Subject: Re: Julian Day Question
Posted by Paul Van Delst[1] on Fri, 26 May 2006 16:43:18 GMT
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kuyper@wizard.net wrote:
> Paul Van Delst wrote:
> ...
>
>> The example on that page is:
>>
>> IDL> print, julday(1,1,1,0,0,0), julday(1,1,1)
>> 1721423.5 1721424
>>
>> The *input* date, 0001-01-01, /should/ be based on how we define dates /now/, starting at
>> midnight. But the reference point for the input date seems to change (to 12noon) when the
>> hours/minutes/seconds are not supplied.
>
>
> It is based upon how dates are defined now - by astronomers.

Yeah, I realised that after I read subsequent posts. And, for that application, it makes perfect sense.

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?

paulv

> The Julian
> day starts at 12:00 noon, because that means an entire night's data
> get's tagged with the same Julian date. The Julian date system was
> originally invented to help astronomers match up ancient records of
> astronomical events with modern observations, to get more accurate
> figures for things like the orbital period of a comet. The starting
> point was chosen because calender cycles associated with several
> different popular historical calendar systems all come together on that
> date. This simplifies the process of converting between the Julian date
> and any one of those calendar systems.
>

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Paul van Delst Ride lots.

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