WHEN DID CREATION TAKE PLACE?

When did it all begin? This is a common question many have asked. Did Creation take place millions and billions of years ago in the past, or was it something that happened as recently as a few thousand years ago. The subject of the age of the earth is a topic which has interested all at one time or another.

The evolutionary viewpoint for the age of the earth states the earth is very old. The majority of scientific sources dealing with this subject would suggest the universe is between 15 and 20 billion years old and the earth is about 4.5 to 5 billion years old.

A study of the Biblical account of beginnings indicates the earth is very young. An overview of the geneologies, or the records of the generations since Adam as listed in scripture, indicates the Creation week took place approximately six thousand years ago. The suggestion of such a young age for the earth, to most people who have accepted the evolutionary model of the earth's history, is absolutely ridiculous. Obviously, there is a very large difference between five billion and six thousand years. If one is correct, then the other must be seriously in error.

It is interesting that many people have established their view on the age of the earth, without examining the evidence for themselves. The science of geochronology deals with the subject of determining the age of the earth. At present there are over eighty different methods used in the science of geochronology. Most people are unaware that the majority of these methods give a young age for the earth and not the proposed billions of years as strongly upheld by the evolutionists. (Figure 6) Later in this book when we discuss the evolution model, we will see why this concept of long periods of time is so essential for the feasibility of the evolutionary theory.

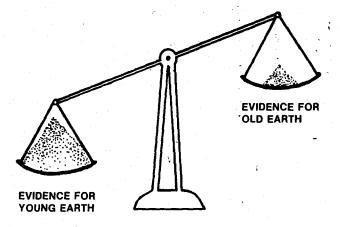


Figure 6:

The majority of the methods for determining the age of the earth indicate the earth is young. Only a few questionable methods of geochronology support the evolutionary concept of billions of years of age.

Geochronology is based on the foundational principle of evolution, that the present is the key to the past. This concept, better known as uniformitarianism, believes various factors such as erosion by wind and water, volcanic activity, and the rising and sinking of land, are occurring at the same rate as they did in the past. With this assumption in place, the geochronologist then attempts to measure the age of the earth or other heavenly bodies in the universe. Using this method, let us look at some of the evidence that would indicate that the earth and universe are not nearly as old as we have been told.

Cosmic Dust On The Moon

With the use of satellite technology, scientists are capable of measuring the amount of cosmic dust filtering into the earth's atmosphere each year. Scientists have speculated that over the estimated billions of years of earth history, fifty or more feet of cosmic dust may have fallen. (Figure 7) Because of the erosion created by the earth's environmental conditions, an accumulation of this depth could not possibly be found in any one location.

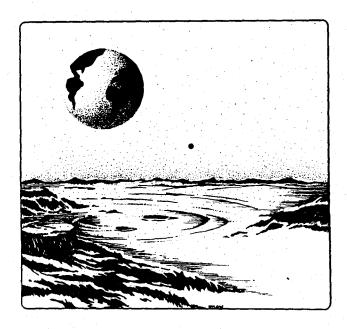


Figure 7: If cosmic dust has fallen on the moon for over 4.5 billion years here should be an accumulation of more than 50 feet of dust.

The factor of accumulating cosmic dust, caused a great deal of concern for the initial explorations that took place to the moon. Unlike the earth, the moon is not subject to erosional processes created by wind and water. Because most evolutionary scientists believe the earth and the moon are of similar age, it was expected lunar landing modules would encounter a problem trying to land in over fifty feet of cosmic dust. As a result of this projection, based upon the assumed millions of years of age for the earth and moon, engineers in charge of design of the lunar landing modules, constructed large pads so the space probes would not sink deep into the dust.

When the first landing on the moon was accomplished, scientists were shocked to find the expected accumulation of dust was not present. In fact the dust was only a few inches thick, indicating a period of accumulation less than 10,000 years. (Figure 8) Creationists, like Dr. Werner Von Braun, had predicted this all along, based on his view of a young earth and universe as outlined by the creation account. Assuming the present rate of accumulation is the same as it was in the past, the amount of accumulated cosmic dust indicates the age of the moon, and therefore the earth, can not be as old as evolutionists have suggested.

