

Re: RA question

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- *From:* "Ben" <bet71743@xxxxxxxxxxx>
 - *Date:* 5 Mar 2007 08:59:37 -0800
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On Mar 5, 4:55 am, "oriel36" <geraldkelle...@xxxxxxxxxx> wrote:

On Mar 5, 8:15 am, "canopus56" <canopu...@xxxxxxxxxx> wrote:

On Mar 3, 2:01 pm, Eric <N...@xxxxxxxxxxx> wrote:

If an object is at RA x:yy for example, how do i know where it is in the sky? I cant figure out how to use RA to determine a point in my view of the sky.

Your current local sidereal ("cy-dear-e-el") time (LST) can be found at this handy USNO web applet:

<http://tycho.usno.navy.mil/sidereal.html>

LST means the right ascension that is currently transiting your south meridian. You can also follow LST with a planisphere. Orient the planisphere to the current time. The RA (that corresponds to the current LST) can be read off the dial plate along the noon-midnight line.

I found spending a couple of days with my plainisphere, following the

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rotation of celestial dome throughout an entire day – including daylight – helped me to wrap my head around the concept of LST. The analogy mentioned in this thread about sidereal time as a watch that runs 3 minutes and 56 seconds fast is a good one.

Why 3:56 minutes fast? If the Earth were just hanging motionless in space rotating on its axis, the solar day would have a nice equal 24 hours periods. But the Earth also revolves around the Sun. Because the Earth also is moving along a tangent to its solar orbit, the Sun gets to back to local solar noon 3:56 minutes "faster". The 3:56 minutes represents the linear travel of the Earth in its orbit around the Sun.

Enjoy – Canopus56

and Oriole enjoins:

The real bonus is appreciating how clocks were developed to keep in sync with axial rotation when it was promoted by Copernicus as the cause of the daily cycle.

Honor Copernicus by not mentioning his name.

Ben