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-acsii 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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