
Creation Answers

Who writes this newsletter?

This newsletter is produced by Wayne Spencer on a Quarterly basis. Its purpose is to bring creation research within the reach of Christians and provide up-to-date reliable information on creation issues. Wayne Spencer is a creation author and former teacher who has presented papers at the International Conference on Creationism and has published in various creation publications, such as the Creation Research Society Quarterly, Creation magazine, the Journal of Creation, and Origins (from the Biblical Creation Society, UK).

This newsletter is meant to help people plug into creation resources and get informed about creation and evolution. It is provided free of charge on request. Using the free Adobe Acrobat Reader is necessary for viewing the newsletter. There are no restrictions in copying this newsletter or passing it on to others. To request to be placed on the e-mail list, send a request to wspencer@creationanswers.net.

More information on Wayne Spencer's education and publications can be found on the creationanswers.net web site. You'll also find many other resources.

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A Personal Note from Wayne Spencer

Greetings,

Hello everyone and thank you for your interest in my newsletter. Please tell others about this newsletter and my website if you have benefitted from them.

In this issue I decided to write about the young age evidence from magnetic fields. I go through a sort of history of the issue. It is a story covering over 40 years now. This is something that has been amazingly successful in explaining discoveries about the Earth and various solar system objects. For a long time I used to call this the best evidence for a young Earth. Now there are other really strong evidences for a young Earth and it is hard to choose the best. I think my new "best" today might be the Carbon-14 evidence from the RATE project. (To read about this, [click here](#).) I've tried to keep this from being too technical. I used to have a presentation about this on my website but it became pretty out of date because there is so much more evidence on it now. If anyone would like to get some of the sources mentioned in this to do more research on it, please email me and I can help. I have watched this topic for a long time.

I also have something about a topic where I am changing my point of view somewhat. Due to some new information I have decided to change my perspective on Earth impacts from space. I'm still learning.

I hope you have a good summer.
God bless.

Wayne Spencer, M.S., Physics

Magnetic Evidence for Young Worlds

It is now about 41 years since an idea began among creationist scientists that has been a great example of good science. This is about an idea that is an extraordinary example of good research from creationists. These ideas demonstrate a young age scientific model that has made successful predictions, that has not been falsified, that is much more successful than secular science, and that has been well verified and even extended. It is about the magnetic fields of Earth and of various solar system planets and moons. These ideas come from the research of Dr. Thomas G. Barnes and Dr. D. Russell Humphrey's.

In 1973 Dr. Thomas Barnes, a physics professor from Texas published a book called "Origin and Destiny of the Earth's Magnetic Field" for the Institute for Creation Research. This book was revised and expanded in a second edition published in 1983 by the Institute for Creation Research. I believe it was probably 1986 that I became interested in this topic and began looking into it. So I have had an interest in magnetism and the age of the Earth (and planets) for a long time. I remember being shocked in college when I heard in my astronomy class that physicists really believed Earth's magnetic field had flipped polarity at various times in the past. This means that the North Pole would become the South Pole for a while, and then reverse again. That was an idea I had trouble accepting for years.

Dr. Barnes questioned the secular old age theories about the Earth's magnetic field. He argued instead that Earth's magnetic field did not work as a "dynamo" as secular scientists said, but instead was simply decaying since creation. Dr. Barnes had once written a textbook on Electromagnetic Theory so he applied his skills to working out the mathematics of the decay of Earth's magnetic field and comparing it to historical measurements of Earth's magnetic field. He

found that the decay of Earth's magnetic field implied Earth had to be less than 20,000 years old. If you projected that far back in time Earth's field would be impossibly strong and the heat produced in Earth's core would become dangerous to us.

Dynamo Theories

The secular theories on Earth's magnetic field is a long story. Historical measurements show Earth's magnetic field decays to about half its strength every 1611 years. Evolutionary scientists are aware of this but they argue that we are only seeing the downward side of a sine wave type oscillation that continues to change over four billion years. They understand Earth's core as being a kind of magnetic generator, driven by a powerful electrical current in Earth's liquid outer core.