Earth's Magnetic Field

Another method of geochronology which shows a young age for the earth, is the measurement of the strength of the earth's magnetic field. Analysis of the data recorded over the past 130 years, indicates the strength of the magnetic field has been getting weaker and weaker each year. (Figure 9)

If we were to draw a graph using the data which has been collected, and making the assumption that the rate of magnetic decay has been the same in the past as it is today, the strength of the earth's magnetic field would have been equivalent to a magnetic star only 10,000 years ago. Obviously no life could possibly exist under these conditions. If the graph was extrapolated back as far as 30,000 years, then the magnetic

strength of the earth would have been sufficient enough to generate temperatures in excess of 5000 degrees Celsius. This temperature is sufficient to melt or vapourize the elements of the earth. According to this method of geochronology, there is evidence to show the earth can not be as old as suggested by the evolution model.

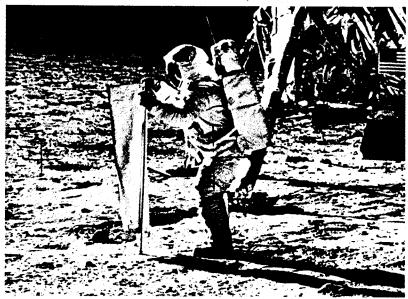


Figure 8: Explorations on the moon have revealed the presence of only several inches of cosmic dust indicating less than 10,000 years of accumulation.

Another important factor which must be considered as a result of the earth's decreased magnetic field, is the effect this condition would have on the Van Allen radiation belts that surround the earth. Figure 10) These belts are very important in determining how much cosmic radiation comes in upon the surface of the earth. Cosmic radiation in turn is an important factor in determining the rate of radioactive carbon 14 formation. Carbon 14 is a method used for dating organic

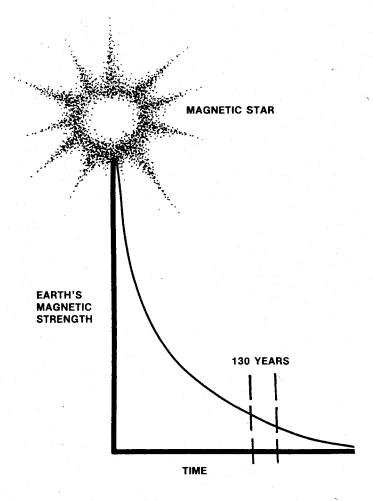


Figure 9: The earth's magnetic strength is decreasing with time. Measurements over the past 130 years recorded a 14% decrease, indicating the earth's magnetic strength decays by one-half every 1400 years. If this decay has remained constant, 10,000 years ago the earth's magnetic strength would have been equivalent to that of a magnetic star. No life could have survived on earth with magnetism of that intensity.

material, and is based on the assumption that the amount of radioactive carbon in the earth's atmosphere has always been constant. If there has been any fluctuation of the earth's magnetic field in the past, then the accuracy of this method would be highly suspect. We will discuss this area in more detail when we look at the area of radiometric dating, later in this book.

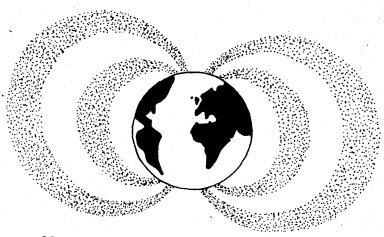


Figure 10: The strength of the Van Allen radiation belts around the earth is dependent upon the strength of the earth's magnetic field. If the earth's magnetic strength has been decreasing over time, the Van Allen radiation belts have not remained constant. This important factor poses serious questions concerning the reliabilty of the Carbon 14 dating method.

The Shrinking Sun

There are numerous other methods which indicate the earth and universe are much younger than what is commonly accepted. For example, measurement of the size of the sun in recent years, indicates the sun is shrinking. (Figure 11) If we extend this present rate of shrinkage back in time, we find that one million years ago, the sun's size would have been so large, the radiation coming from it would have made life impossible on earth.

The Creation Model 31

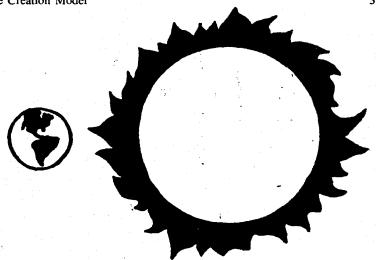


Figure 11:

The sun is shrinking at a rate of 0.1% per century or the equivalent of 5 feet per hour. At this rate, 100,000 years ago, the sun would have been twice as large as it is today. The size and radiation of the sun 1,000,000 years ago would have made life on earth impossible; 20,000,000 years ago the sun would have been large enough to touch the earth.

