

Re: questions about UTC time, definitions, leap seconds, and measurement.

Source: <http://sci.tech-archive.net/Archive/sci.physics.research/2005-05/msg00533.html>

- *From:* helbig@xxxxxxxxxxxxxxxxxxxxxxxxxxxx (Phillip Helbig---remove CLOTHES to reply)
 - *Date:* Sat, 28 May 2005 18:44:52 +0000 (UTC)
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In article <BEBD4018.7B49%rbj@xxxxxxxxxxxxxxxxxxxxxxxxxxxx>, robert bristow-johnson <rbj@xxxxxxxxxxxxxxxxxxxxxxxxxxxx> writes:

> by 1983, they must have expected about 1 leap second each mean year (1 part
> per 31556952) why didn't they define the second to be that much longer (say
> 9,192,632,060 cycles instead of 9,192,631,770 cycles of this cesium
> radiation? they would still have to add or subtract leap seconds
> occasionally, but much less often than they did in the late 20th century.
> why not, when you're *defining* the standard of time (with a much better
> standard), make that initial definition agree as much as possible with the
> known astronomical unit, and then stick to it?

Backwards compatibility. For a time, the second was defined as a certain fraction of the year 1900; the atomic-time definition probably was set up to be as close as possible to this.

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- *Follow-Ups:*
 - ◆ ***Re: questions about UTC time, definitions, leap seconds, and***
 ◇ *From:* robert bristow-johnson
 - *References:*
 - ◆ ***questions about UTC time, definitions, leap seconds, and measurement.***
 ◇ *From:* robert bristow-johnson
 - Prev by Date: ***Re: A question of discrete space-time.***
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