\_\_\_\_\_, et al. 1976. Deposition of calcium carbonate in a laboratory situation *CRSQ* 12:211-2. \_\_\_\_\_\_ and R. J. Herdklotz. 1977. Solution and deposition of

calcium carbonate in a laboratory situation. II. CRSQ 13:192-9. \_\_\_\_\_\_\_ 1978. Solution and deposition of calcium

## **INVITED PAPER**

carbonate in a laboratory situation. III. CRSQ 15:88-91.

, K. W. House and R. J. Herdklotz. 1981. Solution and deposition of calcium carbonate in a laboratory situation. IV CRSQ 17:205-8, 226.

Wise, K. P. 1988. Portland cement dripstone. CRSQ 24:212-3.

## DWINDLING RESOURCE EVIDENCE OF A YOUNG EARTH

THOMAS G. BARNES\*

#### Received 14 October 1988 Revised 19 November 1988

#### Abstract

The best evidence for a young earth is the dwindling energy field of the earth's dipole magnet. Humphreys (1988) has no physical model for the reversed directions in rock magnetization he proposes. The state of the earth's dipole magnet cannot be evaluated from rock magnetization data.

#### Introduction

This article is a reply to D. Russell Humphreys' article (1988) "Has the Earth's Magnetic Field Ever Flipped?". My concern with his article is that it may lead one to believe that there is not much difference in the scientific approach available to the creationist and evolutionist on the earth-age problem.

This article makes a sharper distinction between the two approaches and chooses a battle ground where that distinction is more evident. A particular case is given where its superiority is illustrated by evaluating the electrical conductivity and heating in the earth's core.

### The Dwindling Resource

The best physical evidence that the earth is young is a dwindling resource that evolutionists refuse to admit is dwindling. To admit that it is dwindling is tantamount to admitting that the earth is young. To deny that it is a dwindling resource is phony physics. The physics of this dwindling phenomenon is vastly superior to anything the evolutionists, theistic or secular, have to offer. The dwindling phenomenon can only have a youngage solution for the earth. This physics of the young earth is sufficient to refute the whole gamut of evolution. Whether they know it or not, evolutionists are trapped between the horns of a dilemma: a young earth or faith in phony physics.

The dwindling resource is the *magnetic energy* in the field of the earth's dipole magnet. This magnet is a huge electromagnet in the core of the earth. Its present value of current is about six billion amperes. The sole source of energy to drive its electric current is the magnetic energy in its field. The present value of that magnetic energy is  $2.5 \times 10^{19}$  joules, that is all that remains of the magnetic energy it had at the time of creation (Barnes, 1983).

#### **Physics of the Earth's Magnet**

In accordance with the laws of electricity and magnetism and the first and second laws of thermodynamics, the flow of energy is as follows: Magnetic energy in the field is being transformed into electric current energy; the electric current energy in turn is being transformed into heat which is an ohmic loss of energy that is nonrecoverable. A rigorous theoretical physics solution for this dwindling phenomenon is given in the author's paper (1973) "Electromagnetics of the Earth's Field and Evaluation of Electrical Conductivity, Current, and Joule Heating in the Earth's Core." The evolutionists have no such definitive means of evaluating these core properties, without accepting this decay property.

#### Historic Evaluations of the Earth's Magnet

The earth's magnet is a *dipole magnet*, having a north pole and a south pole. To evaluate the state of this magnet one must evaluate its *magnet moment*, a vector from which one can compute the strength and direction of its field at every point in its field. Due to the fact that there are billions upon billions

Due to the fact that there are billions upon billions of other magnets and magnetic disturbances, it is extremely difficult to evaluate the magnetic moment of the earth's magnet. The first scientist to do it was Carl Friedrich Gauss. He invented the instrument needed, the magnetometer, obtained field measurements over an extensive portion of the globe and developed the mathematics to reduce these data. It took five years to collect and reduce the data for this one evaluation of the earths dipole magnetic moment for the year of 1835.

It has been similarly evaluated many times since then, confirming the theoretical physics solution which predicts this dwindling phenomenon. When the phenomenon is extrapolated backward in time, it confirms a young earth age, because of the physical bounds on its original value.

# What About Reversed Directions of Rock Magnetization?

It is erroneous to imply that the state of the earth's dipole magnet, the value and direction of its magnetic moment, can be evaluated from rock magnetization data. Humphreys may leave the impression that it can, when he states: "Barnes' criteria are more stringent than what is needed." Since Gauss used those criteria, I prefer to give credit to Gauss. No one has ever made a valid evaluation of the magnetic moment of the earth's dipole magnet from rock magnetization.

