

# MESS 0023

MET 2.22: The Spheres of Heaven<sup>1</sup>

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Best Viewed at: <a href="https://bit.ly/3yAW2oS">https://bit.ly/3yAW2oS</a>

#### **ABSTRACT**

In this paper, the author calculates (using averages) precise, but rough, calculations regarding the total values of E-fields, voltages, currents & flux, and Capacitance and Potential. This lays the foundation for future studies of the inductance of the spheres of Heaven. In this study, the source for the heat in the thermosphere is clearly identified in spikes of potential and current (Power), with low resistivity, and this lays the foundation for the Birkeland Polyphase Superweb<sup>2</sup> basic work.

Keywords: Atmosphere - Thermosphere - Electricity - Power - Capacitance - Potential - Current - Flux

https://www.academia.edu/38560727/Birkeland\_Polyphase\_Superweb\_A\_Proposition\_for\_the\_Future\_Betterment\_of\_Mankind\_global\_defense\_interconnection\_and\_unlimited\_power

<sup>&</sup>lt;sup>1</sup> Figure 1 (gif): <a href="https://www.youtube.com/watch?v=AHrCl9eSJGQ">https://www.youtube.com/watch?v=AHrCl9eSJGQ</a>; credit: JeffHK

<sup>30</sup> Days Timelapse at Sea | 4K | Through Thunderstorms, Torrential Rain & Busy Traffic

#### Review of PEMS and HEGEME theories:

In the first Plasma-electromagnetic Sky paper, the author lined out the various mainstream and altstream evidences that existed, at that time (2018), for electrogeometeorology (EGM). In short, the theories of the PEMS and HEGEME are summarized as follows:

Table 1 - PEMS 1.0

#### PEMS - Plasma Electromagnetic Sky

#### HEGEME and the Electrothermal Vine (ETV)

- Solar Wind outermost "shell" of the Spheres of Heaven; each solar 'grain' is worth 4V; total current around 10<sup>6</sup> to 10<sup>9</sup> A, and potential/pressure is unknown
- Plasmasphere location of large MHD (MMS measured³) Birkeland Current connections (magnetic flux ropes) to the sun
- Ionosphere Large Sprites, ELFs, etc.
- Normal Atmosphere rotating, concentric round shells of air (ie, the subject of this paper, Figure 1)
- Troposphere where the BC connections in summer and winter show up on high altitude, as rotating air masses
- The Aether is now known as densest high, and thinnest low altitude, meaning that the connection with the Crustal membrane of the ETV is semi-telluric, semi-thermal, semi-air current driven.
- Medical research in situ suggests that high electrical and proton involvement due to specific circumstances results in wider changes to patient electric fields, per pain adjustment self-reported.<sup>4</sup>
- The currents are non-trivial, as spiders are now known to ride these fields long distances.
- $\bullet$  Tree studies of electric current reveal nA and  $\mu V$  levels of pressure.  $^5$
- The placement of the PEC vs. SSEC and other levels is found in Cosmic Rearrangement Hypothesis<sup>6</sup>

- "Hollow" non-ferrous core, probably an ultradense or "heavy" hexagonal magnetic water<sup>7</sup> and/or a liquid metallic crystal plasma-hydrogen "plasmoid" core with a weak Z pinch
- Expanding based on tectonic involvement, PEMC expansionism does not deny subduction, in fact it just says there isn't enough of it
- Growing the Earth is physically receiving wass and "Starwater"<sup>8</sup> from the solar wind on the ETV
- Electric the "transformer Earth" has a number of turns and through capacitance, induction, hysteresis, etc. is storing charge and current... but it might be losing it based on changes to the New Madrid and Sinai and other volcanic data. This is to be explored in another MESSy
- Magnetic- the magnetic poles are currently moving and accelerating away from origins.
- Earth the "Spheres of Earth" are composed of internal plasma→liquid & gas→solid, including crystalline, and the crust is a mere chemical membrane of active and passive osmosis. Like the human body it reacts to proton density changes, particularly at Davidsonian "Earth Spots," as well (low pressure+fault zones). One must consider all of Solar Forcing, to see the macro effects, but in MET 2.1 the localized tornadic effects were connected to electrogeology, directly.<sup>11</sup>
- The ETV "vine" enters both poles & causes the planet to rupture at the rift valleys

