
Subject: Julian Day NE Julian Day

Posted by [andrewcool777](#) on Fri, 18 Nov 2016 12:30:31 GMT

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Hi All,

So in converting the time stamp from an astro image to Julian Day with JULDAY, I start off with seconds of 6.31, and after doing the back conversion with CALDAT, I end up with seconds of 6.3100353!

Is this to be expected? Is it "wrong?" Is it one of those weird digital precision things that David F. used to bang on about? (Hi David)

```
IDL> print,!version
{ x86_64 Win32 Windows Microsoft Windows 8.5.1 Nov 14 2015    64    64}
IDL>
IDL> Jd = julday(10,1,2016,10,10,6.31)
IDL> print,jd,format='(F20.10)'
    2457662.9236841439
IDL> caldat,jd,mon,d,y,h,m,s
% Compiled module: CALDAT.
IDL> print,y,mon,d,h,m,s
    2016      10      1      10      10      6.3100353
```

And just to show that I'm calling the inbuilt IDL routines, and not altered copies:-

```
IDL> help,/source
```

Compiled Procedures:

\$MAIN\$

CALDAT C:\Program Files\Exelis\IDL85\lib\caldat.pro

Compiled Functions:

JULDAY C:\Program Files\Exelis\IDL85\lib\julday.pro

I'm puzzled. And a bit concerned.

TIA,

Andrew Cool

www.skippysky.com.au (for all your astro weather forecast needs...)
