9 *Lunar Craters*

The Supposed Impossible Presence of Lunar Craters

In chapter five of Ackerman's *It's A Young Earth After All* (1993), he argues that the craters on the moon should be smooth by now if the moon were billions of years old. He points out that even granite will smooth out eventually on a spinning moon. Ackerman says that Harold Slusher, the young earth scientist mentioned earlier, found a "simple and seemingly decisive" proof that the moon was young: the "impact craters" will only last as long as the "kind of rock and its viscosity and rate of flow" allow. Ackerman says that the rocks from the moon obtained in the Apollo missions were "carefully studied and found to be ***virtually identical*** with a kind of earth rock called basalt." Ackerman then affirms that this discovery "that the moon's surface is made up of basalt-type rocks ***rules out the possibility*** that lunar craters are more than a few thousand years old!" (*Id.* at 52.) He affirms: "The viscosity or flow-rate value used by scientists is on the order of a hundred million times too low . . . for the craters to have lasted three or four billion years. . . ."

Before we examine this, let's realize this means that if you divide 4 billion years by 100 million, you will achieve the right age for the moon by Ackerman's version. The moon would be 40,000 years old. Ackerman did not draw out this extrapolation. Yet, if that is the age he establishes, this violates the goal of young-earthers to reduce earth's age to 10,000 years only. Is it honest not to provide the extrapolated figure?

Let's return to the argument. Slusher, the young earth science "astronomer" argues, and is quoted by Ackerman, as saying: "if the viscosity of granite is the upper limit for the

viscosity of basalt, then lunar craters cannot be more than a few thousand years old. The evidence presented here demonstrates that the lunar surface and the craters on it are relatively young structures."[1]

Again, we will find a failure to mention the real facts by both Ackerman and his source, Mr. Slusher.

The Nature of Lunar Crater 'Highlands'

The basalts on the moon are ***far from identical*** to earth. Clearly, "basalt is a common rock type on both Earth and moon and the lunar mare basalts look very much like earth basalts."[2] However, moon basalts are combined heavily with one of the hardest substances on earth: titanium. "One of the more distinctive features of mare basalts [on the moon], and one that was not anticipated, is their titanium content, which is much greater than that of their nearest terrestrial analogs."[3]

This changes the entire equation proposed by Slusher. This basalt is stronger than the toughest basalt on earth granite because it is reinforced with titanium. This metal is so named in "allusion to the strength of the mythological Greek Titans."[4] It is both "strong and light" and relatively inert and has a very high melting point (3272 degrees Farenheit). This metal is used in most modern supersonic aircraft for its amazing strength and light-weight.[5] You cannot ignore this reality when assessing the flow one would anticipate for basalts on the moon.

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1. Ackerman cites Harold S. Slusher, Glenn R. Morton, & Richard E. Mandrock, "The Age of Lunar Craters," *Creation Research Society Quarterly* 20 (September 1983) at 106-07.
2. Dalrymple, *The Age of the Earth, supra*, at 213.
3. *Id.*, at 214.
4. "Titanium," *Funk & Wagnall's Encyclopedia* (1975) Vol. 23, at 8561.
5. *Id.*

More important, Slusher is looking at the craters themselves, and saying they should have flattened out by now. Yet, one more difficulty arises since the asteroid impacts altered the titanium-rich basalts of the craters into even harder crystalized or glass-like structures. This unusual rock is referred to by lunar scientists as "highland rocks." These rocks are "highly brecciated" or "intensely brecciated."[6] This means in this context that they are composed of "a glassy matrix enclosing angular fragments of rock." Thus, the rock is even more tightly compressed in the crater highlands. It is bonded by a more specialized matrix than in the mares (*i.e.,* lava oceans when the moon was active volcanically). Upon impact, the rocks were subject to 1,100 Celsius heat, and this caused melting of the rock and "recrystalization" into this more dense matrix.[7]

Given this correction, how many years is the oldest crater on the moon that requires explanation? The impacts were on top of impacts for many years, which erased much geological data at crater sites. Now, what is left includes the likes of the Copernicus crater which is "one of the oldest of the brightly rayed craters, [and] is thought to be about 800 MA old."[8]

Assuming all present visible craters fit in the same relative range, Slusher and friends must prove that 800 million years would wipe clean crater walls known as the highlands formed from basalt even though it is enriched with one of the strongest metals — Titantium — and thereafter it endured pulverization on top of pulverization until it formed a highly compressed and crystalized version. I doubt, with this information, that he could ever do this.

6. Dalrymple, The Age of Earth, supra, at 215.

7. *Id.,* at 215-16, 221.

8. Dalrymple, *The Age of the Earth, supra,* at 222.

In sum, Slusher and Ackerman provide a misleading picture that moon rock is the same as earth rock. They ignore the most key differences. They fail to tell anyone the latest age of cratering that needs explanation. And, of course, they ignore the isotope and radiometric dates for moon rocks. Their work is scientifically worthless. This does not obtain glory for their Lord. Rather it causes justifiable ridicule that is then heaped upon the name of Christ.