Subject: Re: Julian Day Question
Posted by Paul Van Delst[1] on Fri, 26 May 2006 17:09:55 GMT
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Wayne Landsman wrote:
> 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.
> ***

Ah. Now it becomes clear. Apples [julday(1,1,1,0,0,0)] vs. oranges [julday(1,1,1)].

> 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

Thanks,

paulv

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Paul van Delst Ride lots.
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