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EVIDENCES FOR A RECENT CREATION: PART 3

By David Plaisted, Ph.D.

Parts I and II mentioned young carbon 14 dates as evidence that very old isotopic dates correspond to true ages in the thousands of years. Also, helium retention in zircons and the pattern of discordances in isotopic dates suggest an increase of decay rates in the past. There is also evidence that human mutation rates were faster in the past, which is consistent with a higher level of radiation. Furthermore, the genetic diversity of humans and other organisms suggests an origin a few thousand years ago. Several references by Anderson and Spangler suggest that decay rates can vary.

What could have sped up decay rates? Some creationists including Chaffin¹, Setterfield², and Norman² postulate a change in the basic physical constants at the time of the creation and during the flood, resulting in an accelerated burst of decay very early in the creation and also during the flood. Early in the creation the constants including the speed of light may indeed have been different, and even secular scientists have suggested this. However, a change in the constants at the time of the flood would have had many consequences, and may have made the basic biology of life impossible. But there is another possible mechanism.

The following comment by Wanser³, a creationist physicist, is significant: "Actually, it turns out that when you get the nucleus "excited", decay is going to be much quicker, making things look vastly "older". People have been talking recently about magnetic stars giving off big bursts of gamma rays;

there are all sorts of ways that radiometric "clocks" could have been reset catastrophically, during the Flood, for example." In fact, when the nucleus gets excited, it takes time for it to settle down. This means that rates of decay may have been faster for some time after the Flood. Another mechanism for an increase in the decay rate is presented in Science by Stone.⁴ This article shows how interactions with elementary particles can cause decay rates to increase. One such particle is the neutrino. A recent result implies that neutrinos interact with matter much more readily than previously thought: "The results also show that another property of neutrinos, related to how they interact with matter, known as the mixing angle, must be large, rather than small, contrary to what physicists believed until quite recently."⁵ So radiation, possibly gamma radiation or possibly neutrinos, could have sped up decay rates.

But where would this radiation have come from? One possibility is a supernova. Many supernovae are known. The Crab Nebula is the remnant of a supernova explosion that was seen on Earth in 1054 AD. It is 6000 light years from Earth. At the center of the bright nebula is a rapidly spinning neutron star, or pulsar that emits pulses of radiation 30 times a second. In X-ray pictures taken of the Crab Nebula, one can see a ring structure and beams of radiation coming out from the poles. Another supernova, SN 1987A, appeared on February 23, 1987. Supernovae typically leave behind rapidly spinning neutron stars, or pulsars. And there is

evidence that supernovae occurred near the earth in the past.

TASC asks for your heart felt contribution at this time of year. Our treasury is low, and we need financial support to cover the costs of publishing the newsletter conducting other activities to carry out our mission.

**Thanks for your help,
and we wish you a
*Very Merry Christmas
and
Happy New Year!***

¹ Chaffin, E.F. (2000) Theoretical Mechanisms of Accelerated Radioactive Decay. *Radioisotopes and the Age of the Earth: A Young-Earth Creationist Research Initiative*, ICR and CRS, Santee, CA 305-331

² Setterfield, B. Norman, T. (1987) The Atomic Constants, Light, and Time. SRI International. Menlo Park, California

³ Wanser, K. (1999) *Creation Ex Nihilo* 21(4): 40

⁴ Seife, C. (2000) Furtive Glances Trigger Radioactive Decay. *Science* 288:1564

⁵ Zimmer, C. (2002) Darwin's Avian Muses Continue to Evolve. *Science* 296: 633

An article in the September 2003 issue of *New Scientist* states, "A devastating burst of gamma rays may have caused one of Earth's worst mass extinctions, 443 million years ago. A team of astrophysicists and palaeontologists says the pattern of trilobite extinctions at that time resembles the expected effects of a nearby gamma-ray burst (GRB). GRBs are the most powerful explosions known. As giant stars collapse into black holes at the end of their lives, they fire incredibly intense pulses of gamma rays from their poles that can be detected even from across the universe for 10 seconds or so.... Now Melott believes he has palaeontological evidence that this actually happened at the end of the Ordovician period 443 million years ago, causing one of the five largest extinctions of the past 500 million years. The researchers found that species of trilobite that spent some of their lives in the plankton layer near the ocean surface were much harder hit than deep-water dwellers, which tended to stay put within quite restricted areas. Melott says this unusual pattern could be explained by a GRB, which would probably devastate creatures living on land and near the ocean surface, but leave deep-sea creatures relatively unharmed."⁶

