Subject: Re: Julian Day Question
Posted by James Kuyper on Fri, 26 May 2006 16:20:07 GMT
View Forum Message <> Reply to Message

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. 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.