

# AGE OF THE EARTH

By

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In these days when we read or hear information relating to the age of the earth, the most likely number will be in billions of years. This does not fit a literal reading of the Bible. Some Christians reaction to insistence that the long ages are not valid is "What difference does it make?" It makes a difference when we consider that the Bible is God's written word, (I Peter 1:20,21) and God does not lie.

The ideas of long ages, and dating techniques used to compute long ages, are inventions of mortal man and are not subject to rigorous scientific proof. The geology professor that taught the course in Nuclear Geology, in response to a request for proof for long ages, stated, "There is no proof. It's mostly speculation. But I choose to believe." Choosing to believe is not science, it's religion. (Ref. Alexander, Calvin, PhD, Univ. of MN., Jan. 5, 1982)

What is taught in schools is that there is proof for long ages because we can calculate it. What is generally not known by teachers and students alike is that they have been given philosophy in place of facts.

## God and time

God exists outside of time. I AM Exodus 3:14, John 8:58 God is. The past, present and future in our time frame of existence is all the same to God.

When did time begin? Gen. 1:1 In the beginning (of time), God created the heaven and the earth.

What was there before Gen. 1:1? Only God, in three persons. Spiritual beings

Where there is no physical space or matter, there is no need of time.

God and the concept of time in Biblical terms:

Psalm 90:4 A thousand years in God's sight are as yesterday.

2 Peter 3:8 ...one day is with the Lord as a thousand years, and a thousand years as one day.

## Three aspects of God

God of creation

God of revelation: He told us that He created, how He created, when He created, and why He Created.

God of salvation: Our redemption was planned before He created. 2 Tim. 1:9

## **Calculating the age of the Earth from the Bible**

From God's Word and its record of human history, the age of the earth can be calculated to a period of thousands of years. Time differences exist between the Masoretic and Septuagint texts, but both are less than 10,000 years.

What does the record actually tell us? There are a number of opinions as to what the Scripture says. Authorities generally agree that the literal-day interpretation of Genesis not only is a "legitimate" interpretation of the text, but that it is the obvious view.

This view is held by Dr. Davis Young, Dr. Pattle Pun and others even though they do not

believe this interpretation. They disagree with this description of creation because it does not fit their "Scientific" view of the origin of the earth. The creation sequence as stated in Genesis is also questioned.

### Gap theory

To accommodate long ages, it was assumed by some that there were long periods of time between the specified steps of the creation account.

Those who wish to accept the theoretical long ages of the earth as determined from radiometric dating assume that there were millions of years between Gen. 1:1 and Gen. 1:2.

### Day-Age theory

A similar view of the creation period considers each day as a geological age in which gradual changes in the physical structure were accompanied by gradual changes in the plant and animal life.

Objections to the creation account given in Scripture are not scientific but philosophical.

If the story of the "evolution" of the earth, as proposed by those who hold to the theory, were presented in the same format as the Biblical account of creation, would it be believed as a scientific explanation of the origin of the earth and life?" (CRS Quarterly March 1979, p203 *The Story of Evolution in Biblical Style*, E. Theodore Agard and Charles D. Howe)

A proper philosophical base is needed for the investigation of the world and the universe. The doctrine of creation provides that base, and the associated presuppositions are formed around that base. The created universe was expected to have:

- Design - intelligence
- Order - plan
- Purpose

An alternate philosophical base –

- Universe not created – it evolved.
- Product of basic material (time and chance)
- No intelligence
- Irrational operation (why specific laws?)

## **A problem for Christians - Long ages**

Basis for long ages

The process of evolution needed long ages. Gradual changes that were to eventually produce new species needed time to accomplish the process. In spite of the fact that no intermediate fossil forms have ever been found, there was always hope that some would eventually be found.

Age of rocks

By assuming that the earth was old, geologists began assigning dates to rock strata. The deep layers of sedimentary rock are filled with fossil forms of plants, fish, amphibians and animals. Certain index fossils were used to provide age to rocks in areas where strata sequences were not well defined. From these early studies the sequence chart known as the geologic column was made. It is in a variety of forms found in many science textbooks.

### Dating of rocks and fossils

The age of the earth is considered by many to be 4.5 billion years. This number appears in science textbooks and in science news articles, but few people are aware of how it was derived. Dating techniques for geological formations have been changing over the past several hundred years as new techniques are developed.

