

CREATION VERSUS EVOLUTION

Chronometers and the Age of the Earth

Lesson #6

We learned a few weeks back that scientists mostly rely on radiometric dating to come up with millions and billions of years for the age of the earth, rocks, fossils, and other things they assume are very old. We spent a lesson learning how radiometric dating works and the many problems associated with it. Radiometric dating is based on many unverifiable assumptions and has been proven to be very inaccurate. In fact, hundreds of comparative tests have proven beyond a doubt that radiometric dating is not to be trusted. However, scientists continue to trust in it as it is the only method that, by manipulating the evidence, one can use to support the millions and billions of years needed for evolution to supposedly take place.

We also considered two other kinds of dating. The first was *dendrochronology*, dating wood by examining the growth rings. Yet this method is very limited because it only works on wood and you need to have a good sampling of trees going back in time to create a growth ring sequence to compare samples with. Though very accurate when a complete chronology of tree rings can be assembled, and only one ring formed per year assumed, it has limited use.

Finally, we discussed physical *chronometers*. These are physical processes that we can measure today. Using hard science we can determine a specific rate of increase or decrease in various physical processes. The rate of the process is like a clock. The process moves the hands of the clock forward at a specific rate. Once the specific rate is determined, by mathematical extrapolation, we can rewind the clock and consider the consequences. Most chronometers argue for a very young age of the earth and none of them support an age of the earth being billions of years old.

Chronometers have their limitations however. They assume that whatever process is being measured in the present, was the same in the past. Of course, the Bible says differently. Because we have to assume past uniformity in present processes, chronometers fall outside the realm of hard science. However, assuming physical processes have remained the same is the reasoning used by *uniformitarian evolutionary theory*. Evolutionists claim physical processes in the present were the same in the past. This must be the case or evolutionary theory falls apart.

Creationists, however, believe that creation was a supernatural act of God and therefore cannot be measured or repeated. In addition to divine creation, most creationists believe there was a water canopy around the earth which would have affected certain physical processes. They also believe in a global flood which surely affected other physical processes as well. Thus some or all of the physical processes used for chronometers might have been different in the past. We can't be sure. But using the uniformitarian assumption of evolutionists, we will examine some of the physical chronometers that scientists have discovered and see what they teach us about the age of the earth when we wind their clocks backwards.

I. A KEY TEXT TO CONSIDER BEFORE LOOKING AT CHRONOMETERS

II Pet. 3:3-7, “Know this first of all, that in the last days mockers will come with their mocking, following after their own lusts, 4 and saying, “Where is the promise of His coming? For ever since the fathers fell asleep, **all continues just as it was from the beginning of creation.**” 5 For when they maintain this, it escapes their notice that **by the word of God the heavens existed long ago and the earth was formed out of water** and by water, 6 through which **the world at that time was destroyed, being flooded with water.** 7 But by His word the **present heavens and earth are being reserved for fire**, kept for the day of judgment and destruction of ungodly men.” (emphasis mine)

- A. Notice that end times mockers will espouse a uniformitarian view of the past (**vs. 4**).
- B. Notice that at least they believed in divine creation (**vs. 4**).
- C. Notice that uniformitarianism cannot be true because God spoke everything into existence (**vs. 5**).
- D. Notice that uniformitarianism cannot be true because the earth was formed out of water (**vs. 5**).
- E. Notice that uniformitarianism cannot be true because the earth was flooded (**vs. 6**).
- F. Notice that uniformitarianism cannot be true because the present heavens and earth will be judged with fire (**vs. 7**).
- G. The Bible argues against physical processes always being the same in the past. However, after creation and/or after the flood, some physical processes may have remained constant.

II. SPACE CHRONOMETERS

- A. **Moon dust and billions of years.** Space dust is constantly falling on the moon’s surface (and the earth’s). The rate at which moon dust falls on the moon is debated, especially since evolutionists discovered the amount of dust on the moon was not what they expected. Because there is no wind or rain on the moon, erosion is very minimal and dust builds up over time. Scientists have proposed many rates at which they believe space dust is

currently falling on the moon. Some are very high (fitting the creationist position) and some very low (fitting the evolutionary position).