<sup>&</sup>lt;sup>3</sup> See: MESS0012: CRH - The Aether Flexion Wave for an example of the rippling

<sup>4</sup> https://bit.ly/3snRI8Z

<sup>&</sup>lt;sup>5</sup> Arthur Ramthun: Plant Electrotropism | EU2015

<sup>&</sup>lt;sup>6</sup> https://www.academia.edu/72712073/Cosmic Rearrangement Hypothesis

<sup>&</sup>lt;sup>7</sup> https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3572224/

 $<sup>^{8}</sup>$  Davidson/Uyen - literally  $H^{+} + O_{3}^{-} \rightarrow H_{2}O$ 

<sup>&</sup>lt;sup>9</sup> Bruce Leybourne: Geometry of Earth's Endogenous Electrical Energy -- Geophysical Evidence | EU2016

<sup>&</sup>lt;sup>10</sup> ■ MESS0021: GEO 2.22 - New Madrid Zone and Blue Ridge: Magmaflux

<sup>&</sup>lt;sup>11</sup> MESS0019: MET 2.1 - KY Tornado New Madrid Zone & magnetics

The PEMS 1.0 paper also left the door open for discussing many forms of land collapse, and this was done in "Unboxing Atlantis" which served as a PEMS 1.1, of a sort. However, let it be emphasized that the author showed the level of scientific rigor and candor required in EPEMC<sup>13</sup> in "Ashes of Atlantis part 1"<sup>14</sup>, where he debunked the J. Corsetti "Richat/Atlantis" false hypothesis, point by point and with demonstration (software, logic, mainstream aging estimates, etc.) and grade A++ evidence<sup>15</sup>.

### The Spherical Capacitances and Inductances of the Earth

In physics,  $C=4\pi\epsilon_o\frac{ab}{b-a}$ ,  $\epsilon_o=8.85x10^{-12}F/m$ , where b and a represent the radii from the same center. But instead of free space, we will use the relative permittivities of air<sup>16</sup>, iron, nickel, igneous rock, etc.<sup>17</sup> Therefore, all that we need to do to compute the relative capacitances, treating each shell as a perfect sphere (which they aren't), is to apply the formula, as shown in the accompanying spreadsheet<sup>18</sup>. Consider the idea that the mass of each shell is converted to charge potential, via previous concepts, and look into the transformation into voltage.

Table 2 - Layered Capacitances of the Spheres of Heaven and Earth

@ the Layer	Farads	Kg	keV	Q (coulombs)	Voltage
Core	2.75E+08	1.87E+24	1.05E+57	1.68E+38	6.12E+29
Lower Mantle	9.36E+09	2.95E+24	1.65E+57	2.65E+38	2.83E+28
Upper Mantle	1.51E+09	1.06E+24	5.95E+56	9.53E+37	6.32E+28
Crust lower shell	8.94E+09	2.77E+22	1.55E+55	2.49E+36	2.78E+26
Crust Surface	8.31E+10	2.77E+22	1.55E+55	2.49E+36	3.00E+25
Troposphere	5.62E+10	4.12E+18	2.31E+51	3.70E+32	6.58E+21
Stratosphere	2.59E+10	5.10E+17	2.86E+50	4.58E+31	1.77E+21
Mesosphere	2.60E+10	5.15E+15	2.89E+48	4.63E+29	1.78E+19
Thermosphere	1.57E+09	1.03E+16	5.78E+48	9.25E+29	5.88E+20
Exosphere	1.05E+09	10000	5.61E+36	8.99E+17	8.53E+08
mean	2.37E+10	5.94E+23	3.33E+56	5.33E+37	7.03E+28
stan_dev	2.85E+10	1.04E+24	5.85E+56	9.34E+37	1.91E+29

https://www.academia.edu/36753644/Unboxing Atlantis A top down review of what we know and dont know about the Atlantean through Megalithic Period continents and cities 36 000 2 000 YBP

<sup>12</sup> 

https://sites.google.com/view/epemcgateway/volunteer/standards

<sup>14</sup> https://www.academia.edu/63468751/Ashes of Atlantis part 1

<sup>15</sup> https://sites.google.com/view/epemcgateway/volunteer/grades

<sup>16</sup> https://www.techtarget.com/whatis/definition/permittivity-electric-permittivity

<sup>17</sup> http://www.geo.umass.edu/faculty/wclement/dielec.html

<sup>&</sup>lt;sup>18</sup> PEMS capacitance and inductance



That... is a lot of potential charge! The Voltage associated with the layers is also, consequently, non-trivial, because the capacitances are non-trivial.

