inputing ascii data
Posted by [Haje Korth](#) on Fri, 29 Apr 2005 15:43:22 GMT
[View Forum Message](#) <> [Reply to Message](#)

Dave,

I see two issues you can try:

1. You are defining aa=0l. Why do you define as a long if you want a double in the end? Try aa=0.0d0 and so on
2. Your combo array is defined as float (fltarr). Use dblarr to get a double precision array.

Haje

"dave" <dcfinnegan@gmail.com> wrote in message
news:1114784794.648073.62000@f14g2000cwb.googlegroups.com...

> A quick question that I guess follows on to Ed's precision question.

>

> I'm having similar problems when I import an ascii datafile of X,Y,Z
> values.

>

> the x and y values are utm meter and the z value is mm's

>

> When I import the data it definitely looks different than it should?

>

> I'm using the transread program from Craig M. to import the data. I've
> attached a snippet of the data and the code below...any ideas?

>

> Dave

>

> ----data file

> LAT LON ELEV

> 37626408	5352625	668694
> 37626406	5352080	671058
> 37626406	5352015	674405
> 37626405	5351812	682801
> 37626409	5352791	668146
> 37626405	5351757	686651
> 37626405	5351655	694568
> 37626407	5352339	669945
> 37626405	5351701	690698
> 37626405	5351914	677368
> 37626411	5353354	666662
> 37626409	5352874	667493
> 37626410	5353031	666536
> 37626404	5351470	702865

```

> 37626408 5352625 668677
> 37626407 5352209 670414
> 37626411 5353456 668980
> 37626406 5352034 673583
> 37626412 5353788 666713
> 37626409 5352920 667493
> 37626404 5351554 698988
> 37626409 5352837 667973
> 37626404 5351406 709303
> 37626404 5351424 707796
> 37626404 5351517 700894
> 37626410 5353003 666463
> 37626409 5352883 667347
> 37626409 5352874 667493
> 37626410 5353003 666474
> 37626409 5352948 667574
> 37626408 5352717 668299
> 37626405 5351868 679227
> 37626407 5352394 670108
> 37626404 5351646 695965
> 37626408 5352569 669591
> 37626406 5351988 675233
> 37626407 5352339 670110
> 37626406 5352172 670095
> 37626408 5352597 668901
> 37626407 5352422 670716
> 37626408 5352560 668695
> 37626405 5351674 690904
> ---end data file
>
> pro plane_fit, x, y, z, file=filnam
>
> IF NOT Keyword_set(filnam) THEN BEGIN
>   filnam=dialog_PICKFILE( PATH=path,TITLE='Select xyz Data for',
> /MULTIPLE_FILES, /MUST_EXIST)
>   ENDIF
>
>   print, "
>   print,'Filename: ', filnam
>   print, '
>
>
>   A = 0L & B = 0L & C =0L
>
>   FOR i=0, N_ELEMENTS(FILNAM)- 1 DO BEGIN
>     Aa = 0L & Bb = 0L & Cc =0L
>     OPENR, lun, filnam[i], /GET_LUN
>     TRANSREAD, lun, Aa, Bb, Cc,FORMAT='D0.0, D0.0, D0.0', $

```

```

>  FILENAME=filnam[i]
>  FREE_LUN, lun
>  xA=[A,Aa]
>  yB=[B,Bb]
>  zC=[C,Cc]
>  ENDFOR
>
>
>  print, 'number of data lines: ', n_elements(xA)
>
>  ;---Extracting the data from the variables
>    lon=xA[*]
>    lat=yB[*]
>    elev=zC[*]
>
>  ;-- Creating a 3 column dbl array to house the lon, lat and elev data
>    combo=fltarr(3,N_ELEMENTS(lon))
>
>  ;-- Passing the data into the array
>    combo[0,*] = lon
>    combo[1,*] = lat
>    combo[2,*] = elev
>    data=combo
>  print, 'first lines of data from original file: ', data(*, 0:2)
>  ;--Display the original data
>  return
>  end;
>
>  Thanks in advance,
>
>  Dave
>

```

Subject: Re: number formats inputing ascii data

Posted by [Craig Markwardt](#) on Sat, 30 Apr 2005 20:35:54 GMT

[View Forum Message](#) <> [Reply to Message](#)

"Haje Korth" <haje.korth@jhuapl.edu> writes:

```

>  Dave,
>  I see two issues you can try:
>  1. You are defining aa=0l. Why do you define as a long if you want a double
>  in the end? Try aa=0.0d0 and so on
>  2. Your combo array is defined as float (fltarr). Use dblarr to get a double
>  precision array.