### Dating techniques

Earlier dating was accomplished by such processes as measuring the accumulation of minerals and salts in the ocean, counting the annual deposits in the deltas at the mouths of rivers, measuring the erosion rate of waterfalls, measuring the accumulation of meteorite dust or measuring the decay of the earth's magnetic field. Most dates derived from these processes were in the range from several thousand to several hundred million years. The accuracy of the results depends heavily on the assumptions used. The same is true of the 4.5 billion year date. People in general are not aware of the assumptions used for these dates. It was the discovery of radiometric dating and its application to earth crystalline rock that resulted in a large increase in the assumed age of the earth.

Not all rocks are dated by the same methods. The geologic column and the assumed ages of fossil bearing strata were derived before radiometric dating was developed. Sedimentary strata are not dated by their vertical sequence, their mineral content or their physical characteristics. They are primarily dated by fossil content. Index fossils, such as trilobites and dinosaurs, have been assigned to certain time periods based on evolutionary theory.

Radiometric dating techniques are used on crystalline rocks such as granites and basalt. Small radioactive inclusions are found distributed within the rock. Radioactive decay is a natural process by which an unstable Parent isotope\* decays into a stable Daughter isotope by a specific sequence of radioactive emissions. By measuring the amounts of the Parent and Daughter isotopes and knowing the decay rate, a series of calculations can provide a "radiometric age" for a rock sample. This may or may not be the true age of the rock. The assumptions are key in arriving at radiometric dates. Most assumptions are not proven or are not provable.

The main assumptions of the testing methods for the uranium-lead or rubidium-strontium decay series are:

1. The rock system must be closed. There must have been no gain or loss of either Parent or Daughter isotope during the life of the rock.
2. Initial Daughter isotope can be determined accurately.
3. The decay process is known and is constant.
4. The measurement of the isotopes is accurate.

There are several problems with these assumptions. It is doubtful that there are completely closed systems over long periods of time. Initial conditions can only be estimated. Decay rates are known for current conditions, but factors such as the change in the speed of light can have a direct effect on the decay rate. Measurement accuracies may depend on the skills of the operators. The sample may not be indicative of the whole rock formation.

Potassium-argon dating of rocks had been common although there have been questions of its

accuracy. Recent studies in its decay process by Dr. Edward Boudreaux has revealed that there are two decay rates for potassium, one much faster than the other.\*\* By using the longer decay rate for making calculations, the over abundance of Daughter isotopes produces an extremely old age for the sample.

- \*Isotopes are atoms of the same element having the same number of protons but different numbers of neutrons.
- \*\* Boudreaux, Edward, and Baxter, Eric, A computational model for nuclear Binding and isotope decay Energies, Common Sense Science, 2000

### Long Ages in Astronomy?

#### Distance to stars

Large distances to stars, galaxies and quasars and the size of the universe are used to indicate long ages. How is distance measured?

There is no way to directly measure the distance to most stars and galaxies. Distance to a limited number of close stars has been measured by parallax, taking angular measurements at different times of the year and using trigonometry to calculate the distance.

The determination of the billions of light years for distant stars and galaxies is based on two factors, light intensity or brightness and the red shift of light received from the galaxies. It was assumed that the red shift of light was a Doppler effect produced by the recession velocity of the galaxy or star in question. This was a reasonable assumption, and although it was questioned, no other mechanism was offered to explain the observed effect, until the last 20 years. The brightness, red shift relationship has been formulated into the "Hubble Law" which is not a law since it has never been verified.

As larger telescopes have been built and more sophisticated recording devices have been designed, it has been possible to detect very faint stars and galaxies. The general assumption was that these faint objects were very far away, and because they generally exhibited greater red shift than the brighter galaxies, it was further assumed that they were moving away from us at very high speed.

There are some basic problems with this concept. First, there is no justification for assuming that all faint galaxies are far away just because they are faint. Star density in a given galaxy does not have to be the same as other galaxies nor does galaxy size have to be similar to other galaxies. Galaxies appear to occur in pairs or in larger groups. The red shift of light from galaxy pairs is usually different, indicating from the Hubble relationship that they are moving at different velocities relative to the earth. However, over the years no apparent change in their relative positions has been observed.

#### Red Shift

If the red shift of light from the galaxies is not an indication of relative velocity, then some other explanation must be given.