Comets

The presence of comets in our solar system indicates an age much younger than expected. Scientists have assumed the solar system and the comets associated with it are approximately the same age. We know each time a comet circles the sun, the solar winds tear debris off the cometary body. If comets have been circulating in the solar system for billions of years as has been suggested, then they should have been completely dissipated by now. In fact, some studies have indicated this would take place in 10,000 years or less.

Erosion of Continents

The erosional processes of wind and water provide another important factor indicating a young age for the earth. (Fig. 12)



Figure 12: The present rate of wind and water erosion, would erode continents to sea level within 14 million years.

Given the present rate of erosion, the continents could be completely eroded to sea level within 14 million years. Although 14 million years is a lot longer than the age of the earth proposed by the Creation model, it is less than one half of one percent of the age proposed by the evolution model.

Oil and Gas Deposits

Another interesting observation supporting the concept of a young earth, pertains to the extremely high pressures associated with oil and gas deposits beneath the earth's surface. (Figure 13) Many of these deposits are surrounded by porous material which would allow the dissipation of high pressures over the millions of years of time. The high pressure which remains gives a clear indication that petroleum deposits can not possibly be as old as theory suggests.

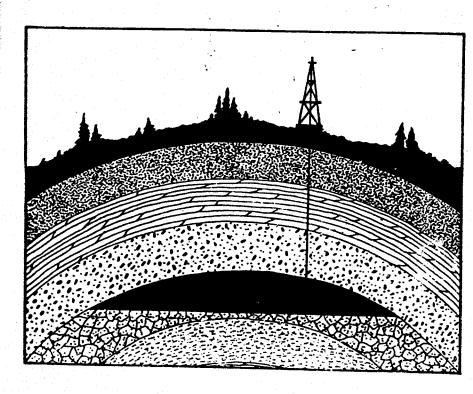


Figure 13:
Oil and natural gas are found in deposits of porous rock and sand. The extremely high pressure found in many of these porous reservoirs would have dissipated by now if these deposits were more than 10,000 to 100,000 years old.

These are just a few of the methods of geochronology used to lend proof to the idea that the earth is young. Certainly there is adequate evidence to challenge preconceived ideas that the earth and the universe are billions of years old.

Evidence For An Old Earth

There are a number of methods used in the science of geochronology which seem to indicate an extreme age for the earth. This of course, fits with the evolutionary concept. These methods we will be looking at are referred to as the radiometric dating methods. Most scientists are convinced these dating techniques are accurate and reliable. It is very common to read scientific publications which have used radiometric methods for dating certain layers of the earth. Radiometric dating methods have become an important basis for the claim that the earth is billions of years old.

Let us consider how the radiometric dating methods measure time. The most common methods that are used are:

- 1. Uranium-lead method
- 2. Rubidium-strontium method
- 3. Potassium-argon method

In each of these systems, the parent element or the element which is undergoing decay (uranium, rubidium, potassium) is gradually changed into the daughter component (lead, strontium, argon) of the system. With the use of an instrument called a mass spectrometer, it is possible to measure the ratio of the parent and daughter elements involved. The radiometric decay rate of the system, is then used to determine how long the process of decay has been taking place.

The radiometric dating techniques are based on several assumptions.

- 1. The system must have been initially made up of all parent elements and no daughter elements.
- 2. The rate of decay must have been constant from the moment the process was started.

3. The system must operate as a closed system. Nothing from the system can be taken away; nothing from outside the system can be added.

As we examine these basic assumptions, the highly speculative nature of the radiometric dating methods becomes apparent. None of these assumptions are testable or provable. and therefore not scientfic. For example, it is impossible for anyone to know the initial components of the system. To state that the system began as 100% parent element and 0% daughter element is an outright guess. Secondly, it is unreasonable to suggest the decay rate has always taken place in the past, at the same rate it is observed today. Every process in nature operates at a rate influenced by numerous environmental factors. For example, in the process of radiometric decay, it is known that a factor of extreme temperature change alters the rate very significantly. And thirdly, there is no such thing as a closed system in nature. The whole concept of having a process taking place over long periods without any outside interference is purely hypothetical. It is totally impossible to make the claim that parent or daughter elements have neither been added to or taken away from the system over millions of years of time.