Comparing the total voltage of the Spheres of Earth (~100%) vs. of Heaven (1.27x10<sup>-8</sup> %) we see the Earth holds all the real power. This makes sense because of the sheer difference in mass. Let us consider the averages, instead: 100% vs. 1.27x10<sup>-8</sup> %. It's the same!

So what level of power can we expect in inductance from the atmosphere? It is the author's prediction it will be a non-trivial amount, even still. We will also compare back to the voltages, for orders of magnitude. Again, we have to use a spherical shell model be substituting the impedances of each in, and using the equation of relative current:  $I = \frac{V}{R}$ , where R will represent only the difference, not the entire radius from the core.

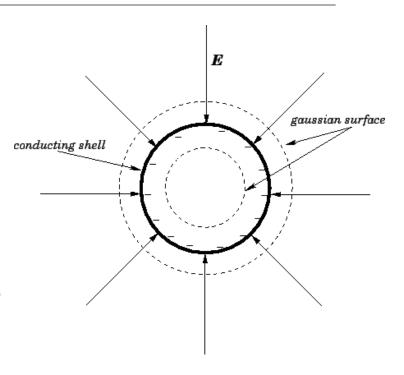


Figure 1 - E field of a conducting shell; credit: utexas.edu<sup>21</sup>

Table 3 - Electric Field and Current Flux inside the Spheres of Heaven and Earth

Radii (m)	@ the Layer	E-field	R (ohms)	I=V/R (A)	Flux/m^3
3.48E+06	Core	-9.50E+22	0.0000769	5.23E+19	2.97E-01
3.68E+06	Lower Mantle	-1.34E+23	20	8.34E+12	4.00E-08
5.72E+06	Upper Mantle	-1.99E+22	20	7.69E+12	9.82E-09
6.31E+06	Crust lower shell	-4.28E+20	0.000467	1.19E+15	1.13E-06
6.38E+06	Crust Surface	-4.18E+20	10	5.86E+09	5.39E-12
6.39E+06	Troposphere	-7.18E+17	2.00E+17	6.42E-11	5.88E-32
6.41E+06	Stratosphere	-8.82E+16	4.55E+17	7.55E-12	6.85E-33
6.43E+06	Mesosphere	-8.86E+14	1.30E+19	2.63E-15	2.37E-36
6.78E+06	Thermosphere	-1.59E+15	200	5.09E+03	3.90E-18
7.38E+06	Exosphere	-1.31E+03	1.00E+12	1.25E-18	7.41E-40

<sup>&</sup>lt;sup>19</sup> https://royalsocietypublishing.org/doi/pdf/10.1098/rspa.1949.0146?download=true

<sup>&</sup>lt;sup>20</sup> https://www.researchgate.net/publication/215751207 Electrorotation A spherical shell model

<sup>&</sup>lt;sup>21</sup> https://farside.ph.utexas.edu/teaching/316/lectures/node25.html



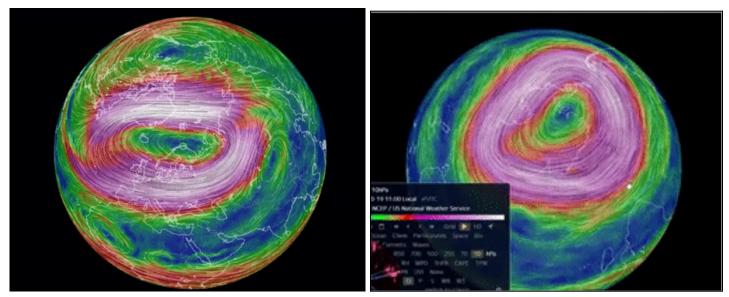


Figure 2 - Arctic Birkeland Current, demonstrated by 10hPa (8,000 ft) Troposphere motion; Figure 3 - Antarctic Credit: nullschool/author/makeagif (click pic for video) Medium quality (antarctic:) <a href="https://makeagif.com/i/6K2n2i">https://makeagif.com/i/6K2n2i</a>