If you pick, let's say, a low average of current estimates (favoring the evolutionary time table) and you multiply the rate space dust falls on the moon by 4.6 billion years, it should give you an average depth of moon dust. This is what scientists did and before man landed on the moon, they sent several unmanned spacecrafts to the moon in the early 1960's to investigate the amount of moon dust. More definitively, in 1969, Apollo 11, and the first manned lunar module set down on the moon. Some had previously believed, because of evolutionary assumptions, that astronauts and their spacecrafts would disappear into the dust on the moon's surface, it would be so thick. Yet that is not what the unmanned Ranger spacecraft determined and not what astronauts discovered when they arrived. Before men landed on the moon, Dr. William Overn of the Jet Propulsion Laboratory in Pasadena (JPL), who worked on the Apollo 11 project, argued:

I simply told them that they should expect to find less than 10,000 years' worth of dust when they got there. This was based on my creationist belief that the moon is young. The situation got so tense it was suggested I bet them a large amount of money about the dust. . . However, when the Surveyor spacecraft later landed on the moon and discovered there was virtually no dust, that wasn't good enough for these people to pay off their bet. They said the first landing might have been a fluke in a low dust area! So we waited until ... astronauts actually landed on the moon.¹

Since the physical evidence now proves there is very little dust on the moon, evolutionists have labored to find research that fits an old age of the moon. This they did, as we would expect, for they would not give up their precious theory. They have provided data showing that the rate of space dust falling on the moon is nowhere near what they previously believed. This is another good case in point that what science says is true, is often denounced as false a few years later. The fact is there are only a few inches of space dust on the moon's surface. If evolutionists are wrong, and the rate of space dust falling on the moon is greater, their theory crumbles. Yet the lack of dust provides no problems for a young age of the moon proposed by creationists.² Solarviews' website notes:

¹<http://www.answersingenesis.org/articles/tj/v7/n1/moondust>

²John Morris, *The Young Earth* (Green Forrest: Creation Life Publishers, 1997), 87-88.

From the bottom rung of the ladder, Armstrong had to make a three-foot jump down to the footpad—a contingency against a less than gentle landing that might have compressed and shortened the landing strut. From the footpad, he had only a couple of inches to step down to the surface itself. He stood on the pad for a moment or two, testing the soil with the tip of his boot before he made the epochal "small step". The soil was very fine grained and had a powdery appearance and, once he stepped down, his boot sank perhaps a couple of inches, making a sharply defined print.³

- B. **Comets exist – but shouldn't.** When a comet orbits around the sun, ice particles are released—it's like a snow ball that when thrown loses some of its size as it flies through the air to strike its target. Scientists for a long time said that comets were created when the universe was formed. If this were so, then there should not be any comets because they would have disintegrated long ago. However, comets exist, which fits perfectly with a young age of the universe as taught in Genesis 1. Evolutionists, not having an answer to this dilemma, have proposed a mythological "Oort Cloud,"⁴ which is kind of a comet producing factory—a mother of all comets—that supposedly keeps giving birth to new comets, sending them out on their own into space. Of course there is *no evidence* that an "Oort cloud" exists, but evolutionists are determined to believe one exists so that they don't have to believe the Bible along with its Creator and Judge!
- C. **The Sun would have burnt up the earth.** Scientists estimate that the sun shrinks at a rate of about 5 feet per hour. If this rate has been constant, one million years ago the sun would have been so hot it would have burnt up the earth. Not only that but 11.2 million years ago the sun would have been touching the earth!⁵ And if you go back 20 million years, it would have engulfed the earth. Obviously this would have been a huge problem for life to exist on earth!⁶

