
Subject: Re: two issues with julian dates

Posted by [Jean H.](#) on Wed, 11 Jul 2007 22:43:56 GMT

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Josh wrote:

> On Jul 11, 3:58 pm, David Fanning <n...@dfanning.com> wrote:

>> Josh writes:

>>> I've got date and time strings that I've parsed into their respective

>>> hour/minute/etc and month/day/etc form and I'm using the julday()

>>> function to turn them into julian dates. I've come across two

>>> problems that hopefully somebody can help me with.

>>> First off, according to NASA (<http://ssd.jpl.nasa.gov/tc.cgi#top>), the

>>> returned value of julday() is incorrect. When I use 11/18/2003 at

>>> 16:14:43, I get 2452955.2 from IDL and 2452962.1768866 from NASA.

>>> Thoughts?

>>> Second, the fact that julday() only returns a value with ONE digit

>>> after the decimal is not cool. If it returns a double floating point

>>> value, shouldn't I be able to get 14 sig figs? The time scales in my

>>> data set are such that I need that resolution. Thoughts?

>> Humm. Are you using *this* IDL!

>>

>> IDL> print, julday(11, 18, 2003, 16, 14, 43), format='(F 20.10)

>> 2452962.1768865748

>>

>> Cheers,

>>

>> David

>>

>> --

>> David Fanning, Ph.D.

>> Fanning Software Consulting, Inc.

>> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>

>> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

>

>

> Perhaps it is because it is getting late into the afternoon, but I

> can't use that technique to stuff the new Julian date into a variable,

> correct? If I want to just save that beautifully long number in an

> array, how can I keep it formatted like that?

>

it is saved properly.... it is rounded when you display it only!

to convince yourself:

a = julday(11, 18, 2003, 16, 14, 43)

>> 2452962.1768865748

print, a - 2452962.0

Jean
