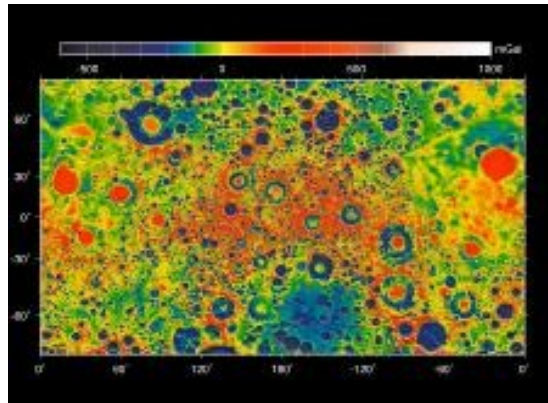


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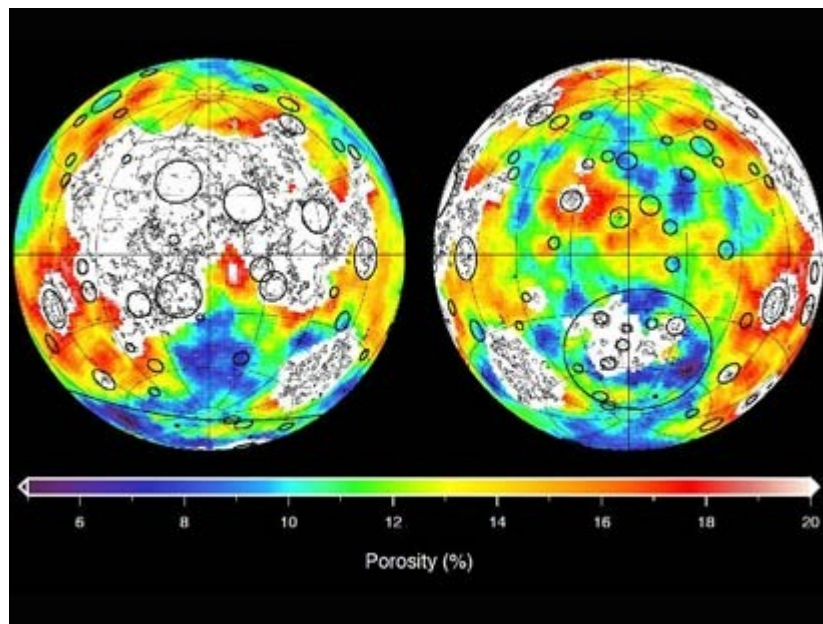
NASA'S LUNAR GRAVITY MAPS



by Miles Mathis

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[NASA recently released the gravity maps](#) generated by its GRAIL mission satellites, and as usual the release is strange. To start with, I don't like the GRAIL acronym. It is pushed and inappropriate. The last two letters stand for "Interior Laboratory." What interior laboratory? NASA is just giving grist to Richard Hoagland here, though maybe by accident. I am sure Hoagland and thousands of others are jumping on this to confirm that aliens have a laboratory in the interior of the Moon. I consider that unfortunate, since there are other things I wish to talk about. I am not here to talk about aliens.



We see the first problem just by a cursory look at the porosity maps above. The white areas are the mare basalts, and NASA tells us they “weren't analyzed.” That makes no sense and isn't believable. Are we to believe they just turned the satellites off over the basalts? These satellites move in smooth curves above the surface, so they can't be driven around the basalts. If they are already flying over, why not include the basalts?

Well, we know they have data for those areas, since the main gravity maps don't have those holes in them. So why leave them out of the porosity calculations? It must be because the basalts would drive numbers up that NASA wishes to keep down. Basalt has a high density of 2.8 to 3, only exceeded [on the common charts](#) by peridotite and some forms of gabbro. So including the basalts would have driven the surface density way up. NASA doesn't want that, for some reason. We find more evidence of that when we see they are mapping porosity above. Note they map porosity, not density. Why would they do that? More misdirection. Basalts, though dense, can either be porous or non-porous, depending on their cooling rate. It appears that NASA doesn't want you to know how porous the lunar basalts are, perhaps because they don't want you to know how fast they cooled.

At any rate, it would have been far more logical to map densities than porosities. Densities are a direct function of mass and volume, while porosities aren't. What I mean is, density is just mass per unit volume, but porosity is not such a simple equation. Why didn't NASA create a density chart? And why didn't they include the basalts?