³<http://www.solarviews.com/eng/apo11.htm>

⁴<http://www.answersingenesis.org/articles/tj/v15/n2/oort>

⁵http://www.earthage.org/youngearth/evidence_for_a_young_earth.htm#The Sun:

⁶<http://www.icr.org/article/sun-shrinking/>

- D. **The Sun would have frozen the earth.** Another problem, opposite of the one above, tells us that maybe the sun was cooler before. Scientists have discovered that the sun creates heat and light by a thermonuclear reaction where hydrogen is converted into helium deep in the core of the sun. Over the course of time the thermonuclear reaction of the sun would have changed its composition, causing the sun to grow brighter. In fact, scientists say that over 4.6 billion years the sun should have become 40% brighter! Evolutionists claim that life arose on earth by spontaneous generation 3.8 billion years ago. Since then the sun should have increased by 25%, which means it was 25% cooler 3.8 billion years ago. Answers in Genesis notes:

A simple calculation can be made assuming that, over time, there has been no change in the Earth's reflectivity or the ability of the Earth to radiate heat. While this approach is almost certainly unrealistic, it is useful to illustrate the problem. With these assumptions, we find that a 25% increase in solar luminosity increases the average temperature of the Earth by about 18°C. Since the current average temperature of the Earth is 15°C, the average temperature of the Earth 3.8 billion years ago would have been below freezing (-3°C). Thus when life supposedly was just beginning, much of the Earth would have been frozen.⁷

Evolutionists have tried to explain away this problem but to no avail. However, if you believe the Bible, you know the earth was created some 6,000 years ago, God was there and told us so, and the evidence works perfectly with what God's Word says!

III. EARTH CHRONOMETERS

- A. **Too Much Oil Pressure.** When they drill for oil deep in the earth, it often comes out under great pressure. You have probably seen video shots of oil, under great pressure, erupting from the earth like a geyser. Geologists say that oil is millions, if not billions, of years old. However, because rocks are porous, many scientists believe that oil should not be under any pressure at all after about 10,000 years.⁸ All the natural gas should have percolated to the surface by now and be gone in less than 100,000 years. Yet this isn't the case. In fact, oil and natural gas are usually under great

⁷<http://www.answersingenesis.org/articles/tj/v15/n2/faint-sun>

⁸http://www.earthage.org/youngearth/evidence_for_a_young_earth.htm#Oil Pressure:

pressure, arguing for a much younger age of the earth than 4.6 billion years! According to the Bible, Noah's flood happened about 4,000 years ago. During that time all the plant and animal material, which forms the oil and natural gas we use, would have been buried at one time in the global food of Noah. *Serious Life* magazine notes:

If the oil and gas pockets are millions of years old, all the gas pressure in the pockets should have been relieved, as the gas would have percolated up through the semi-porous and semi-permeable over-lying rock layers. In fact, all of the gas within the strata should have bled up through the overlying rock layers, and escaped into the atmosphere, in less than 100,000 years.¹ And yet, when an exploratory drill pipe enters a pocket of oil and gas (which is supposedly hundreds of millions of years old), great gas pressure often releases up the drill hole, a "gusher." The presence of this gas pressure, within the sedimentary strata, tells us that these deposits were formed less than 100,000 years ago.

Imagine an oil and gas field 10,000 feet underground which is said to be 300 million years old. Highly pressurized gas within this deposit would percolate up through the sedimentary rocks (as escaping gas can be monitored on the earth's surface). If this gas percolated up at a rate of only one inch per year, it would escape within 100,000 years; if it percolated up at a rate of .003 inch per year, it would escape to the atmosphere within the alleged 300 million years that the deposit is purported to be. One inch per year is plausible; .003 inch per year is not, as much more viscous matter (water and oil) percolate through rocks at much greater rates than .003 inch per year. (For instance, water tables rapidly rise after long and heavy rainfall.)⁹

- B. Tree rings argue for young earth.** There has been discussion as to which trees are the oldest on earth. Since trees can produce more than one tree ring in a year, some believe the Sequoias¹⁰ are the oldest, (they are certainly the largest). However, most believe the Bristlecone Pines are the oldest.¹¹ Whatever the case may be, trees tell us things. For instance, *Earthage.org* website notes:

