
Subject: Re: How to add 'd' to get the correct julian conversion ?

Posted by [R.Bauer](#) on Fri, 31 Jan 2003 18:54:22 GMT

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Kolbjorn Bekkelund wrote:

> Craig Markwardt wrote:

>> Kolbjorn Bekkelund <kolbjorn@arctic-linux.tnett.no> writes:

>>

>>

>>> How can I add the NEEDED d to get this:

>>>

>>> 2452662.305203d

>>>

>>> out of this:

>>> maxtime = jul2cal((data(0,maxgust_time)), /TO_STRING, /MDY)

>>>

>>> In my program (data(0,maxgust_time)) fetches 2452662.305203 out of the

>>> array, but if I don't add the d to the julian date it calculates the

>>> wrong time in the above statement.

>>

>>

>> You can use

>> double(data(0,maxgust_time)),

>> but the variable DATA should already be in double precision. At least

>> it should be if you expect 13 decimal digits of precision to be

>> maintained. When you type the number directly on the command line,

>> you probably do have to use the "D" to indicate double precision, but

>> you should not have to if the variable DATA is already double.

>>

>> Craig

>>

>

> I've checked my array a bit more and it seems as if there's something

> wrong with it. From the file I'm reading in with read-ascii I should

> have this:

> 2452662.499876 2.719500 6.216000 343.494000

> 955.793400 93.911600 -5.444307

>

> but the print, data in IDL shows:

> 2.45266e+06 2.71950 6.21600 343.494 955.793

> 93.9116 -5.44431

>

> If I replace the read-ascii with Reimar Bauers read_data_file I get:

> 2452662.5 2.7195000 6.2160000 343.49400

> 955.79340 93.911600 -5.4443070

>

> but as you see the julian date in the first element is wrong in both

> arrays. How can I do ensure that I get all digits inserted ?

Dear Kolbjorn

The problem I think you have is that's the default format for print is defined for float numbers.

read_data_file uses as default double if you don't give a type.

So you should try something like

```
x=read_data_file('test.dat')
print, x.data[0],format='(F20.10)'
2452662.4998760000
```

best regards

Reimar

>
> Kolbjorn
>
>

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<http://www.fz-juelich.de/icg/icg-i/>

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a IDL library at ForschungsZentrum Juelich
http://www.fz-juelich.de/icg/icg-i/idl_icglib/idl_lib_intro.html