```

And,

3. The FORMAT keyword does not appear to be correct. For me to get it

to work, I need () parentheses.

4. You don't need to give both the LUN and the FILENAME, pick one.

Craig

```
>
> Haje
>
>
>
>
> "dave" <dcfinnegan@gmail.com> wrote in message
> news:1114784794.648073.62000@f14g2000cwb.googlegroups.com...
>> A quick question that I guess follows on to Ed's precision question.
>>
>> I'm having similar problems when I import an ascii datafile of X,Y,Z
>> values.
>>
>> the x and y values are utm meter and the z value is mm's
>>
>> When I import the data it definitely looks different than it should?
>>
>> I'm using the transread program from Craig M. to import the data. I've
>> attached a snippet of the data and the code below...any ideas?
>>
>> Dave
>>
>> ----data file
>> LAT LON ELEV
>> 37626408 5352625 668694
>> 37626406 5352080 671058
>> 37626406 5352015 674405
>> 37626405 5351812 682801
>> 37626409 5352791 668146
>> 37626405 5351757 686651
>> 37626405 5351655 694568
>> 37626407 5352339 669945
>> 37626405 5351701 690698
>> 37626405 5351914 677368
>> 37626411 5353354 666662
>> 37626409 5352874 667493
>> 37626410 5353031 666536
>> 37626404 5351470 702865
>> 37626408 5352625 668677
>> 37626407 5352209 670414
>> 37626411 5353456 668980
>> 37626406 5352034 673583
```

```

>> 37626412 5353788 666713
>> 37626409 5352920 667493
>> 37626404 5351554 698988
>> 37626409 5352837 667973
>> 37626404 5351406 709303
>> 37626404 5351424 707796
>> 37626404 5351517 700894
>> 37626410 5353003 666463
>> 37626409 5352883 667347
>> 37626409 5352874 667493
>> 37626410 5353003 666474
>> 37626409 5352948 667574
>> 37626408 5352717 668299
>> 37626405 5351868 679227
>> 37626407 5352394 670108
>> 37626404 5351646 695965
>> 37626408 5352569 669591
>> 37626406 5351988 675233
>> 37626407 5352339 670110
>> 37626406 5352172 670095
>> 37626408 5352597 668901
>> 37626407 5352422 670716
>> 37626408 5352560 668695
>> 37626405 5351674 690904
>> ---end data file
>>
>> pro plane_fit, x, y, z, file=filnam
>>
>> IF NOT Keyword_set(filnam) THEN BEGIN
>>   filnam=dialog_PICKFILE( PATH=path,TITLE='Select xyz Data for',
>> /MULTIPLE_FILES, /MUST_EXIST)
>>   ENDIF
>>
>>   print, "
>>   print,'Filename: ', filnam
>>   print, '
>>
>>
>>   A = 0L & B = 0L & C =0L
>>
>>   FOR i=0, N_ELEMENTS(FILNAM)- 1 DO BEGIN
>>     Aa = 0L & Bb = 0L & Cc =0L
>>     OPENR, lun, filnam[i], /GET_LUN
>>     TRANSREAD, lun, Aa, Bb, Cc,FORMAT='D0.0, D0.0, D0.0', $
>>     FILENAME=filnam[i]
>>     FREE_LUN, lun
>>   xA=[A,Aa]
>>   yB=[B,Bb]

```

```

>> zC=[C,Cc]
>> ENDFOR
>>
>>
>> print, 'number of data lines: ', n_elements(xA)
>>
>> ;---Extracting the data from the variables
>>     lon=xA[*]
>>     lat=yB[*]
>>     elev=zC[*]
>>
>> ;-- Creating a 3 column dbl array to house the lon, lat and elev data
>>     combo=fltarr(3,N_ELEMENTS(lon))
>>
>> ;-- Passing the data into the array
>>     combo[0,*] = lon
>>     combo[1,*] = lat
>>     combo[2,*] = elev
>>     data=combo
>> print, 'first lines of data from original file: ', data(*, 0:2)
>> ;--Display the original data
>> return
>> end;
>>
>> Thanks in advance,
>>
>> Dave
>>
>
>

```

--

 Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
 Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