We are told,

The probes revealed the bulk density of the moon's highland crust is substantially lower than generally assumed. This low-bulk crustal density agrees well with data obtained during the final Apollo lunar missions in the early 1970s, indicating that local samples returned by astronauts are indicative of global processes.

But wait, they didn't include the basalts—which are the densest areas, and which comprise at least 60% of the nearside map. How did they calculate a bulk surface density while leaving out a large portion of the total possible data? They appear to be pushing their numbers and conclusions in very hamhanded ways.

Another problem is that mainstream sources tell us the lunar basalts comprise only about 16% of the total surface. But we can see for ourselves that the white areas near and far total more than 16%. I would say the white areas approach 30% of the total surface. Is NASA just leaving off ALL of the high density areas?

[As you study the porosity maps, be careful. Notice they have slid both poles toward you, so you are looking at quite a bit more than half the surface on each hemisphere map. This is also curious. It has the effect of making the white areas on the nearside look smaller, which I assume was its purpose. But if you draw the right circle around the nearside basalts, you see the white areas are at least 60% of the total surface.]

We come to other problems when we read about the method of mapping. It is the actual motions of the satellites that are causing the maps. The satellites are basically monitoring one another, not the Moon. Since the satellites are in the gravitational field of the Moon, this seems like a logical method, but it

isn't. Since the satellites are at an altitude of 34 miles, they are quite near the surface. That's about 55,000m or 180,000 feet. Since the radius of the Moon is about 1.7 million meters, the satellites are only 3% above the surface. This becomes critical when we remember that the satellites are NOT in a gravity only field. They are in a unified field, which includes the Moon's charge field. Since the Moon is recycling charge in the same way as every other body, that charge has to move through the interior of the Moon—going in at the poles and going out (most) at the equator. As it moves out, it can be blocked more or less by more or less dense areas on the surface. We saw the mechanism of this in my paper on the [South Atlantic Anomaly](#) and my [paper on the GOCE satellite](#). There, I showed blocking by the plate under Indonesia, and the charge reflection which caused the South Atlantic Anomaly.

This is a problem here with GRAIL, because the satellites are then being buffeted by these low level charge anomalies, which are like the SAA. The satellites aren't able to map an overall gravity field of the Moon: they are only mapping the variations caused by the surface. They are mapping the surface only, as it creates the low-level unified field above the Moon.

NASA even admits this, in a way. From the press release:

"What this map tells us is that more than any other celestial body we know of, the moon wears its gravity field on its sleeve," said GRAIL Principal Investigator Maria Zuber of the Massachusetts Institute of Technology in Cambridge. "When we see a notable change in the gravity field, we can sync up this change with surface topography features such as craters, rilles or mountains."

That's right. You may have noticed that the gravity map (under title) shows red circles surrounded by blue circles. These are impact craters, of course, which are right on the surface. Obviously, whether it intended to or not, NASA is mapping only the surface. This isn't because the Moon is "wearing its gravity field on its sleeve," it is because NASA's method of mapping guarantees they will map only the variations caused by the surface. But because they don't know about the charge field or the unified field, they don't understand that. They don't understand that charge exists and that it must come up through the crust, so they don't understand how these field variations are created.

Yes, these maps are just more confirmation of my unified field. NASA has proven my theories once again.

Even without that information, NASA should have been able to figure out that its method of mapping was only mapping the surface. As soon as the physicists saw red circles surrounded by blue circles they should have known they were only mapping the surface. By the current theory of gravity, how could surface craters follow overall gravity so perfectly? They couldn't. There is absolutely no mechanism by which interior or overall gravity could be caused by surface craters. These maps are clear confirmation of my field and clear refutation of theirs. See more on this below.

Despite that, principal investigator Maria Zuber says,

the moon's gravity field preserves the record of impact bombardment that characterized all terrestrial planetary bodies and reveals evidence for fracturing of the interior extending to the deep crust and possibly the mantle.

She is proposing that the craters *do* determine deeper gravity patterns, and this is achieved by deeper areas "preserving the record of bombardment." But even if these impacts could fracture the interior down to the mantle, those fractures don't determine interior densities. Interior densities had to predate any impacts, and I would think that has to be obvious. In other words, the Moon had to have some

definite structure from early times, determined either by the way it was accreted or by the way it was torn from the Earth. Those density variations must predate any later impacts. Later impacts cannot determine—*by themselves*—the interior densities. To propose that craters follow overall gravity, Zuber has to propose that these craters *cause* all interior gravity, all the way to the core. A few fractures won't do it. For her theory to fly, the Moon's interior must somehow be a direct and final product of these surface impacts. That makes no sense. Wouldn't it be easier and more logical just to admit her satellites are mapping the surface? She has no evidence they are mapping the interior, so why is she trying to make up an illogical theory from nothing to indicate they are?