Another article in the January 2002 *New Scientist* gives additional evidence for a recent supernova near the earth.⁷ The researchers found atoms of a very rare isotope of iron, ⁶⁰Fe, in cores taken from the ocean floor. ⁶⁰Fe is rare in the solar system because it has a half-life of 1.5 million years. The group suggested that the iron arrived on Earth as fallout from a nearby supernova about two million years ago. This is about the time that fossil records indicate that many marine molluscs went extinct. Donald Clayton, an astronomer at Clemson University, says the story appears consistent: "The amount of ⁶⁰Fe found in deposits is about what you might expect from a supernova going off about 100 light-years away." Clayton says ⁶⁰Fe would be blasted towards Earth when high energy neutrons from the supernova core smack into iron atoms in its outer shell.

An additional evidence is given in the May 2002 *New Scientist*.⁸ "A student at Harvard University has stumbled across the terrifying spectacle of a star in our galactic backyard that is on the brink of exploding in a supernova. It is so close that if it were to blow up before moving away from us, it could wipe out life on Earth. We are only 150 light years away from HR 8210 at present - well short of the 160 to 200 light years thought to be the minimum safe distance from a supernova. If it did

let fly, the high-energy electromagnetic radiation and cosmic rays it released would destroy Earth's ozone layer within minutes, giving life little chance of survival. "The fact that there's such a system so close to us suggests maybe these objects are not so rare," says Latham." The fact that supernovae are common near the earth makes it more likely that one occurred in the past. Of course, the evidence for supernovae in the past is valid even if the assumption that they occurred hundreds of million years ago is in error.

So there is reason to believe that a supernova occurred near the earth, and we have reason to believe that radiation from a supernova would increase decay rates. But which supernova might have been responsible for the increase in decay rates?

The Gum Nebula is a huge constellation in the Southern hemisphere, about 1000 light years away, and extends over at least 40 degrees of the sky. The Gum Nebula is thought to be the remnant of one or more ancient supernovae. One pulsar in this region, perhaps not associated with the Gum Nebula, is the Vela Pulsar, which is about 800 light years away and estimated to be about 11,000 years old. However, if the dating of pulsars is wrong, as has recently been suggested⁹, then the Vela Pulsar could be much younger, and may have arisen only 4,500 years ago, or about the time of the Flood. The Vela supernova remnant is now about 230 light years across and covers over 100 times the sky area of the full moon. The Vela pulsar is the brightest gamma-ray source in the sky above 100 MeV. It's a "smoking gun" and a logical choice for the supernova that increased decay rates in the past. Jueneman was the first to suggest a link between this pulsar and an acceleration of decay.¹⁰ A recent X-ray picture of the Vela pulsar shows the typical ring structure with a beam of radiation exiting from a pole.

Another evidence of a recent creation is comets. Comets are essentially frozen mud. That is, they are believed to be composed of dust combined with water, ammonia, methane, or other frozen liquids. When a comet is heated by the sun some of the ice vaporizes and dust escapes. This is what makes comets visible to us. Each time a comet orbits close to the sun, it loses 5 to 10% of its material. Astronomers have even seen them break up into pieces as they go around the sun. At this rate they couldn't last more than 100,000 years. Some of the short-orbit comets couldn't last more than 10,000 years old. If so, how could there be any comets left after 5 billion years? The Kuiper belt is the supposed origin of the short period comets. The Oort cloud is also believed to originate comets. But the Kuiper belt was recently found

⁶ Hecht, J. (2003) Gamma rays may have devastated life on Earth, *New Scientist*

⁷ Samuel, E. (2002) Supernova "smoking gun" linked to mass extinctions. *New Scientist*

⁸ Samuel, E. (2002) Supernova poised to go off near Earth. *New Scientist*

⁹ (2001) Redating a Star. *Science* **291**(5503): 429

¹⁰ Jueneman, F.B. (1972) *Industrial Research Sept*: 15

to have only 4 percent of the necessary objects!¹¹ Comets must have been recently produced, then, by some kind of a catastrophe. Perhaps a planet between Mars and Jupiter exploded when the decay rate increased, thereby generating comets, producing the asteroid belt, and also explaining many asteroid impacts on the earth at the time of the flood.

