



## **A Creationist Scientist and His Famous Computer Program**

**by Warren Krug (May-August, 1998)**

*(A review of an article in the 6/16/97 U.S. News & World Report)*

**A** tendency to indulge in circular reasoning is one of the problems creationists sometimes find with evolutionists and their theory. For instance, rocks are dated according to the age of the fossils contained therein. And the fossils are dated according to the age of the rocks that contain them. Another example: it is said that no reputable scientist today doubts evolution and accepts creationism. But it is also said that anybody who accepts creationism and doubts evolution cannot be a reputable scientist.

This last bit of illogic has been taking a few hits in recent years. Still it was a pleasant surprise to see a major secular news magazine recently give an even-handed treatment to a creationist scientist from New Mexico.

The June 16, 1997 *U.S. News & World Report*, in an article entitled "The Geophysics of God" gives an account of the work of one John Baumgardner. It seems that Baumgardner, "the world's pre-eminent expert in the design of computer models for geophysical convection," created a powerful new computer program called Terra. Geophysical convection is the process by which the Earth creates volcanoes, earthquakes, and the movement of the continental plates. And Terra is being used by geophysicists around the world to help them understand geophysical convection.

### **How Did Terra Come About?**

Baumgardner did not always take the Bible literally. His family, as he was growing up in Texas, was basically agnostic. After getting a master's from Princeton in electrical engineering, he returned to Texas and joined a Presbyterian college Sunday school class. He was impressed by what he heard in the class and in time experienced a "dramatic conversion experience."

Well indoctrinated in evolutionary theory, Baumgardner's thinking gradually changed as he studied Christianity. He eventually became convinced that there indeed had been a major catastrophe (i.e. Noah's flood) in the past that caused many of the geological features we see on the Earth's surface today.

Soon Baumgardner (who has a Ph.D. in geophysics from UCLA) was working on Terra expressly to prove that the story of Noah and the flood happened exactly as the Bible relates it. In his view, the program provides just the evidence he had been looking for.

### **What is Terra All About?**

Written in a computer language called Fortran, Terra imagines the Earth's mantle (2,000 miles of silicate rock that surrounds the Earth's solid but very hot iron core) as if it were 10 million three-dimensional cells. It assigns each of the hexagonal cells a value for heat, direction, velocity, and other unknowns, and then watches where each of the cells goes over time.

This movement is the result of the silicate near the core warming and rising (like hot water in a kettle on the stove) while cooler material above it sinks. This movement, according to Baumgardner and Terra, is the force behind plate tectonics which has resulted in the continents having moved around on Earth.

### **What does this have to do with Noah's Flood?**

Baumgardner believes that around 6,000 years ago, an enormous mass of hot mantle material came rushing up at incredible velocity through underwater midocean ridges. This huge blob, in displacing ocean water, created a tidal wave that pushed over all the continents, covering even the highest mountains and destroying all life on earth.

After 150 days, the "bubble" of mantle rock retreated with equal speed, the continents began reemerging, and the runoff traveling at about 100 mph had sufficient force to create such geologic features as the Grand Canyon. Also, the various sedimentary layers could have been deposited in as little as one week.

This bit of science is known as "runaway subduction", a theory first proposed in the 1960's under a different name. Runaway subduction suggests that there is considerable potential energy in the Earth's heavy crust. As gravity pulls on the heavy plates of ocean floor into the hotter, lighter silicate rock mantle, the mechanical energy of deformation is converted into heat and the silicate becomes weaker and even hotter. In the case of Noah's Flood, the plates sank faster and pulled apart, eventually resulting in open ridges through which the giant bubble of mantle shot. This then led to the displacement of ocean water and the Flood.

### **Do Other Scientists Accept Terra's Findings?**

Terra proves that Noah's Flood could have been caused in this manner. But Baumgardner admits that if different numbers are fed into the program in the first place, the results would be more in keeping with the standard geological story of 4.6 billion years.

To get these more accepted results though, one has to assume that the mantle's liquid like flow has been consistent through the ages - in other words, no major catastrophe. Baumgardner, however, sees evidence of such a catastrophe everywhere he looks. He points to the widely diverging results of radiometric dating methods on rock depending upon which isotope - samarium, rubidium, or potassium - is used. He also mentions the scarcity of erosional channels in the various sedimentary layers. Moreover, he notes that coal is found in concentrated seams, rather than spread out as forests generally are, which is just what one would expect from a massive flood. To Baumgardner, the fossil record also suggests a major flood.

Other scientists tend to view John Baumgardner in two ways. When it comes to his useful and powerful computer program, Terra, he is accepted as a "world-class scientist." But when it comes to his religious views and his views on the scientific evidence for Noah's Flood, other scientists don't wish to talk about the subject.

In conclusion, *U.S. News & World Report* should be commended for giving a creationist scientist a fair shake. There are other creationist scientists out there who are doing important work also and who deserve the same break from the secular news media as did John Baumgardner. *LSI*