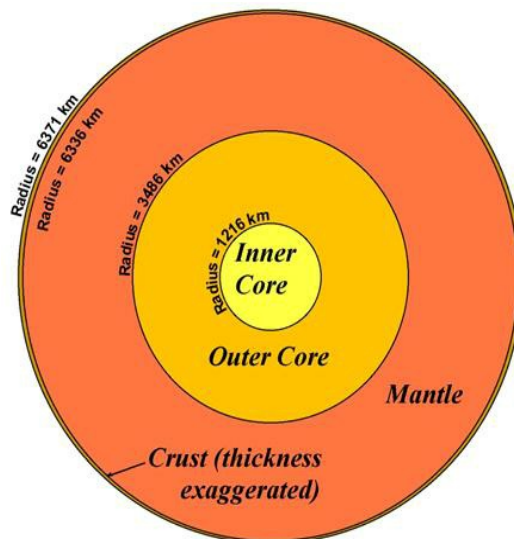


Figure 1 Earth's interior
(Purdue graphic)

It is true Earth's magnetic field comes from an electrical current, but how did it get there? Also, can Earth's magnetic field go on forever or is it running down? What does it tell us about Earth's age and Earth's origin? Secular dynamo theory is very technical. It

turns out that scientists found very early that simple arrangements of the Earth's core with moving molten iron and electrical currents would not generate a magnetic field. But they had to find a way to explain how Earth's magnetic field could last for 4.6 billion years. The dynamo theory is what they came up with. To make a long complex discussion very short, the dynamo requires that molten iron in Earth's liquid core move in a sort of helical motion. As it streams along it must rotate around its direction of motion. It is a combination of a circular convection motion and a circular electrical current roughly parallel to Earth's equator. So if you have an electrical current in a moving fluid that is also a conductor, like iron, then this can generate a magnetic field. This model means that for the theory to work, there must be a molten liquid iron core and the object (like Earth) must rotate. The rotation direction and the tilt of the Earth affect how strong the field is, as well as properties of the molten liquid.

In 1983 there was an interesting article in Scientific American about magnetic fields (Parker, E. N., "Magnetic Fields in the Cosmos," Scientific American, August 1983, p 45.) Parker made this statement, which shows an important limitation of the dynamo theories: *"The operation of either type of dynamo calls for the initial presence of at least a weak magnetic field or a weak current . . . Therefore the dynamo mechanism does not explain how the magnetic fields of planets and stars may have originated but rather how they are amplified and maintained in spite of the continual sapping of the field. . . ."*

This same article by Parker goes on to say the following about the problems explaining how magnetic reversals would happen: *"The scheme shown here is a model: the mechanism by which the field reverses polarity is not known . . . Although sudden changes in the pattern or rate of convection could cause reversals of polarity, it is not known why there should be sudden changes."* This would suggest there's good reason to question dynamo reversal theories. But there is more to the story.

Dynamo theories have inherent problems even today. Even the best efforts of scientists with today's computers have not solved certain aspects of the problem. Computer simulations always depend on the assumptions the programmer puts into the programming. Also even the best computers have limitations in what they are able to analyze. The liquid core of the Earth is under great pressure and is very hot. Under these conditions its viscosity, a measure of its resistance to flow, is very low. It flows about as easily as water. This is one aspect that modern computer simulations struggle with modeling properly. Another major limitation of modern simulations is that they are not able to properly handle the effects of turbulence. The entire dynamo concept depends on turbulent eddies of a certain kind forming in the molten liquid core. These eddies are believed to lead to the helical fluid motion that can generate a magnetic field. If something can change the fluid motion or mix it up, this can generate multiple magnetic fields that can cancel each other or cause a change in direction of the field. One of the fundamental problems of dynamo theories is that the turbulent eddies cannot be sustained long enough to maintain the helical motions. There is small scale turbulence that becomes too chaotic and which can't be modeled by computers.