Amazingly, Zuber is giving Hoagland another opening, although, again, I hope unwittingly. By foolishly saying that the Moon “wears its gravity on its sleeve,” she has provided more grist for the theory that the Moon is hollow. Hoagland will say overall gravity follows surface gravity, because the surface is all there is. I have just disproved that, but I predict that won't keep Hoagland or anyone else from saying it. Unfortunately, NASA's method doesn't indicate *anything* about the interior of the Moon, hollow or otherwise. It only indicates they don't understand how physical fields work.

To get any useful idea of the interior from this data, NASA would have to combine this current map with previous crater and density maps, to see how the surface is masking deeper variations. I see no evidence they have done that. In fact, they seem to be moving away from sense, as we see here:

The probes revealed the bulk density of the moon's highland crust is substantially lower than generally assumed. This low-bulk crustal density agrees well with data obtained during the final Apollo lunar missions in the early 1970s, indicating that local samples returned by astronauts are indicative of global processes.

That paragraph contradicts itself. We are told that the density is lower than assumed, and that it matches data from Apollo missions. If our assumptions aren't coming from previous data, where are they coming from? Why did our assumption not come from the Apollo missions?

Might the number for density be lower here because 30% of the surface was “not analyzed” for porosity or density? Even supposing these new numbers for density included data for the entire surface, NASA admits this data comes from GRAIL alone. Under the porosity map, it says,

This image depicting the porosity of the lunar highland crust was derived using bulk density data from NASA's GRAIL mission and independent grain density measurements from NASA's Apollo moon mission samples as well as orbital remote-sensing data.

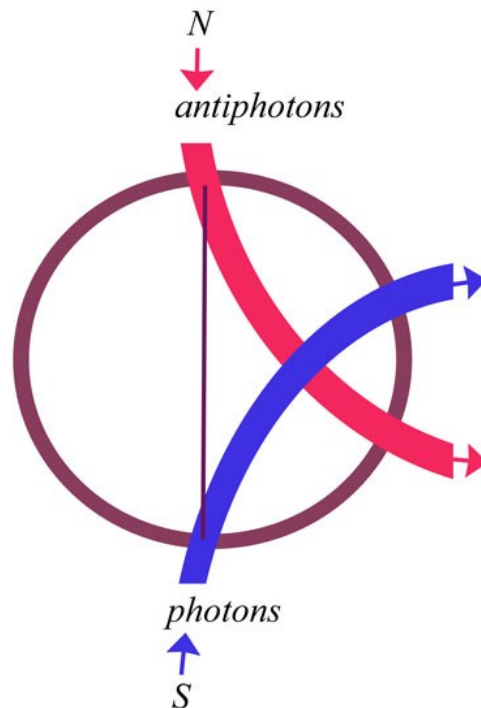
So according to this, the bulk density data comes from GRAIL and nowhere else. The porosity map was generated from three sources, we are told, but the bulk density data came only from GRAIL. I have just shown that GRAIL is only mapping the very surface, so this data by itself can tell us nothing about the Moon's crust down to depths of 33 miles. Craters don't create density variations down to 33 miles, and even if they did, we have no indication this is what GRAIL is mapping. As I said, GRAIL is clearly mapping surface anomalies.

We can also see this by looking at the altitude of the satellites again. They are trying to map the crust of the Moon down to a depth of 33 miles, with satellites that are only 34 miles above the surface. Obviously, they need satellites that are higher than that, to give surface anomalies like I am talking about time to dissipate. The deeper you wish to probe the interior field, the higher your satellites have to be. Otherwise surface anomalies will wash out all deeper data, as we see here.

So we have seen that NASA's claim that “The new map. . . is allowing scientists to learn about the moon's internal structure and composition in unprecedented detail,” is false. The new maps only allow them a glimpse of the surface anomalies. To map deeper areas, they need higher satellites and much more cross data.

