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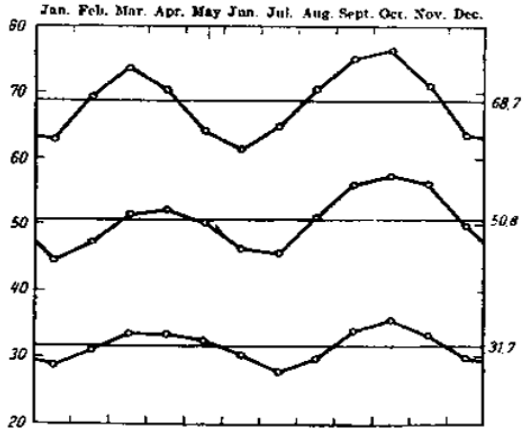
The Semi-Annual Variation in Geomagnetic Activity



by Miles Mathis

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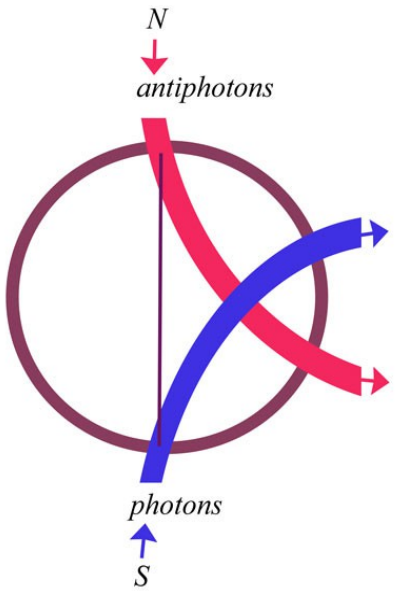
As you see from the simple graph above, the geomagnetic field has twin peaks that roughly correspond to the spring and fall. For many decades this problem has had three possible solutions, with supporters of all three remaining to this day. Those solutions are the axial solution, the equinoctial solution, and the Russell/McPherron solution. The first relates to the position of the Earth relative to the Solar Equator. The second relates to the tilt of the Earth relative to the Sun. The third relates to the "southward field" of the Earth, meaning the southern hemisphere of the Solar System. In the 1970s Russell and McPherron gave the total influence to the southern field, ignoring the northern field, finding this explained some data (but not others).

Many scientists now believe all three factors play a part, as you can see here. There, Leif Svalgaard of Stanford even assigns tentative percentages to the input of each, giving axial 10%, equinoctial 70%, and R-M 20%. But even now, none of these scientists is able to point to a mechanism—and they admit that. That is why I am here today, of course.

We will start with the R-M solution and work back. The R-M hypothesis is useful to the solution because it weights the southern field, but it fails because it **overweights** that field. The R-M solution weights the southern field at 100%, ignoring the northern field. But my readers know that can't be right, because the southern field doesn't supply 100% of the magnetism. The southern field is dominant, and we know that just from the fact that the Aurora Australis is more powerful than the Aurora Borealis. The south pole is dominant in all charge and EM questions, and that is known. But I have proved that it is only double the strength of the north pole, so the starting numbers here should be 67% and 33%. And those numbers will also vary based on angle of attack.

What do I mean by that? I mean that the geomagnetic field is caused by charge recycling by the Earth. The mainstream doesn't understand this, which is why it isn't able to answer this question. Mainstream

scientists believe the magnetism of the Earth is caused by a spinning molten core, and their failure there causes the failure here. They have the cause and effect reversed, since *if* there is a spinning molten core, its spin and heat are caused by charge recycling, not the reverse. The spinning core doesn't cause the magnetic field; the magnetic field causes the hot spinning core. As I have shown in many previous papers, the magnetism of the Earth comes from pulling in the charge field of the Sun at the poles, recycling those real photons with real spins through its body, and releasing them at all latitudes (with peaks 30 N and S). In other words, on a rough pole-to-equator cycle, just like the proton, the atomic nucleus, and the galaxy.

