Subject: Re: Julian Day Question
Posted by news.verizon.net on Fri, 26 May 2006 16:57:49 GMT
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Paul Van Delst wrote:

> However, it the two julday results up top still seem inconsistent. If I'm an astronomer
> and my day start reference for input to the julday routine is 12 noon, then why do
> julday(1,1,1,0,0,0) and julday(1,1,1) provide different results? Doesn't
> julday(1,1,1,0,0,0) refer to 0hours, 0minutes, 0seconds beyond the (12noon) start of the
> day? Why does providing the ",0,0,0" hh,mm,ss data cause the start reference to suddenly
> shift by 12 hours?
>

The way I think about it is that there are two distinct quanities: an
integral "Julian Day" and a real-valued "Julian Date". For example,
from the US Naval Observatory Website
http://tycho.usno.navy.mil/systime.html

**
Julian Day Number is a count of days elapsed since Greenwich mean noon
on 1 January 4713 B.C., Julian proleptic calendar. The Julian Date is
the Julian day number followed by the fraction of the day elapsed
since the preceding noon.
***

So when you supply the IDL julday() function with only the day, month
and year, it calculates the integral Julian day (and returns a
longword). If you also supply the hh,mm,ss (even if this is 0,0,0)
then it returns a double precision Julian date. --Wayne