In order to better understand how these dating techniques work, let's look at some different examples. If a scientist wants to determine the age of a specific rock or layer, what procedure would he take? One of the common materials that is used in dating procedures, is rock which originates from volcanic activity. (Figure 14) Often fossils are found in layers surrounded by volcanic material. In order to determine the age of the fossil, an age is assigned to the volcanic material that is either above, below or around it, by using the potassiumargon or uranium-lead radiometric techniques. Often these dates are published in scientific journals and accepted as accurate and reliable.

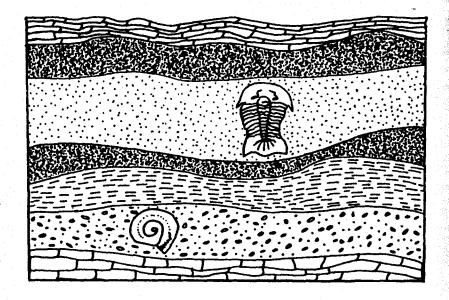


Figure 14: In order to determine the age of a fossil, volcanic materials from layers surrounding the fossil are subjected to radiometric dating. Are these techniques reliable?

How Reliable Are Radiometric Dates?

The question which needs to be asked is; how reliable are these dating methods? We have already seen that the theory behind the dating procedure is based on several assumptions which can not be tested. Is there other evidence to indicate there are reasonable grounds for questioning these procedures? There are numerous examples of inconsistencies which raise serious doubts about the validity of radiometric dating. Lets look at some of these examples.

Lunar soil obtained from the Apollo 11 mission was dated by four different radiometric methods. The results from these dating procedures produced four different ages.

> Pb207-Pb206 -- 4.60 billion years Pb206-U238 -- 5.41 billion years Pb207-U235 -- 4.89 billion years Pb208-Th232 -- 8.20 billion years

Lunar rocks taken from the same location and dated by a potassium-argon dating technique gave an age of 2.3 billion years. Five different dates were determined by five different methods. Which one of these dates is the correct one, or are any of them correct? These findings were reported in Science, volume 167, January 30, 1970.

The Apollo 16 mission brought back a moon rock which was dated by three different methods giving ages ranging from 7 to 18 billion years old. It was determined these ages were not correct because of an excess of lead in the samples. Removal of the lead by an acid treatment produced an age of 3.8 billion years which was considered acceptable. This was reported in Science, volume 182, January 30, 1973, page 916.

If there is an uncertainty about the accuracy of a dating technique, a good way of testing the method would be dating a material of a known age. If the dating procedure came up with the same age as the known material, then you would know

the method was accurate and reliable. Let's look at what happens when volcanic material of a known age is tested by radiometric techniques. The Journal Of Geophysical Research, volume 73, July 15, 1968, reported that lava rocks formed in 1800 and 1801 in Hawaii were dated by a potassium-argon method and showed an age of formation of 160 million to 3 billion years. This shows a tremendous discrepancy between the actual age and the age as determined by a radiometric dating method.

Another example of erroneous dating is reported in Science, volume 162, October 11, 1968. Volcanic rocks known to be less than 200 years old, were dated by a radiometric dating method and showed ages of 12 - 21 million years. It is apparent that the reliability of these dating methods is in question when tested against materials with a known date of origin. We must remember, that these same dating techniques are the ones scientists believe give a positive proof for the earth being billions of years old.

Most of us have read articles in scientific publications which give precise dates for important finds supporting the evolutionary view of origins. Most readers rely heavily on the accuracy of these dates, and accept them without question. Lets look at some examples to show how some of these dates are determined.

National Geographic, June 1973, has a very important article called "Skull 1470", telling about a human-like skull found by Richard Leakey in Africa. (Figure 15) The reader is told the skull was determined to be 2.8 million years old. The article states the date was determined by the use of the potassium-argon radiometric dating procedure, by dating volcanic material in which the skull was found.

Another interesting article is found in National Geographic, December, 1976. Here we are told about some important skeletal remains found by Donald Carl Johanson. (Figure 16) Johanson, who has nicknamed his discovery "Lucy", claims this organism is a credible link in the proposed lineage from ape to man. The article makes the claim that the age of this

specimen is approximately 3 million years old. The age was determined by doing a potassium-argon test, using volcanic materials in the layers surrounding the fossil.