There are other issues with dynamo theories as well. One basic question still has not been adequately explained about Earth. On Earth the magnetic field is tilted about 11.5° from the Earth's spin axis. Dynamo theories have the field generated from the planet's spin, which should make the field lined up with the planet's tilt. Dynamo theories have not yet really shown how the field could be tilted by 11.5 degrees from Earth's tilted spin axis! There have also been some attempts to build experiments to model dynamos, but they do not seem to be successful. Computer simulations, that leave out the small scale turbulence that destroys the mechanism, appear to successfully model magnetic fields. Also, often certain

parameters are put into the computer simulations that are not realistic numbers like the real Earth. One scientist wrote in 2002 that “the models all have severe deficiencies”

Humphrey’s Magnetic Model

In 1986 creationist physicist Russell Humphreys began to put forward new ideas that built on Barnes work but yet differed with it. Humphrey’s took as valid the basic concepts about the decay of Earth’s magnetic field from a decaying electrical current in Earth’s core. However, Barnes had rejected that magnetic reversals could happen for the Earth. But Humphrey’s accepted reversals and put them in the context of a new model of Noah’s Flood at that time, the Catastrophic Plate Tectonics model. Catastrophic Plate Tectonics (CPT) holds that there was rapid subduction of the ocean floor into the mantle during the Flood, and a rapid “turning-over” of the mantle that caused continents to be moved during Noah’s Flood. The CPT model leads to there being turbulence at the boundary of the liquid core and the mantle. This means that in Humphrey’s approach, not only could magnetic reversals happen, they could happen much quicker than secular scientists would imagine, in less than a month, during Noah’s Flood. In evolutionary dynamo theories, a magnetic reversal could require millions of years. In Humphrey’s model, the reversals cause some of the energy in Earth’s field to be lost, thus the field of the Earth would be weaker after the Flood than it had been prior to the Flood.

But is there experimental evidence of magnetic reversals? Yes. Humphrey’s detailed this evidence in a paper at the International Conference on Creationism in 1986. There is evidence from the mid-ocean ridges on the ocean floor but that evidence has been controversial sometimes. But there is much more evidence of magnetic reversals in lava flows on various continents. There are core samples cutting through many rock layers possessing particles magnetized in changing directions. As lava cools the

surrounding magnetic field will “freeze into” the rock as it cools below a certain temperature called the Curie point. Furthermore, the Sun also flips it’s magnetic field on a regular basis (though the Sun’s magnetic field is much more complicated). Thomas Barnes some years later acknowledged that Humphrey’s was correct about reversals.

Dr. Humphrey’s continued to work out details of how the magnetic field of the Earth could have been created. I’ve always been surprised by how well this idea works. The idea just applies something in the Bible. Genesis 1 and 2 Peter 3:5 describe Earth being formed out of water. Consider a water molecule, made of two atoms of hydrogen and one atom of oxygen. Each hydrogen has one proton in its nucleus. These protons have a magnetic moment of their own, as if they were like a little bar magnet. What if some of the water was created with the protons having their spins all lined up the same way initially, then this water was instantaneously transformed miraculously by God into other elements (such as iron). Sounds like a crazy idea but it actually works. This model can explain how a magnetic field can get started. Dynamo theories cannot explain this. The initial alignment of the protons in water molecules kick starts an electrical current that then becomes the current in Earth’s core that gets weaker after creation. This model can explain how a variety of types of objects in space could have a weakening magnetic field. It can explain how the magnetic field can be aligned differently than the spin of the planet, it doesn’t require that the core be molten, and it doesn’t have to be related to how fast the object spins.

Confirmations of Creation Model

In 1990 some confirming evidence was reported from evolutionary scientists that confirmed the model of Russ Humphrey’s. First, in 1989 some well known secular scientists reported finding evidence of a very rapid magnetic reversal in the vicinity of

Steens Mountain, Oregon. It happened in an area which had many thin lava flows, each of which would have cooled in a short time. The magnetism of the basalt there showed a dramatic change in magnetic direction. (See Coe, R.S. and Prévot, M., 1989. Evidence suggesting extremely rapid field variation during a geomagnetic reversal. *Earth and Planetary Science Letters* 92:292–298). In this paper, Coe and Prévot make this comment, *“Nonetheless, even this conservative figure of 15 days corresponds to an astonishingly rapid rate of variation of the geomagnetic field direction of 3° per day.”* This agrees more with Humphrey’s model of reversals during Noah’s Flood than secular theories. Secular scientists seem to dismiss this as not being a true reversal.