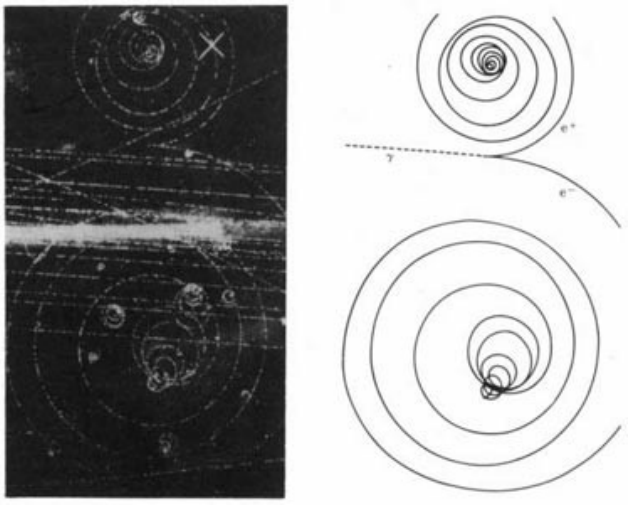


The 2/3rd - 1/3rd split comes from the fact that charge can either be up or down. We have photons spinning either way, so we have both photons and antiphotons. Photons go in the south pole, antiphotons go in the north pole. But in our local field, we have about twice as many photons as antiphotons. Why? Because the Sun is spinning left (say) and not also right. So the field can't be balanced. The Sun is also recycling the charge field, and it is recycling a field coming in from the galactic core. Well, the Sun makes this field somewhat coherent as it recycles it, due to its own spin. Another factor is charge returning to the Sun from the big planets. The big four recycle charge, then return a majority of what they recycle to the Sun in a loop. But since they don't intercept all of it, they can't return all of it. They return some fraction, and that fraction is compressed (in charge density) as it returns. This, in part, is what creates the 2/3rd – 1/3rd split at the Earth. Another part of the equation is the ambient field from the galactic core which is not recycled by the Sun. The Sun can't recycle all the charge in its vicinity, so some remains. A part of this ambient field is antiphotonic.

We have long had easy data telling us this, though I was the first to read it right. For instance, the charge conjugation problem was a clue in this direction, since the mainstream couldn't explain loss of parity (in beta decay, etc.). Well, there was no parity to start with, so nothing needed to be explained. It was our expectation of parity that was wrong.

Another big clue was the spin-outs of antiparticles, as in the famous cloud chamber picture I lead with in this paper on pair production. There, the positron creates a circle half the size of the electron, but nobody ever thought to ask why. The reason is that they are both spinning out into the same ambient field, but that ambient field is twice as rich in photons as antiphotons. So they spin the positron down

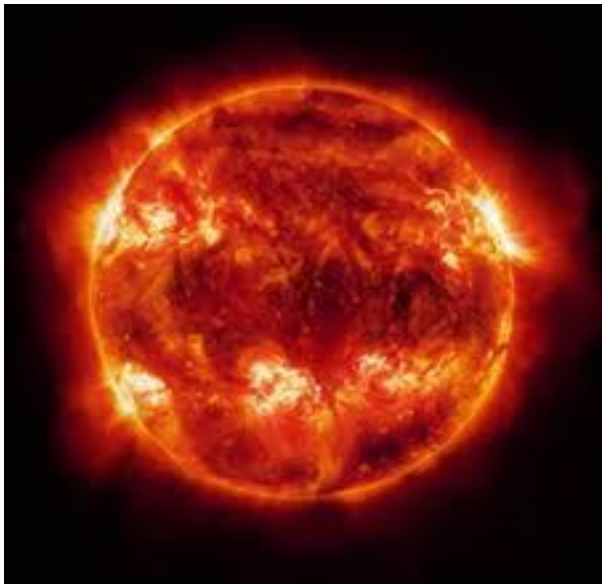
twice as fast.



As for angle of attack, I mean that if the north pole of the Earth is tilted toward the Sun, it will be easier for antiphotons to enter there, and harder for photons to enter the south pole. So we have to track the polar vortices here while we do everything else.

And that also explains why the equinoctial solution is primary. The tilt of the Earth determines the angle of attack of the polar vortices, so it affects not only this R-M effect, it affects all other variables. So it gets included in the math several times. You can already see that it must also affect the axial input, since once we calculate the Solar angle for that time, we have to once again see how the Earth is tilted at that time.

You can see that my theory of charge recycling also explains mechanically why axial is important. The Sun is recycling on a pole-to-equator scheme, so the heaviest photon charge will be emitted at 30 N. *Not* at the equator, but 30 N. However, the heaviest antiphoton charge, or anticharge, will be emitted at 30 S. So that has to be taken into account as well—something the axial theory has never included.



However, we have a fourth minor input that all have missed, and it is hiding in my explanation above. If the big planets are returning charge, we have to include that here as well. I have shown it is a calculable fraction of the total field, so it cannot be ignored. I have even done the math to calculate its baseline strength. See my paper on eccentricity, where I use the meeting of the incoming and outgoing fields to calculate the eccentricity of the Earth, in only a few lines of math. There, I show the charge returning from the planets is .032 of the Solar charge, *as a matter of density* (**not** total field strength, but charge density). The planets have a total charge .0014 that of the Sun, compressed 23 times in returning due to distance, giving us a charge density of .032S. But there is also a variance of 23 times between maximum and minimum, since charge is greater when the planets are aligned and weaker when they aren't. So to include this factor you have to track the actual positions of the big four planets. You can do the same thing by importing the 11-year Solar Cycle data, which I have shown is directly caused by that variance.