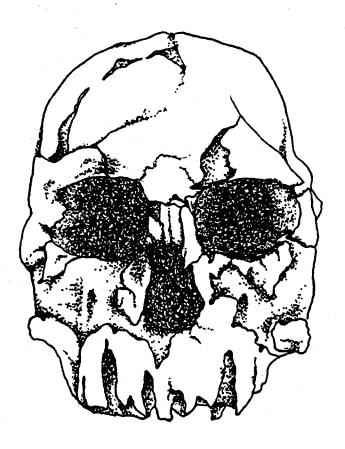


Figure 15:
"Skull 1470", found by Richard Leakey, is claimed to be 2.8 million years old. National Geographic, June 1973, page 824, states: "layers of volcanic tuff, datable by the potassium-argon method have led scientists to fix the age of the level that yielded the "1470" skull at 2.8 million years." Note: volcanic material was used to determine this age.

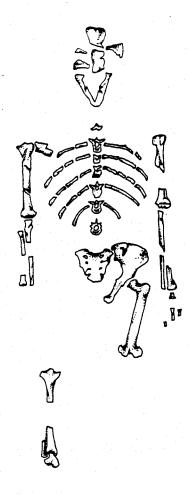


Figure 16: "Lucy", a skelton found by Donald Carl Johanson, is alleged to be three million years old. National Geographic, December 1976, page 801, indicates that volcanic tuff dated by the potassium-argon method "determines the dates of volcanic eruptions, thus placing age limits on fossils deposited above and below. Note: volcanic material is used to determine age.

Or we could look at an article called "Footprints In The Ashes Of Time", by Mary Leakey, as reported in the National Geographic, April, 1979. These footprints are claimed to be made by ape like humans living 3.6 million years ago. Once again, we are told dating was accomplished by the use of the potassium-argon method on volcanic material.

Previous to these three examples, we discussed the high degree of inaccuracy exhibited in dating volcanic material of a known age. We saw how volcanic material formed on the surface of the earth as recently as 200 years ago, gave an age of millions of years by radiometric methods. In light of this kind of evidence, we must ask ourselves, how reliable are the radiometric dating methods?

Carbon-14 Dating

The radiometric methods that we previously discussed deal with measuring the age of materials classified as inorganic or non-living material. Now we are going to look at a dating method commonly used for dating organic material, material which at one time was part of a living organism.

The Carbon-14 method is based upon the measurement of the radioactive element, carbon-14, found in all living tissues. As a result of radiation passing through the upper atmosphere of the earth, ordinary nitrogen atoms are changed into radioactive carbon-14. (Figure 17) Some of these radioactive atoms are then incorporated into carbon dioxide molecules, which are in turn taken up by plants in the process of photosynthesis. Animals consume plant material or meat that can be traced back to a plant source. Thus every living organism, whether plant or animal, contains a certain amount of radioactive carbon-14.

When an organism dies, carbon-14 intake ceases and the radioactive element begins the process of decay back to nitrogen. By measuring the amount of radioactive carbon in a sample, an indication can be made as to date of death. The more carbon-14 present, the younger the age; the less there is, the older the specimen.

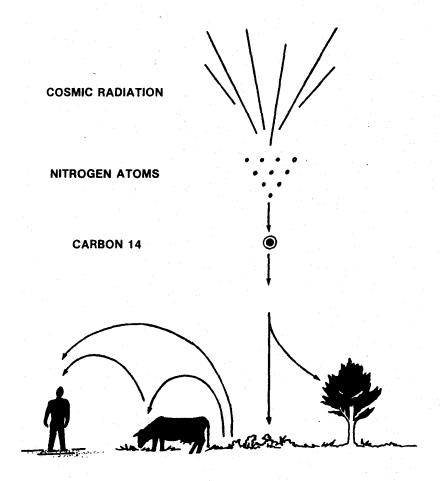


Figure 17: Cosmic radiation produces radioactive Carbon 14, which eventually becomes a component of all living things.

As with other radiometric dating methods, the carbon-14 method depends on several assumptions. One of the most important assumptions, in order for this method of dating to work, is that the amount of radioactive carbon in the earth's atmosphere in the past, would have been constant. This would mean the rate of formation of radioactive carbon would have had to equal the decay rate in the age which the specimens lived. Secondly, it must be assumed the decay rate was the same in the past as it is today. Another important factor is that no contamination of radioactive carbon could occur since the death of the specimen.