Humphrey’s applied his ideas on the creation of planetary magnetic fields to various solar system planets and to our Moon in a 1984 paper in the *Creation Research Society Quarterly*. So the ideas above regarding creation out of water used to explain Earth can explain other planets also. He calculated values for the present magnetic field strengths of Neptune and Uranus. He suggested values for both these planets would be 10^{24} Amperes-meter². He was just saying it would be within one power of ten of this number (10^{23} to 10^{25}). When he wrote his 1984 paper, the Voyager 1 and 2 spacecrafts were on their way but had not yet made it Neptune or Uranus. The Voyager 2 spacecraft passed by Uranus January 20, 1986 and passed by Neptune August 25, 1989. Both planet’s magnetic fields were about in the middle of the range Humphrey’s predicted. Humphrey’s model assumes an age of 6,000 years for Uranus and Neptune and calculates the magnetic field strength today. Humphrey’s approach was on the money but secular theories utterly failed. In fact, the magnetic fields of both Uranus and Neptune are offset from the center of the planet and tilted a significant angle compared to the planet’s spin axis. These aspects make Uranus and Neptune very hard to reconcile with dynamo theories.

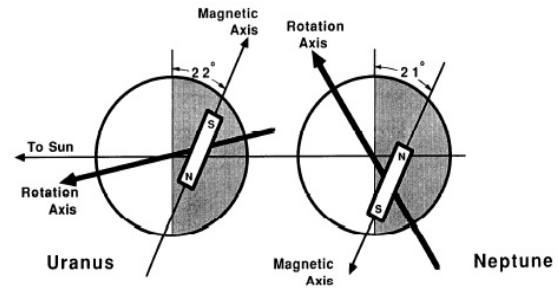


Figure 2 Uranus and Neptune’s magnetic field directions compared to the planet’s tilt. From CRSQ June 1990.

Humphrey’s theory is more successful in explaining Mercury and Mars than evolutionary dynamo theories also. In more recent years the NASA Messenger mission to Mercury has provided magnetic data that has also confirmed Humphrey’s magnetism model from its rate of decay. Humphrey’s magnetism model is more flexible in terms of the types of objects it can be applied to than secular dynamo theories. I wrote a short paper about Jupiter’s moon Ganymede, which still has a weak magnetic field. [CLICK TO GO TO](#) Humphrey’s model also successfully applies to explaining the magnetized Moon rock samples that were collected by the Apollo missions. Our Moon once had a magnetic field but it has decayed away. Yet there are some magnetized rocks on the Moon and there are still some magnetic anomalies in various locations.

At the International Conference on Creationism in 2008 Humphrey’s put forward more new ideas on magnetic fields. His “creation from water” model can be extended to a variety of types of stars, possibly even pulsars and magnetars. It can also be applied to galaxies. Some of these ideas are in early stages but the idea of creation from water, based on 2 Peter 3:5 has been a remarkably successful model. This is both a Biblical and a scientific model. It supports God creating as Genesis 1 describes and argues strongly for a young Earth, young solar system, and even a young universe.

The more types of objects in space this model can be applied to, the stronger the case it makes for the universe being created just several thousand years ago. (Humphrey's best estimate of the age of the Earth from his model was 8,700 years or less. To read an article by him about this [CLICK HERE.](#))

Secular theories rely on natural processes and exclude the possibility of supernatural creation or intelligent design by God. But a Biblical view is always true to the real world if we interpret both the Bible and the scientific data correctly.

Craters and Creation - A New View

For a number of years now I have written articles related to impact craters and Noah's Flood. In my 1998 papers presented at the International Conference on Creationism (ICC) I made a case for there being impacts during Noah's Flood. The evidence for this was presented in one paper and some of the effects of impacts was addressed in another paper at that conference. The evidence for impacts from space is scattered across the Earth on most of the continents and in all types of rock. Many of the rock layers that creationists believe formed in Noah's Flood have remnants of craters in them. This evidence is accepted by creationists with science degrees today. But, there has been much debate among creationist scientists over various questions about impact craters and Earth.

