Subject: Re: Double precision data into caldat
Posted by David Fanning on Tue, 08 Sep 2015 20:01:05 GMT
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Larry H. writes:

> I'm trying to convert some Julian dates back into standard dates using caldat. (In fact, I am testing what I got out of julday in the first place.) There should be hours and minutes in the results. If I take the output of julday as a variable, say TEST, and put it into caldat as
>
> caldat, test, m, d, y, h, mm, s
>
> I get the right answer. However, if I just use the actual value of test, I get odd results. So, for the Julian day 2456658.56250000, I should get
>
> 2014 1 1 1 30 0
>
> in year, month, day, hour, min, sec form. If I use
>
> caldat, 2456658.56250000D, m, d, y, h, mm, s
>
> the results are correct, but if I do the type conversion using double(), it doesn't. So I have
>
> caldat, double(2456658.56250000), m, d, y, h, mm, s
>
> and
>
> p = double(2456658.56250000)
> caldat, p, m, d, y, h, mm, s
>
> both giving the result
>
> 2014 1 1 0 0 0
>
> Does anyone know why this is? As far as I know, all of those input values are the same.

Some required reading for all those who work with IDL:

http://www.idlcoyote.com/math_tips/sky_is_falling.html

> PS Why on earth does IDL use month, day, year rather than year, month, day in both caldat and julday??

I believe this was an attempt to make IDL "unique" among programming languages. It has infuriated some and made IDL endearing to others. ;-)

Cheers,

David
--
David Fanning, Ph.D.
Fanning Software Consulting, Inc.
Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
Sepore ma de ni thue. ("Perhaps thou speakest truth.")