⁹http://www.seriouslifemagazine.com/read.asp?a=143&t=Are_Coal_And_Oil_Deposits_Millions_Of_Years_Old

¹⁰http://www.pathlights.com/ce_encyclopedia/Encyclopedia/05agee3.htm

¹¹<http://www.sonic.net/bristlecone/intro.html>

The oldest living thing on earth is either an Irish Oak or a Bristlecone pine. If we assume a growth rate of one tree ring per year, then the oldest trees are between 4,500 and 4,767 years old. The fact that these trees are still alive and growing older means that we don't yet know how old they will get before they die. It also strongly suggests that something happened around 4,500 to 4,767 years ago which caused the immediate ancestors of these trees to die off.

Note also that it is possible for trees to produce more than one growth ring per year, which would shorten the above estimated ages of these trees. Also, with regard to fossil tree rings, the author has been unable to find any documented instances of fossilized trees having more than about 1,500 rings. Janelle says 1,700. This is significant since we are told that God (literally) made the Earth, and all that is in it, only about 1,800 years before the Noachian [sic] Flood described in the Book of Genesis.¹²

The point being made above is this, if the earth is in fact billions of years old and trees have been around for millions of years, we would expect to find fossilized trees that are at least 4,000 years old, because we know that trees live at least that long. However, we only find fossilized trees that are 1,700 years old or less. This fits perfectly with the biblical model. We would expect trees of about 2,000 years old to be found buried and fossilized because of the flood. They would have had 2,000 years to grow from the time of creation. After the flood we would expect to find no trees older than 4,000 years. This is what we find!

- C. **Helium in the atmosphere argues for young earth.** When Uranium-238 decays, helium is produced and escapes into the earth's atmosphere where it accumulates. No known process in the atmosphere removes helium. Using the uniformitarian assumptions of evolutionists, that all the helium we have has come from the decay of Uranium-238, and considering the amount of helium in the atmosphere today, the earth cannot be billions or even millions of years old, which is what we would expect for that is what the Bible says is true!¹³

¹²[http://www.earthage.org/youngearth/evidence_for_a_young_earth.htm#The Oldest Living Thing:](http://www.earthage.org/youngearth/evidence_for_a_young_earth.htm#The%20Oldest%20Living%20Thing)

¹³<http://www.trueorigin.org/helium01.asp> also <http://www.trueorigin.org/helium02.asp>

- D. **Magnetic field decay argues for a young earth.** The earth has a magnetic field around it that scientists have been measuring for quite some time. They have measured a constant rate of decay of about 5% every 100 years. What happens if we extrapolate backwards and increase the magnetic field by 5% every 100 years?¹⁴ Scary stuff! Four thousand years ago the magnetic field would have been about six times as strong as it is today. If we go back a mere 10,000 years, the magnetic field of the earth would have been strong enough to heat up the earth's atmosphere and prevent life on earth. If you go back 100,000 years it would have separated the earth's mantle from its core! Thus the magnetic field of the earth argues for an age of the earth of about 6,000 years, which just happens to be what the Bible says is true!¹⁵
- E. **The Dead Sea, a testimony to a young earth.** Scientists have been measuring the salt content of the Dead Sea, which is found in the lowest place on earth. The fresh waters of the Jordan river flow into the Dead Sea. The temperatures around the Dead Sea are very hot, often reaching 125 degrees Fahrenheit. Because the Dead Sea has no outlet, the salt content in the water increases every year as minerals flow in but are not removed by evaporation. Taking into account that in more recent years water from the Jordan has been diverted for irrigation, if one extrapolates backwards, you arrive at the age of the Dead Sea being no more than 50,000 years.¹⁶
- F. **Niagara Falls argues for a young earth.** Every year the rim of Niagara Falls erodes about 4 to 5 feet. The current channel is about 35,000 feet long. If you divide 35,000 x 4.5 feet per year, it gives an approximate age of the Niagara Falls channel as being about 8,000 years old. Of course, if there were a worldwide flood, as described in the Bible, the receding flood waters would have increased erosion for a time, making an age of the falls about 4,000 years which fits perfectly with the Bible.¹⁷