Humphreys has no valid physical theory for reversal of the earth's dipole magnet, whether it be associated with rock magnetization or any other data. If he did, the evolutionists would surely be interested in it, because they have yet to find one.

<sup>\*</sup>Thomas G. Barnes, D. Sc., receives his mail at 2115 N. Kansas St., El Paso, TX 79902.

A careful reading of his paper will show that he does not actually claim that the total dipole magnet reversed. But what he does claim needs to be challenged. His "evidence" is difference-in-direction of magnetization in rocks on the earth. There is much difference in having reversed magnetization in rocks here and proving a "flip" in the dipole magnet, or even a part of it. That magnet is more than a thousand miles away.

In his argument he refers to magnetic field. That is not synonymous with dipole magnetic field. Magnetic field includes the "noise" from extraneous sources. Whereas the dipole magnetic field is the ideal field with the "noise" removed, by Gauss' procedure. To have a reversal, the axis of the dipole magnet must reverse.

There is no conclusive evidence that the axis of the dipole magnet has ever reversed. There is evidence, from the historic evaluations of the dipole moment, that the axis of this dipole magnet has been precessing westward.

Stanley F. Stanulonis, Jr. (1974) has shown this precession to be due to solar wind—dipole magnetic field interaction. He carried his research further to evaluate the charge density in the earth's core. Here is an illustration of a physical cause and effect based on good physics and magnetic moment data. Nothing of this caliber has been advanced to prove reversals of the axis of the dipole magnet.

In support of his reversal theory, Humphreys refers to a figure, in my book Origin and Destiny of the *Earth's Magnetic Field",* which I used to discredit the "rock" magnetization data. It is reprinted here as Figure 1 for reference. This figure has only the most recent 160 years of archeomagnetic data (the bottom curve) from a Russian paper's 8,000 years of data. This figure also contains, for comparison, a plot of the earth's magnetic moment data, of the Gaussian type (the upper curve), which is the scientifically valid one. Let the reader decide where the credibility lies.

\*Available from CRS Books—see inside back cover.



YEAR OF MEASUREMENT

Figure 1. The most recent 160 years of archeomagnetic data (bottom curve). Also see CRSQ 21:109-13.

It may be commendable in Humphreys to associate reversed directions in rock magnetization with the Biblical Flood, a catastrophic event that certainly changed the face of this earth. But like so many other problems that have never been solved, it would be more convincing if there were a physical model from which one could derive a physics solution.

#### References

CRSQ—Creation Research Society Quarterly

- Barnes, Thomas G. 1973. Electromagnetics of the earth's field and evaluation of electric conductivity, current, and joule heating in the earth's core. CRSQ 9:222-30.
- 1983. Origin and destiny of the earth's magnetic field, 1963. Origin and destiny of the early's magnetic field.
  2nd Ed., Institute or Creation Research. El Cajon, pp. 100-112.
  Humphreys, D. Russell. 1988. Has the earth's magnetic field ever flipped? CRSQ 25:130-7.
  Stanulonis, Stanley F. 1974. The mechanism responsible for the stanulonis.
- precession of the geomagnetic dipole with evaluation of the earth's core charge density and its application. Master of Science Thesis, The University of Texas at El Paso.

# RADIOACTIVE HALOS: GEOLOGICAL CONCERNS

KURT P. WISE\*

Received 6 August 1987 Revised 24 July 1988

#### Abstract

The geology involved in the polonium halo research is examined. Since there is a lack of locality and specimen information, the geology associated with the presence of polonium halos is incompletely understood. A preliminary examination of this geology casts doubt on the explanatory power of Gentry's model. Further research into the geology of halos is necessary.

#### Introduction

Robert Gentry has presented polonium halos as evidence for the rapid formation of the earth's crystalline rocks-at a rate that is too great to allow for the operation of currently understood natural laws and processes. Gentry (1984, 1986, 1987a) has also produced an explanatory model—not only for the origin of the polonium halos, but also for the granites in which they were supposedly found, and even for the earth itself.

According to Gentry's theory for the origin of polonium halos, God created the earth's primordial rocks, including granites and contained polonium, sometime during a singularity in the creation week about 6,000 years ago (Gentry, 1987a, pp. 97-8, 104). The theory also posits that God created granites and large biotite crystals almost instantaneously (Gentry, 1987a, p. 97) in forms that cannot be reproduced by man or natural process (Gentry, 1987a, p. 104). I call this theory Gentry's "special creation-week theory" for polonium halos. It is a "special" theory in that it requires

<sup>\*</sup>Kurt P. Wise, M.A., receives his mail at 1307 Longfellow Glen, Sudbury, MA 01776.