Subject: Re: Conversion of MS 64bit timestamps to JD
Posted by andrewcool777 on Sat, 12 Nov 2016 23:25:32 GMT
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Hi Dick,

This is Gold Star stuff! Maybe even an Elephant stamp too.

Of course, having the ability to record 100nanosecond intervals assunes that the Windows clock is up to that int eh first place, and well calibrated, but that's another story.

A friend and I recorded and occultation by the Centaur asteroid Chariklo
on Oct 1st, using SER format. I've written a converter to get individual FITS
files from the SER file, but it needs those 64bit timestamps converted too.

Many Thanks.

Andrew

Working the other way, to turn serDateTime into six parameters:

IDL> serDateTime = 636144921840000001 ; 2016-11-11T20:16:24.0000001 from above

IDL> Jul2Greg,(serDateTime / (24LL * 60 * 60 * 10000000)) + Greg2Jul(1,1,1,0,0,0),mo,d,y
IDL> increments = serDateTime MOD (10000000LL * 24 * 60 * 60)
IDL> s = increments MOD (10000000LL * 60) / 1D7
IDL> m = increments / (10000000LL * 60) MOD 60
IDL> h = increments / (10000000LL * 60 * 60)

This seems to have worked:

```
IDL> help,y,mo,d,h,m
Y               LONG      =        2016
MO              LONG      =          11
D               LONG      =          11
H               LONG64    =                  20
M               LONG64    =                  16
```

> Andrew