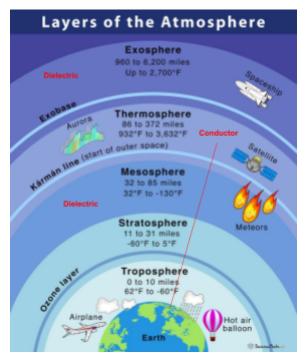
# Harvesting energy from the Atmosphere Directly

Looking at the current, and considering the thickness, and physics of the layers of the atmosphere, one must ask, what is more important: electrical potential, or current flux? Underlying questions: what is more important in engineering: resistance (conductivity) or having an electric field already strong enough to break

through the permittivity barriers (voltage breakdown)? If we look at the resistances, based on Google Search results and various studies (and stored as links in the spreadsheet, so the model can be updated in a peer-dialogue with the audience), it is clear that the telluric (crustal) and the Thermospheric are going to be the two best shells. Of the Spheres of Heaven, the Thermosphere is very high up, and part of the "ionosphere" (hence the low breakdown). But one has to wonder what kind of conservation there will be, versus charge loss to other layers. The likelihood is good, the author thinks, that it can be harvested because the layers are acting as a form of insulation.

Figure 4 - Illustration of Table 2; credit: ScienceFacts.net/author<sup>22</sup>

Notice, and the author did not even think of this, that the aurora itself is occurring in the Thermosphere. So the development of the first prototyping of the Birkeland Polphase Superweb will be made much easier as the satellites are cleared out and replaced with better, modular satellites designed to take us to Phase 2. The heat within it indicates also the use of radiant energy and harvest - via gold arrays -



<sup>22</sup> https://www.sciencefacts.net/layers-of-atmosphere.html

and the transfer via tight beam lasers and laser-arc discharge, back to transponders which have geocentric orbit that enables wireless transfer back to the surface (via microwaves).

# Radiant Energy (RE) as a True Green Energy (TGE)

Table 4 - Radiant Energy

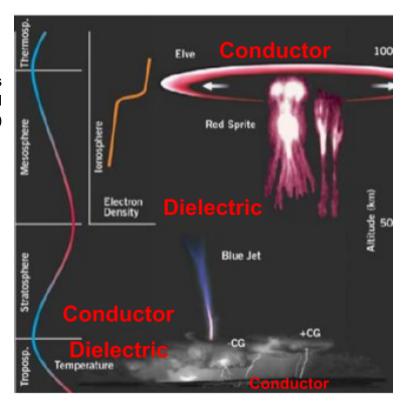
3 Forms			5 Types		
<ul><li>Thermal/electric</li><li>Radio/transmissive</li><li>Color/optical</li></ul>	(TE) (RT) (CO)	3.11.2 3.11.3 3.11.4	<ul> <li>Sunlight (full spectrum)</li> <li>Plasma ions (sequestration)</li> <li>Earth's sound waves/resonance</li> <li>Radio &amp; Cellular recapture</li> <li>Reflected light &amp; heat  MIMS 3.11.5X</li> </ul>		

Figure 5 - ELFs and Sprites, etc. explained as sources for RE; credit: space.com<sup>23</sup>/author (red words)

The **SPERR** for our energetic horse, so to speak, rides all along a solid backbone of not only PEMC science, EPEMC cosmology, and MIMS philosophy... it also resides along with the incredible power of the atmosphere.

Think about the values in Tables 1 & 2:

- ★ Average of 1.79 x 10<sup>21</sup> V potential
- ★ 1.59 x 10<sup>15</sup> V/m electric-field in the Thermosphere
- ★ 5.1 x 10<sup>3</sup> A in total current in that shell alone (this is not the Van Allen or other belts)
- $\bigstar$  10 Ω in the crustal shell; 200 Ω in the Thermosphere



The goal for the Birkeland Polyphase Superweb is for deep outer space, not just above the Karman Line. However, it makes total sense for the infrastructure to be developed and kept intact, refined and matured close to the Earth. There are also strategic military and defense values, as well as environmental reasons (and keeping the goals on cleaning up the plasmasphere etc.