In closing, I want to draw your attention to one last very clear indication in these maps of my charge field. Study the map under title, looking only at red and blue areas. You will immediately see that we have much more red on the lunar equator, and much more blue near the poles. We also see this in the porosity maps, where we see huge amounts of blue around the lunar south pole. This is curious, since it can't be explained by a gravity-only field. Why would the Moon have huge low gravity areas near the south pole, and lesser ones at the north pole? Why would it have high gravity areas all across the equator? Also notice that the red has stronger peaks north than south. Notice the two largest red spots, which happen to be about 30 degrees north. We see other spots as large on the map, but when they are at other latitudes, they aren't as red. Curious.

If you don't know what I am getting at, you need to read my papers on charge recycling, especially [this recent one](#). In those papers, I show how charge is recycled by spherical bodies of all sizes, from electrons up to galaxies. Photons go in the south pole, antiphotons go in the north pole. The photons are then emitted most heavily at 30 degrees north, and I show the mechanical reason. Since our galaxy is richer in photons—due to the fact that it is spinning one way and not also the other—the charge fields here tend to be richer in photons. This means that bodies like the Sun and Earth take in more charge at the south pole, and I provide the diagrams from NASA that show that. We have seen the charge hole at the south pole of the Sun, and we know the Earth also has a similar charge hole. The map above is showing us the same charge hole in the Moon. We are seeing clear evidence of charge recycling by the Moon.



Likewise, the Moon is emitting more charge around the equator, peaking at 30 degrees north. What we are seeing from NASA with GRAIL is this charge emission field being channeled by surface densities.

The map we see is basically a crater map superimposed on a charge map.

Addendum, next day: There is one final thing I want to recommend you look at. Strangely, NASA has chosen to center its gravity map on the farside. The map under title has the farside in the middle and the nearside on both ends, which is the opposite of what you would expect. I suspect they did this as some form of misdirection, but it ends up putting another big anomaly right in front of our eyes. You will have to go to NASA to look at the larger image, but even in my small reproduction you can see the big blue patch near the south pole. It is centered on 150° E and 60° S. It is a shocking anomaly to mainstream theory not only because of the charge hole it implies—as I have mentioned above—but also because of the lack of cratering there. As we know, the farside in general has far more cratering than the nearside. This may be explained by the nearside being protected by the Earth. The Earth bounces out most intruders from that direction, protecting the nearside. So why this relative lack of cratering in the large blue spot on the farside? This spot is huge, being about 70 degrees wide and 60 degrees tall.

I suggest that this is yet another sign of the charge hole near the south pole. This large blue patch is telling us the charge hole isn't centered on the axial south pole, but—as with the Earth—is several degrees away from it. Part of this offset can be explained by the fact that the Moon doesn't travel either in the ecliptic or above the Earth's equator. Nor does it travel in the equator of the Sun. It is inclined to all three, indicating that it is unable to travel either in the center of the Sun's charge or the center of the Earth's charge. In my theory this is explained by the fact that the area of most charge emission isn't at the equator of a sphere anyway. As I said, in a charge field that richer in photons than antiphotons, we will see the most charge at 30 degrees north. Since orbiting bodies are drawn to charge as a source of their energy, they will be drawn to these charge maxima. If the Sun were not involved, the Moon would prefer to travel over the Earth's 30° N. But since the Moon has to align to both Sun and Earth, its charge axis is pulled off its spin axis, as we see. The center of this large blue spot is the center of the Moon's charge intake.