Yet another evidence for an increase in the decay rate in the past is the correlation between surface heat flow and the radioactivity of surface rocks.¹² Geologists have found a puzzling correlation between heat flow out of the ground, and the presence of radioactive elements near the surface. This should not be so if decay has proceeded slowly for millions of years, because the heat would have long since dissipated. A better explanation is that the pulse of heat from an interval of accelerated decay in the past has not entirely dissipated. It is also possible that in the "wild," decay is taking place faster than we realize, generating extra heat.

Finally, Robert Gentry claims to have found "squashed" polonium haloes as well as embryonic uranium radiohaloes in coal deposits from many geological layers claimed to be hundreds of millions of years old. The ages given for several adjacent geological periods using squashed Polonium haloes are nearly identical.¹³

Many evidences have already been presented by creationists that indicate something is wrong with the long ages of radiometric dating on earth. These include a rate of erosion that is too high for the assumed age of the continents, too much salt entering the ocean, too little sediment on the ocean floor, many evidences of catastrophe in the geological column, too little erosion in many places in the geological column, evidence of sudden burial of fossils in large numbers, turbidities in the geological column, missing periods in places in the geological column, the lack of uniform unconformities, polystrate fossils, overthrusts, and others. Another evidence that appeared in a recent issue of *Science* is the survival of remnants of meteoritic fragments for (supposedly) 251 million years.¹⁴ These remnants would long since have been destroyed by chemical reactions in such a long time period, scientists say. "Meteoriticists and

impact geologists are stunned that tiny, fresh-looking, unaltered fragments of a meteorite should have survived burial for 251 million years." Though there is disagreement about the date of origin of these fragments, one possibility is that accepted dates of 251 million years correspond to actual dates of a few thousand years.

In addition to these evidences, there are now many new evidences of increased decay rates in the past that indicate that isotopic dates of hundreds of millions of years were produced in thousands or tens of thousands of years, namely, helium retention in zircons, young Carbon 14 dates, and disagreements between well justified isotopic dates. In addition, there is evidence of an acceleration of the mutation rate in the past, which would have been the result of increased decay. There is also evidence of a nearby supernova in the past, and evidence that the radiation from such a supernova would have increased the decay rate. Finally, there is the lack of expected objects in the Kuiper belt, and the correlation between surface heat flow and the radioactivity of surface rocks. And of course there is the mitochondrial DNA mutation evidence indicating that man and many other species had a very recent origin. Not only do all these evidences fit together, but several of them seem impossible to explain in the long ages geological framework. This justifies a repetition of the question posed at the beginning of this article [Part1]: How much evidence is necessary before a paradigm shift occurs? How much evidence is needed before geologists will seriously consider the possibility that the geological column was laid down in thousands, rather than millions of years? When will those who hold this view be regarded with respect by the scientific establishment rather than being considered as religious fanatics? Only time will tell. ☞

TASC ELECTS NEW CHAIRMAN AND VICE CHAIRMAN

At the TASC board meeting on November 6, 2005, Dan Reynolds, PhD, currently serving as Vice Chairman, was elected Chairman, and Fred Johnson, PhD was elected Vice Chairman by the board of directors. Their new offices will become effective January 1, 2006. Congratulations to these able men and long time members of TASC! We know TASC will be served well by them to continue to effectively carry out our mission. Fred graciously has elected to continue to serve as editor of our newsletter. Mark Stephens, MCS, current Chairman, elected to take a break and usher in fresh leadership after serving as Chairman over four years. He expresses his heart-felt thanks to all of you for your support of him and support of TASC in general. Mark will continue to serve as a board member.

¹¹ Schilling, Govert (2003) Comet 'Factory' Found to Have Too Little Inventory. *Science* **301**:1304

¹² (2000) *Radioisotopes and the Age of the Earth: A Young-Earth Creationist Research Initiative*, ICR and CRS, Santee, CA, 80

¹³ Gentry, R. V. et al. (1976) Radiohalos in coalified wood: new evidence relating to time of uranium introduction and coalification. *Science* **194**: 315-318

¹⁴ Kerr, R. (2003) Has an impact done it again? *Science* **302**:1314-1316

COMING EVENTS

Thursday, December 8, 7:30 P.M., Providence Baptist Church, 6339 Glenwood Ave., Raleigh

Overview of Historical Evidence Concerning the Veracity of Genesis. Evidence of a creator may be found not only in science, but also in history and archaeology. This talk by Joe Spears will look at some of these evidences, ranging from the Shroud of Turin to ancient documents to discoveries in ancient Egypt.

Thursday, January 12, 7:30 P.M., Providence Baptist Church, 6339 Glenwood Ave., Raleigh

To be announced.

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