<sup>&</sup>lt;sup>23</sup> https://www.space.com/space-station-asim-1st-blue-jet-elves-detected

It also adds value to Parameterizing the New Religion by giving people a clean daytime sky, but an active, beautiful nighttime sky. As well as a visual example of plasma space defense, and a warning for the behaviors of the Sun. If people see the activity up the night before, they might sunbathe less the next day, saving \$trillions in insurance. But perhaps they also will just consider taking days off when proton density is high, and taking care of themselves, instead of getting into fights, murders, crimes, and auto or work accidents. People will be able to *see* something that affects them, anyway.

# Superweapons of Phase 2 of Stage 1 in a SPACER society; or the dystopia

It goes without saying that development of any new super weapons - to point at one another, rather than at space - would be lamentable, and yet (because of the New Cold War) inevitable. Therefore, we have to work very hard, in the cosmological and research (and anthropological) community and as humanity in general, to guide (with good philosophy) this development towards a wiser 'space'. It would be all too easy to utilize the above research and technology to make a form of "The Manhattan Project". Although that was necessary at the time, it continued into unnecessary development which was incredibly problematic and sad. Worst of all: it strengthened our strategic and ideological adversaries.

So we must think to the next phase of Stage 1 of humanity's progress (there are roughly three phases per stage, 10 stages total), in order to lay out the SPACER movement as well as the vision, project, and policies that encourage the culture and humanity in that direction in general.

The main weapons that are developed out of this are:

Table 5 - Superweapons of Phase 2 of Stage 1

### Weapons (MIMS 2.85.X)

#### MilDef (MIMS 3.15.X)

- ★ Perattian Thunderbolt Generator (PTG)
- ★ Ion Cannon (Tight Beam Laser+Plasma-arc)
- ★ Van Allen Belt Arc-release Trigger
- ★ Hardin-Careaga Orbital Rail Weapon System
- ★ Next<sup>Next</sup> Kinetic Rail Cannon

- Plasma Double Layer Shield (for Earth)
- ❖ A.S.T.E.R.O.I.D.S. Defense System<sup>24</sup>
- Birkeland Polyphase Superweb Interphase Communications Array BPS-ICA

## Conclusion

One will notice that despite the fact that the Stratosphere is not a pure conductor, there is incredible electrical (ELFs, etc.) activity happening there. This is probably because the atmosphere is racing on the conductive crust with the Troposphere acting as a dielectric. Or, potentially it is the conductive Earth, dielectric atmosphere, conductive Thermosphere, dielectric Exosphere. This reminds the author of the MIMS 1.0 diagram<sup>25</sup>, alternating yin and yang, The rotation of charge in the layers is a very complex topic and the author recommends the reader to review the Uman et al. Lightning Physics<sup>26</sup> texts to understand the four main kinds of lightning. This will familiarize them enough to understand the importance - and to a degree the power levels - discussed in this document pertaining to the PEMS Spheres of Heaven.

<sup>&</sup>lt;sup>24</sup> Asymmetric, Systemic, Thermo-electric, Re-Orienting, International, Defense, System - a laser tag of asteroids for arc discharge or even BPS deflection system interaction.

<sup>25</sup> https://bit.lv/3EQJsWl

<sup>&</sup>lt;sup>26</sup> https://sites.google.com/view/epemcgateway/pemc/pu-research/lightning-research

This paper was able to make some baseline assumptions, and using average permittivity, thickness, and conductivity, to determine relative power levels.

In short:

Table 6 - Power Levels

@ the Layer	Power	
Core	3.20E+49	
Lower Mantle	2.36E+41	
Upper Mantle	4.86E+41	
Crust lower shell	3.32E+41	
Crust Surface	1.76E+35	
Troposphere	4.22E+11	
Stratosphere	1.34E+10	
Mesosphere	4.68E+04	
Thermosphere	2.99E+24	
Exosphere	1.06E-09	

How very interesting that the natural power (ungoverned) within the Exosphere is so low, literally nW; while the Thermosphere provides 3 mega-exawatts, and we note that the crust is also providing a massive amount of the potential power, and perhaps the weak middle shells indicates that a coupling can be had between the Thermosphere and the ground. This probably explains the Thermosphere in the first place (hence radiant energy sequestration). Further discussions in Radiant Energy (MIMS 3.11.1) will take place surrounding the pre-engineering and the true green energy concepts, etc. in the MIMS 3.5X.1Y and 3.11.X categories.

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