¹⁴http://www.earthage.org/youngearth/evidence_for_a_young_earth.htm#The Earth's Magnetic Field: See also http://www.pbs.org/wgbh/nova/transcripts/3016_magnetic.html

¹⁵http://www.creationresearch.org/crsq/articles/39/39_1/GeoMag.htm Also <http://www.icr.org/index.php?module=articles&action=view&ID=292>

¹⁶<http://www.varchive.org/itb/deadsea.htm>

¹⁷<http://www.answersingenesis.org/articles/cm/v22/n4/niagara-falls> Also see: <http://www.icr.org/article/dating-niagara-falls/>

- G. **Historical records of man argue for a young earth.** Often times you hear archeologists make claims of civilizations being 10 to 20,000 years old. Yet the scientific facts attest to the earliest known civilizations being no more than 3,000 to 5,000 years old.¹⁸ Sylvia Baker quotes one professor:

Professor Libby learned this when he tried to verify his Carbon-14 method. He said, 'The first shock Dr. Arnold and I had was when our advisers informed us that history extended back only 5,000 years... You read statements in books that such and such a society or archeological site is 20,000 years old. We learned rather abruptly (that) these... ancient ages are not known accurately; in fact, it is at about the time of the First Dynasty in Egypt that the first historical date of any real certainty has been established.'¹⁹

- H. **The minerals in the ocean argue for a young earth.**²⁰ Scientists have been measuring the accumulation of minerals in the ocean for some time. Water flows from the land, takes minerals, and deposits them in the oceans of the world. The water in the oceans evaporates and the distilled water from the clouds, not having removed any minerals from the ocean, again causes rain to fall on the land, washing more minerals into the oceans of the world.²¹ Thus over time the oceans accumulate more and more minerals. Scientists, in calculating the rate of increase of these minerals, have determined that the oceans must be about 5,000 years old – exactly what the Bible teaches!²²
- I. **The lack of human skeletal remains argues for a young earth.** Evolutionists say that mankind has been around for some 200,000 years. What this means is that humans must have been dying and being buried by their families (often with other artifacts) for the last 200,000 years.

¹⁸http://en.wikipedia.org/wiki/Cradle_of_civilization See also: Sylvia Baker, *Bone of Contention: Is Evolution True* (1986), 27.

¹⁹[http://www.earthage.org/youngearth/evidence_for_a_young_earth.htm#Historical Records](http://www.earthage.org/youngearth/evidence_for_a_young_earth.htm#Historical%20Records): See also: J. O. Dritt, *Man's earliest beginnings: discrepancies in evolutionary timetables*, *Proceedings of the Second International Conference on Creationism*, vol. II (Pittsburgh: Creation Science Fellowship, 1991), 73-78.

²⁰<http://www.icr.org/ocean-salinity/>

²¹<http://www.answersingenesis.org/articles/kw/liquid-water-earth>

²²<http://209.10.202.163/graphical/literature/oceans/oceans.html> See also: <http://www.answersingenesis.org/articles/2005/06/01/evidence-for-young-world>

Some 8 billion skeletons should be buried in the earth, but we find only a few human remains. This tells us that man has not been around very long, as evolutionists assert, and what fits is human remains since about 4,000 years ago – just like the Bible says.²³