Exploration of our solar system has made it very evident that craters are abundant almost everywhere. There are a few objects in the solar system whose surfaces have been covered over and thus you can't see many craters on them, such as Venus and Europa (a moon of Jupiter). Venus has been covered with lava but it has some craters. It also has an atmosphere so thick that many objects would break up before reaching the surface. Europa is covered with ice and there may be water

coming up through fissures and freezing on the surface. Earth, is unusual as a planet in our solar system in that there is a limited number of craters known that we can be confident about. One of the best lists of Earth impact sites has 184 sites where there is good evidence of them being impact craters. On Earth many craters get heavily eroded so much of the crater rim is gone. Sometimes volcanic eruptions have melted or destroyed craters. Also, Noah's Flood and the post-flood ice age has likely modified or eroded a number of craters.

For years I have taken a view that has impacts from space on Earth beginning early in Noah's Flood and continuing for some period of time. However, I am now changing my view on this in the light of some new ideas and better information. At the ICC conference of 2013 there was a panel discussion on cratering and Earth. Whenever I have done presentations I have always presented two possible views, one is that impacts only happened surrounding the Flood and the other has been the view of Dr. Danny Faulkner, that impacts happened during the Creation week and again at the Flood. Dr. Faulkner was a physics and astronomy professor from South Carolina but now he is at Answers in Genesis, working at the Creation Museum of Ken Ham. Dr. Faulkner's view has been that while impacts were happening across the solar system in the Creation week, Earth was protected by God from impacts. So this view supposes miraculous protection of Earth on the fourth day of Creation. This view implies that most impacts in the solar system happened in the Creation week, not at the Flood. Then a separate, lesser impact event happened at the Flood that accompanied God's judgment of the Earth.

I am changing my view to agree with Danny Faulkner's view, with a few minor modifications. The important thing to lead me to this is getting better information about the number of impacts on the Moon. I used to think that many of the impacts on Earth would be very small objects that would cause little

danger. But the crater data from the Moon suggests there should be tens of thousands of impacts on Earth that would be sizable impacts. There would be too many large impacts and I suspect it is not sufficient to say Noah's Flood would wipe out all evidence of them. The effects of impacts can be life threatening to all life on Earth if there were too many large ones. So I am currently working on a detailed paper about this issue.

Sometimes skeptics have criticized creationists saying that creationists are not scientific because we can never change our theories. This is a total misunderstanding. Creationists may agree on the basics from Genesis and the Bible but creationists have always differed on various details. So creationists can change their theories. The Bible is not a book with scientific detail, but it does provide the foundational ideas we build on. I am changing my position on this issue because it seems logical based on the evidence. I'm not changing my view of Scripture. This change does mean I am falling back on God doing a miracle to protect Earth. But I'm not falling back on a miracle arbitrarily without having considered the other possibilities.

If you would like to read a paper by Dr. Faulkner explaining his fourth day impacts idea, [CLICK HERE](#).

Were Stegosaur in Cambodia?

In Cambodia is a famous temple called the Angkor Wat. It was built by Hindus of the Khmer kingdom about 1140 A.D. There is a carving in the stone near this temple that looks like a clear representation of a stegosaur. Below is a close up of this carving. It appears with carvings of a number of other animals that would have been commonly seen by the local people. Skeptics have loudly criticized creationists on this. So, many bizarre ideas have been put forward to try and explain what the carving is without it being from people having actually seen such a creature. Of course, the Bible implies

dinosaurs would have lived at the same time as humans in the beginning. In fact, it's likely that dinosaurs were on Noah's Ark and survived some in the post-flood world. But the post-flood world would not have been a good climate for many dinosaurs and people may have hunted some to extinction.

Here are some of the ideas put forward to try to explain how the carving was done:

1) **It's an imaginary creature.** Why then is it depicted with other real animals?

2) **It was done from looking at a fossil.** Interesting idea. But there are no records of stegosaur fossils being found in Cambodia. Also, can we expect that the people from the 1100's would have the knowledge to take bones of a fossil and figure out the appearance of the stegosaur?

3) **What looks like the stegosaur plates are merely some sort of background ornament that the animal is standing in front of.** If the entire carved structure were in poor condition perhaps we could consider this but it's not. It is clear. The "plates" clearly follow the back and tail of the animal. What else could it be?

This seems to be evidence that people in Cambodia long ago (possibly before the 1100's or maybe at that time) actually saw stegosaur.

