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Subject: Re: julday() and fractional days

Posted by [Conor](#) on Thu, 01 Nov 2007 15:25:51 GMT

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On Nov 1, 10:39 am, Craig Markwardt

<craigm...@REMOVEcow.physics.wisc.edu> wrote:

> Bob Crawford <Snowma...@gmail.com> writes:

>> Perhaps I'm missing something but why would one expect a JULDAY

>> function that is passing hour, minute and second data to also accept

>> fractional days?

>

>> I can understand that if you did: print,julday(12,31.2,2005) one might

>> expect the fractional days to be handled, but not when the smaller

>> time units are explicitly present.

>

>> What would the correct output of, say,

>> print,julday(12,31.2,2005,6,0,0) be?

>

> I don't know, but because of IDL JULDAY()'s insane behavior, I can

> tell you that it would be different than,

>

> print,julday(12,31.2,2005) + 0.25

>

> Craig

>

> --

> -----

> Craig B. Markwardt, Ph.D. EMAIL: craigm...@REMOVEcow.physics.wisc.edu

> Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response

> -----

I suppose for the very flexible solution you would hope for julday to start with something like:

```
function julday,mon,day,year,hr,min,sec
```

```
min += (sec - floor(sec))/60.0
```

```
hr += (min - floor(min))/60.0
```

```
day += (hr - floor(hr))/24.0
```

```
year += (mon - floor(mon))/12.0
```

```
day += (year - floor(year))*365
```

then you can have the best of both worlds.

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