

Re: cesium clock question

Source: <http://sci.tech-archive.net/Archive/sci.physics/2008-10/msg01920.html>

- *From:* "Tom Potter" <tdp@xxxxxxxxxxxxx>
 - *Date:* Tue, 21 Oct 2008 09:52:17 +0800
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"Sam Wormley" <swormley1@xxxxxxxxxx> wrote in message [news:41GKk.339595\\$TT4.113716@xxxxxxxxxxxxx](mailto:news:41GKk.339595$TT4.113716@xxxxxxxxxxxxx)

Tom Potter wrote:

"Sam Wormley" <swormley1@xxxxxxxxxx> wrote in message [news:evJJk.335455\\$TT4.302562@xxxxxxxxxxxxx](mailto:news:evJJk.335455$TT4.302562@xxxxxxxxxxxxx)

Tom Potter wrote:

"Sam Wormley" <swormley1@xxxxxxxxxx>
wrote in message
[news:j10Jk.387412\\$yE1.38880@xxxxxxxxxxxxx](mailto:news:j10Jk.387412$yE1.38880@xxxxxxxxxxxxx)

Ironic, isn't it Potter, that
relativity predicts just the
right
values for engineers to make
the GPS work accurately
and for the
LHC and other particle
accelerators work properly.

Sammy, I know you keep saying that,
and the General Relativity Guru's on the
taxpayer dole say that,
but why don't you work out JUST ONE
example of this for
JUST ONE interaction between a GPS
satellite and a GPS receiver
and don't use any of Maxwell's, Newton's,
Doppler, Galileo,
or Hubble hacks to fudge your answer.

Potter, see the example in:
<http://relativity.livingreviews.org/open?pubNo=lrr-2003-1&page=node5.html>

Re: cesium clock question

Sammy,

As can be seen from your reference which is quoted below, the designers of the ***GALILEO*** system make light of the claim that General Relativity is essential, and they leave the SO-CALLED "Relativity" corrections to the computer programmers and engineers at Garmin, etc.

And as can be seen, your favorite General Relativity Guru, who is on the taxpayer dole, is forced to acknowledge that what he hypes as "large correction terms" are necessary to correct for effects that he calls "relativity effects".

1. It appears that your guru does not know that the size of the "correction term" is not important, but what is important is the fineness of the "correction term".

2. It appears that your guru does not know that what he attributes to "relativity" system engineers attribute to distance, velocity, acceleration, temperature, component aging, pressure, variations in the ionosphere, etc.

System engineers understand that "relativity" doesn't affect anything except the minds of Einstein Cultists, and the Guru's who profit from the public's gullibility.

"Information released in 2006 by the GALILEO project [25] states that relativistic corrections will be the responsibility of the users (that is, the receivers). This means that GNSS devices capable of receiving both GPS and GALILEO signals will have to contain additional relativity software to process GALILEO signals. Since no "factory frequency offset" is applied to atomic clocks in the GALILEO satellites, relativity effects will cause satellite clock time to ramp away from TAI and will require large correction terms to be transmitted to users."

Sammy considering

"that relativistic corrections will be the responsibility of the users"

and that these corrections will be made in the GPS receivers,

why don't you post some algorithms used in the GPS receivers and prove that these "corrections" are made to correct for "Relativity"

rather than for velocity, acceleration, distance, etc.?

Re: cesium clock question

Potter, you wouldn't be so ignorant if you read (and digested)
<http://relativity.livingreviews.org/open?pubNo=lrr-2003-1&page=node5.html>

You could sure shut up the heretics who don't worship General
Relativity
if you posted some of these powerful, esoteric algorithms
that have to be used in the GPS receivers
to make the GPS System work.

As the old saying goes:
"Faith is the belief in things unseen."
Many heretics want to see the actual General Relativity
algorithms used to correct for "Relativity",
as opposed to velocity, acceleration, etc.

Keep the "faith" brother!

--
Tom Potter

Sammy, when I first taught at the military school level,
I, like you, insulted folks who asked questions I couldn't answer,
(And pulled their weekend passes, if they persisted.)

but as I progressed

and taught at the taught at the high school, college, and seminar levels,
I found that rather than insulting folks who asked tough questions,

it was best to explain what I did know.
and admit what I did not know,

particularly at the seminar level
where I was dealing with potential customers.

The bottom line is,
it is better for all concerned
to put honesty, civility, and education above ego.

For years, you have been parroting the Urban Legend,
perpetuated by your favorite General Relativity Guru,
that the GPS System would not work
without using the General Relativity model.

As can be seen the
designers of the ***GALILEO*** system
leave the SO-CALLED "Relativity" corrections
to the computer programmers and engineers at Garmin, etc.

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Why don't you educate all of the ignorant folks,
and post the algorithm that GPS receiver manufacturers
use in their little microprocessors to model the
so-called "Relativistic Effects"?

Would you believe it,
many folks actually think that the algorithms
used in the GPS and Galileo Systems,
compensate for "Relativity"
rather than velocity, acceleration, temperature,
pressure, the ionosphere, shape of the Earth, etc.?

If anyone wants to look at the Glonass control document
which covers the equations, constants, and algorithms,
needed in designing a satellite navigation system.
visit the URL below.

http://www.glonass-ianc.rsa.ru/i/glonass/ICD02_e.pdf

Tom Potter

<http://www.geocities.com/tdp1001/index.html>

<http://notsocrazyideas.blogspot.com>

<http://www.flickr.com/photos/tom-potter/>

<http://tdp1001.wiki.zoho.com>

<http://groups.msn.com/PotterPhotos>

<http://www.androcles01.pwp.blueyonder.co.uk/dingleberry.htm>

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