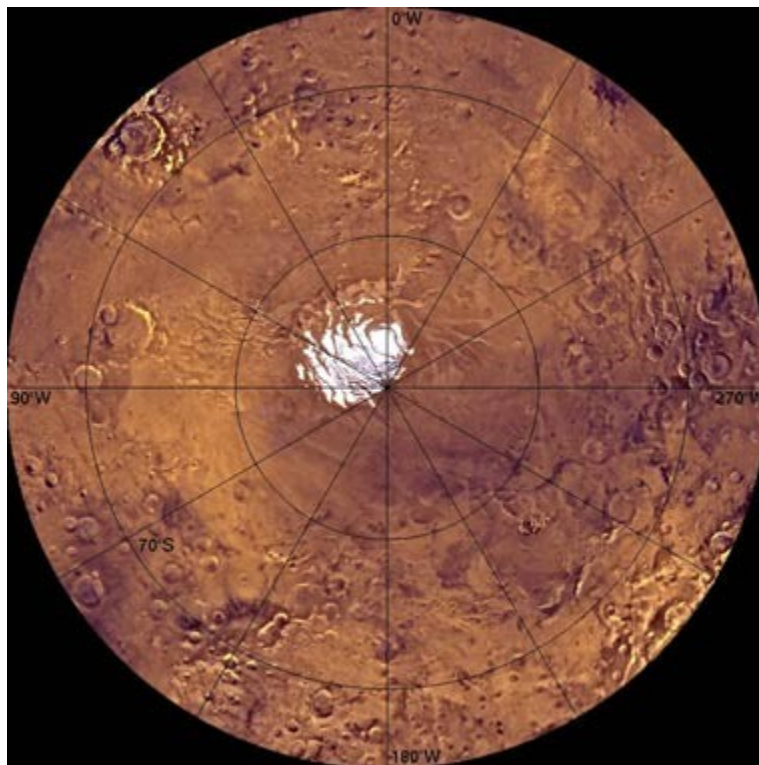
But why the lack of cratering? Again, because all bodies are drawn to charge maxima as sources of energy. I have shown this is why all eight planets orbit very near the solar equator (or about 6 degrees above it, actually). It is why the Moon is trying to orbit in the charge maxima of both Earth and Sun. And so it applies to smaller bodies like asteroids and meteors. They also are drawn to charge maxima. The blue spot we have been looking at is a charge *minimum*. Where charge goes in defines a field minimum and where charge comes out is a field maximum. Therefore, intruders are more likely to hit near the equator, and they are most likely to hit at 30° N.

The Earth is blocking intruders on the nearside, so it skews data on that side. Even so, we see the largest intruders at 30° N. And on the farside, we see the greatest *number* of craters at 30° N. The GRAIL map is a veritable honeycomb at 30° N, as anyone can see.

Still, some will not understand the mechanism here. I have defined charge as an emission and as a bombarding field. It is the opposite of attractive in that sense. Why would charge *attract* planets or intruders? Shouldn't outgoing charge repel them and incoming charge corral them? No, and it is because these planets and intruders have their own charge fields as well. If these intruders were photons, yes, they would then be corralled to the poles and excluded from the equators. But all other bodies have their own charge fields, and these existing charge fields have to align to the encountered

charge fields. So if we let the Earth come into the Sun's field for the first time, for instance, it will want to align its intake holes with the Sun's charge exhaust. You don't have to explain this as the Earth "wanting" more charge. You can explain it by straight statistics. These spinning spheres in a charge field create density variations in the field around them, by straight mechanics. Nothing mystical or mysterious about it, as you will see if you read my other papers or study the idea on your own. Low field potentials at the poles of smaller bodies will naturally and mechanically be attracted to high field potentials near the equators of larger bodies. This is what physically creates the plus and minus of the charge field, and thereby the E/M field.

Therefore, an intruder that is already charged (as all bodies larger than photons must be) will want to align its poles with the charge being emitted by any body it comes near to. To do that, it must go to the highest density of charge emission. And so it will seem to be attracted to the equator of any primary it orbits or impacts. By this mechanism, all the south poles of all the planets (except Venus) should have less cratering. Is this what we see? Yes. You can see [the charge intake of Mercury here](#). Run the animation and go to 8 o'clock on the circle. You will see a large crater-free area at the first latitude out from center. How about Mars?



A conspicuous lack of cratering all about the south pole, with much more cratering near the equator. I will be told this is explained by the fact that these planetary poles are at a right angle to the main field of the solar system, so of course they will encounter fewer intruders. But that isn't true. Remember, Mars, like the Earth, is lying on its side in the orbital plane, so its poles are also quite near the plane. The poles are at right angles to the Sun, but they *aren't* at right angles to the orbital plane. They are almost in it. Therefore, the poles are in the main disk of the Solar system, and should not be immune from impacts.

You will say, “If your theory is true, why doesn't the Earth point its south pole straight at the Sun? Wouldn't that be the best way to get the charge to go straight in?” Well, if the Sun were emitting only photons and no antiphotons, yes, that would be the way of it. But the Sun is emitting both. It is emitting more photons, but it is also emitting a sizable fraction of antiphotons, as we see from the charge-rich environment of the southern hemisphere here. And so, the Earth would wish to point both poles at the Sun, to get both photons and antiphotons. Since it cannot do that, it does the next best thing: it turns sideways to the Sun, to allow both poles to receive charge. And since the Earth is also receiving charge coming in from the Jovians, it wants to turn and receive that charge as well. As I have shown [in my papers on axial tilt](#), the Earth adjusts to receive the maximum amount of charge from the Sun and all the planets.