

## INVESTIGATING ORIGINS

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### “More Dating Problems”

The inexact nature of the methods currently used by scientists to date the earth has been discussed numerous times in this column. A recent example of this inexactitude was discovered by Elizabeth Catlos, associate professor of geology at Oklahoma State University. She and her colleagues undertook numerous scientific expeditions to the Himalayas, the highest mountains in the world. During these expeditions she collected rocks bearing garnets. According to the journal *Smithsonian*:

“Forged tens of miles beneath the surface of the earth, garnets are more than semiprecious gems; they are also exquisite recorders of geologic data. Through variations in their chemical composition, garnets preserve information about the extreme pressures and temperatures at which they crystallized. They also contain tiny grains of monazite, a rare earth mineral that lends itself to radioactive dating” (Nash 2007: 91).

Back when she was a graduate student at UCLA, Catlos sliced these garnets and dated the monazites inside them with an instrument known as an ion microprobe. As reported by *Smithsonian*: “The data she recorded contradicted the prevailing picture of how the world’s highest mountains were formed” (Ibid.).

Current theory had maintained that the Himalayas were formed when the tectonic plate on which India sits floated northward and slammed slowly into what was then Asia’s south coast. The resultant upward crumpling of the land created the Himalayas. According to conventional dating assumptions, this occurred 20 million years ago. “But Catlos’ rock samples,” reported *Smithsonian*, “told her they had been buried as recently as one million years ago....” (Ibid.).

The date of one million years of course does not fit in with young-earth creationism, but that’s not the point. The point is that Prof. Catlos’ discovery reduces by a whopping 19/20ths the assumed date of the creation of the Himalayas.

Another example of this can be found in supervolcanoes, whose descriptive name needs no explanation. One of the best-known remnants of these is the Bishop tuff, a volcanic layer hundreds of meters thick and known commonly as the Volcanic Tablelands in eastern California. According to Dr. Ilya Bindeman, a geochemist and assistant professor in the department of geological sciences at the University of Oregon,

“For decades, many geologists assumed that a series of distinct eruptions OVER MILLIONS OF YEARS must have occurred to produce the extensive Bishop tuff. But careful studies of microscopic, magma-filled bubbles trapped inside tiny crystals of quartz tell a different story....Alfred Anderson of the University of Chicago and his colleagues studied the size of the bubbles under a microscope to estimate how long it took the magma [underground lava] to leak out. Based on these and other experiments and field observations from the 1990s, geologists now think that the Bishop tuff—and probably most other super-erupted debris—was expelled IN A SINGLE EVENT LASTING A MERE 10 TO 100 HOURS” (Bindeman 2006: 41 [emphasis added]).

Dr. Bindeman further added: “Since that discovery, investigators have had to modify their reconstructions of supervolcano eruptions” (Ibid.). The discoveries by Professors Catlos and Anderson thus demonstrate that widely accepted dating assumptions are not to be taken as

infallible, unarguable proof that the earth, or its geological formations, are of a certain ancient age.

References:

Nash, J.M. 2007. "Rocks of Ages." *Smithsonian*, Special Fall Issue.

Bindeman, I.N. 2006. "The Secrets of Supervolcanoes." *Scientific American* 294, no. 6.

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