J. **Earth’s human population argues for a young earth.** The population of the earth and various cultures and civilizations has been monitored for thousands of years. Population rates have been studied and the average of the earth’s population per year calculated to be about 1.8%.²⁴ No matter how you tweak the math, you can’t make the human population go back further than 10,000 years. In fact, a more reasonable estimation is 4,000, exactly what we would expect for that is when Noah and his family came off the Ark.²⁵ This is exactly what Arch Bishop Ussher concluded in his massive work, *The Annals of the World*.²⁶ Ussher concluded that creation happened on Oct. 23rd, 404 BC, or 6,000 years ago. The chart to the right was taken from www.about.com using population from 2010 and extrapolating backwards to 1 AD. Creation.com notes:

Year	Population
1	200 million
1000	275 million
1500	450 million
1650	500 million
1750	700 million
1804	1 billion
1850	1.2 billion
1900	1.6 billion
1927	2 billion
1950	2.55 billion
1955	2.8 billion
1960	3 billion
1965	3.3 billion
1970	3.7 billion
1975	4 billion
1980	4.5 billion
1985	4.85 billion
1990	5.3 billion
1995	5.7 billion
1999	6 billion
2006	6.5 billion
2009	6.8 billion
2011	7 billion
2025	8 billion
2043	9 billion
2083	10 billion

We can calculate the rate of population growth starting from about 4,500 years ago, when, from the historical details found in the Bible, Noah and his family—eight in total—survived the deluge. That population has to double 29½ times to get the current world’s

²³http://www.answersingenesis.org/articles/2005/06/01/evidence-for-young-world#fnMark_1_28_1 See also: E. S. Deevey, 'The human population', Scientific American 203 (September 1960), pp. 194-204.

²⁴<http://creation.com/human-population-growth>

²⁵<http://www.creationdefense.org/74.htm> see helpful chart that goes back to 1 AD at <http://geography.about.com/od/obtainpopulationdata/a/worldpopulation.htm>

²⁶ James Ussher, *The Annals of the Word* (1658), revised and updated by Larry and Marion Pierce (Green Forrest: Master Books, 2003).

population of six and a half billion, at an average doubling rate of once every 152 years. Interesting, isn't it? The Bible's time frame of history fits the data.²⁷

- K. The sediment on the bottom of the ocean argues for a young earth.** Every year, water, wind, and erosion deposit some 25 billion tons of dirt and rock into the oceans of the world.²⁸ The average depth of sediment on the ocean floors is about 400 meters (about 1,200 feet).²⁹ Christiananswers.net writes:

As far as anyone knows, the other 25 billion tons per year simply accumulate. At that rate, erosion would deposit the present amount of sediment in less than 12 million years.

Yet according to evolutionary theory, erosion and plate subduction have been going on as long as the oceans have existed, an alleged three billion years. If that were so, the rates above imply that the oceans would be massively choked with mud dozens of kilometers deep. An alternative (creationist) explanation is that erosion from the waters of the Genesis Flood running off the continents deposited the present amount of mud within a short time about 5,000 years ago.³⁰

Above we have surveyed some of the many chronometers that argue for a young age of the earth. As stated earlier, creationists don't believe in uniformitarianism, for we believe in divine creation about 6,000 years ago and a global flood about 4,000 years ago. However, we can consider the hard science of various processes and consider what they say about the age of the earth. Though some argue for longer ages than others, one or two million years at the most, none of them argue for billions or even tens of millions of years. Most argue for a very young, biblical age of the earth. Though all the chronometers above rely on assumptions, and therefore fall outside of science, we have an infallible source and a person who was there to tell us what happened and when; that source is the Bible and the person is God Himself. Keep in mind that if any single chronometer above is true, evolution can't be true!

²⁷<http://creation.com/human-population-growth>

²⁸V. V. Gordeyev, 'The average chemical composition of suspensions in the world's rivers and the supply of sediments to the ocean by streams,' *Dokl. Akad. Nauk. SSSR* 238 (1980), p. 150.

²⁹W. W. Hay, 'Mass/age distribution and composition of sediments on the ocean floor and the global rate of subduction,' *Journal of Geophysical Research*, 93, No. B12 (10 December 1988), pp. 14,933-14,940.

³⁰<http://www.christiananswers.net/q-aig/aig-c012.html>