

*A short paper on the age of the universe:*

The speed of light was first measured in 1657, by Olaf Roemer. Over the ensuing 300 years, the speed of light has been measured some 163 times, using 16 different methods. The work of Australian physicist Barry Sutterfield, and mathematician Trevor Norman shows that the speed of light is slowing down.

Roemer: 1657 (Io eclipse method) 307,600 km/sec. +or- 5400 km/sec.

Harvard: 1875 (Io eclipse method) 299,921 km/sec. +or- 13 km/sec.

NAS: 1983 (laser method) 299,792 km/sec. +or- 0.0003 km/sec.

While the margin of error has improved over the years, the mean value has noticeably decreased, with the bands of uncertainty hardly overlapping.

Allen Montgomery, the Canadian mathematician, has analyzed the Sutterfield and Norman data statistically and has concluded that the decay of  $c$  (the velocity of light) has followed a cosecant-squared curve, with a correlation coefficient of better than 99%. This curve would imply that the speed of light may have been 10-30% faster in 30AD; twice as fast in 1000BC; and four times as fast in 2000BC. The progression of this curve has led them to believe that prior to 3000BC, the speed of light was more than 10 million times faster than it is today! The impact of these findings on the physical sciences could be monumental. For instance, the "red shift" may not be due to an expanding universe, but rather to the decay of  $c$ . If so, the universe could be far smaller than is presently believed.

Since molecular motion, not to mention all atomic dating, argon 60, carbon 14 and the like, all depend on  $c$  being a constant (for their measurements of time), if  $c$  is slowing down in the manner described above, our concept of the age of the universe could be wildly incorrect, and the universe could actually be less than 10,000 years old... Just as the Bible teaches.

If we count time  $t=0$ , at the fall of man, Norman and Sutterfield's best estimate of the date of that event is 5300-5700BC (gravity clock, i.e., dynamical time). This approximately agrees with the dates obtained from the Septuagint Greek translation of the Hebrew Bible, namely 5313BC. If we use Alan Montgomery's formula for  $c$ -decay, the date of creation (i.e., the date when  $c$  began to decay) would have been 4125BC. This differs by just 121 years from internal evidence within the Massoretic Text of the Old Testament as determined by Bishop Ussher (i.e., 4004BC). The findings of neither authority, however, allows for a universe older than 8000 years!

The above is hard science, developed by respected authorities in their respective disciplines. If you would like further documentation on the above subject, please read: *The Atomic Constants, Light and Time*, Department of Mathematical Sciences, Flinders University, South Australia; or write: Alan Montgomery, 29 Radford Drive, Ajax, Ontario, Canada L1T2G5, for his paper.

Some of the above data is from *Jesus, lord of Time and Space*, by geophysicist Lambert P. Dolphin, (Green Forest AR, Green Leaf Press). Additional documentation is available from these sources. This paper is an edited compilation of various direct quotes from published works written by the above named authorities.

Belief in God's Word is never an intellectual problem, but a faith problem. The Bible states, 2 Tim 3:16-17 "All scripture is given by inspiration of God, and is profitable for doctrine, for reproof, for correction, for instruction in righteousness: That the man of God may be perfect, thoroughly furnished unto all good works."

Pax Christi;  
Eli