In order to fairly evaluate the accuracy of the carbon-14 dating method, let's examine the observable evidence. There are a number of environmental factors that we could look at which indicate that the rate of radioactive carbon formation has not been constant in the past.

- 1. The power of the earth's magnetic field has decreased by approximately 14% over the past 130 years. As a result of the decreasing magnetic field, cosmic radiation more readily penetrates the earth's atmosphere, thus increasing the rate of carbon-14 formation. This observation indicates the rate of formation has not been constant in the past. (Figure 18)
- 2. Volcanic activity in the past would also be an important factor. One of the major components of a volcanic eruption is the liberation of carbon dioxide. Periods of violent volcanic eruptions would upset the carbon-14 balance required for this method to be valid.
- 3. Solar flare activity taking place on the sun is responsible for an increased rate of formation of radioactive carbon.
- 4. It has been discovered that nuclear tests made in the past several decades have been responsible for an increase in the rate of radioactive carbon formation
- 5. Collisions of asteroids or meteorites taking place on the earth are responsible for drastically increasing the rate of radioactive carbon formation. For example, the Tunguska

explosion in Siberia in 1908, which was attributed to an asteroid or a meteorite exploding in the earth's atmosphere, caused such an increase. Tree rings from all over the world, indicate that the year following the Siberian explosion, the measurement of radioactivity was much greater than normal.

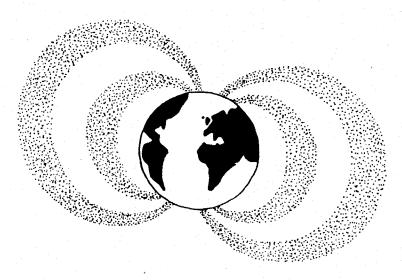


Figure 18:
The strength of the Van Allen Radiation Belts affects the amount of cosmic radiation entering the earth's atmosphere to produce Carbon 14. As the earth's magnetic field decays over time, the Van Allen Belts weaken, allowing more cosmic radiation to penetrate the atmosphere. The rate of Carbon 14 formation has not been constant.

It is apparent, assuming the rate of carbon-14 formation and decay to have been constant in the past, is inaccurate. There is no possible way of making adjustments to compensate for all the variables that have occured in the past. A fair evaluation of the observable evidence clearly indicates that carbon-14 dating is highly suspect.

Reliability Of Carbon-14 Dating

How reliable is the Carbon-14 radioactive dating method? When dates are published in various scientific articles, can we accept these as being accurate and unquestionable? Many scientists have claimed the dating of organic material is trustworthy and precise as a Swiss watch. Let's look at a few examples indicating good reason to question the reliability of this method.

- 1. Living mollusks have been dated by the carbon-14 procedure and assigned an age of 2300 years old. These results were recorded in <u>Science</u>, volume 130, December 11, 1959.
- 2 Nature, volume 225, March 7, 1970, reported a carbon-14 test was done on organic material contained in the mortar of an English castle. Although the castle was known to be 787 years old, the carbon-14 date gave an age of 7370 years old.
- Freshly killed seals were dated by the carbon-14 method, and an age was assigned at 1300 years old; Mummified seals that had been dead for 30 years dated 4600 years old. These results were reported in the Antarctic Journal of The United States, volume 6, 1971.

The following chart illustrates a sampling of dates taken from the scientific journals <u>Radiocarbon</u> and <u>Science</u>. It gives a comparison of carbon-14 dates with dating of specimens by the geological time frame. The geological dates or ages were determined by evolutionists well over 100 years ago, and are

still aknowledged by the majority of scientists today as accurate and reasonable.

Sample	C-14 Date (yrs. before present)	Geological Date (yrs. before present)
mammoth	11,000	20,000 - 35,000
natural gas	14,000	50,000,000
coal	1,680	100,000,000

It is obvious there is a very large discrepency between the Carbon-14 dates and the dates proposed by the geological column. However, both these dating methods are accepted as accurate and dependable by those who support the evolutionary theory, even though one obviously contradicts the other.

As we have examined the observable evidence regarding the question of the age of the earth, we have seen there are sufficient grounds to support the concept for a young earth. As we have seen, the majority of methods of geochronology indicate the earth is young. The radiometric techniques for dating the fossils and layers of the earth are not as reliable as we have been told. It is obvious you do not have to be classified as a religious kook or fanatic, if you hold to the Biblical concept of a young earth. According to the creation model, the earth is young. The observable evidence agrees.