When a series of studies of Quasars (quasi-stellar objects) was started it was found that their red shifts were larger than the faint galaxies. They were first assumed to be even farther away than the galaxies, but as data were accumulated it became evident to some astronomers that the quasars were associated with galaxies and showed distinct violation of the red shift-

distance relationship. Reports of these findings were not accepted by the astronomy journals since the implications of such data were contrary to the Big-Bang hypothesis. Astronomers were comfortable with the Big-Bang cosmology, and anyone upsetting it was not welcome in their midst.

A large body of evidence exists showing that galaxies and quasars can violate the red shift-distance relationship. Quasars are not the most distant objects in the universe, but are associated in space with relatively nearby galaxies. (Arp)

Documentation of the red shift problem is found in *Quasars, Redshifts and Controversies* and *Seeing Red* by author and astronomer Dr. Halton Arp.

Quasars enormous red shifts are not from Doppler effects of an expanding universe. Red shifts are intrinsic properties of the quasars and galaxies related to their magnetic field strength. (Ref. Bergman, David, **Origin of the Redshift**, Common Sense Science, 2001)

Quasars and galaxies have origins different from the standard Big Bang model of the universe. Quasars and small galaxies appear to be generated from large galaxies. (Not proven)

A static universe, one that is neither contracting nor expanding, could be a reality. This is not a popular concept with most astronomers and astrophysicists.

We don't know how far away most of the stars and galaxies are or how they are changing, but evidence is quite clear, God didn't use the Big Bang to create the universe.

Conclusions logically drawn from factual data are no more valid than the assumptions on which they are based

British astronomer Sir Fred Hoyle made the following statement.

"I have little hesitation in saying that a sickly pall hangs over the Big Bang theory. When a pattern of facts becomes set against a theory, experience shows that the theory rarely recovers."

**The Big Bang Under Attack**, Science Digest, V. 92 May 1984 p. 84

#### Factors supporting a young universe

1. Supernova remnants should number in the thousands if the universe is old, but there are only 205 detected. This is 65 less than expected by astronomers even assuming the universe is 7,000 years old. (Ref. Davies, Keith, **Distribution of Supernova Remnants in the Galaxy**, Proceedings of the 3<sup>rd</sup> International Conference on Creationism, pp. 175-182, 1994)

2. Deep Space Galaxies appear much the same as other galaxies, indicating that galaxies have not evolved but were created much as we see them today. (Ref. Goldsmith, D., Digging deeply in galaxies pasts, Science 271, 1996)

3. Red dwarfs are assumed to be faint old stars that should number in the thousands if the universe is billions of years old. However, astronomers have reluctantly admitted that the

limited number found fits a biblically young universe of 10,000 years or less. (Ref. Davies, Keith, Interview in 'This Week in Bible Prophecy' No. 191)

### Christians reaction to long ages

Many Christian scholars began to accommodate long ages into their interpretation of Genesis. The long age ideas did not initially find acceptance in most churches. But as some seminaries began teaching future pastors the new ideas, the long age concepts began to invade the churches. Bible commentaries and reference Bibles carried the message of long ages. The **Scofield Reference Edition**, because of its wide distribution and support of long ages, was instrumental in leading people into the mindset of long ages. While many remained true to the literal interpretation of Scripture, large numbers of Christians accepted the idea of long ages without understanding the full implication of their action. The accuracy of the Genesis record was being questioned, and more liberal interpretations were being made in other portions of Scripture.

"Creation not only serves as a good basis for science, but for all of life. It brings meaning to the totality of existence." (Chittick)

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Robert Helfinstine is a retired professional electrical engineer having spent 40 years working for Honeywell in the field of control systems for aircraft, spacecraft and missiles. He worked for two years in Europe, part of the time in Germany and part in Sweden.

Robert has been on the board of directors of the Twin Cities Creation Science Association since 1976 serving as secretary, treasurer and president. In 2003 he was granted the title of president *emeritus*. His main area of study in the creation science field was post-flood catastrophes and their correlation with Scripture.

He has also participated in excavation activities for dinosaur and human tracks in Texas and dinosaur bones in Wyoming. The book *Texas Tracks and Artifacts* was written to document some of the work done in Texas.

In 1996 Robert went to Ukraine to teach a 50-hour course in Bible-Science Relationships at Zaporozhye Bible College, a topic that was well received by the students.

Beginning in his high school years he has been active in church and church related activities. He has served as Sunday School superintendent, treasurer, trustee and deacon as well as being a Bible teacher.

Robert is also a registered Tree Farmer. With a ready supply of ash, birch and oak wood for lumber, he enjoys making furniture and other wood products.