Correlation between electromagnetic pollution and increase in temperature in the Troposphere and consequences on the interaction of solar and terrestrial magnetic fields

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Abstract:

In this report we want to explain how the alteration induced by electromagnetic pollution in the troposphere can influence the interaction between the solar magnetic field and the magnetosphere. From these modified interactions all arise a series of terrestrial and astrophysical environmental consequences involving the sun and the other planets.

Introduction:

It is demonstrated that the Sun and the Earth have an interaction of dynamic electromagnetic fields that create an equilibrium for both.(1) (2)

During this process, the Earth's magnetic field creates a protection over it, producing the magnetosphere, which reduces the passage of solar radiation.

But the magnetic field of the earth interacts, also depending on the distance, with the magnetic field of the other planets.

These interactions contribute to the intensity variations of the magnetosphere. (3) Electromagnetic and chemical pollution, heavy metals, high and low frequency military technologies, satellite transmissions, have created a chaotic layer of electrostatic energy.

"The reflected wave forms a standing wave between the ground and reflection level. As the wave approaches the reflection height from below the wave group, velocity decreases so that the amplitude increases in order to conserve the energy flow, similar to what happens to an ocean wave approaching the beach. This swelling of the wave electric field in a region which constitutes a resonance between the wave and the plasma provides an efficient coupling of EM pump energy into the ionosphere." (4)

This prevents the electromagnetic energy of the Sun from penetrating to the core of the Earth, but which is nevertheless sufficient to reach the lowest part of the atmosphere and the superficial part of the earth's crust at a depth probably of a few tens of kilometers.

Increase in temperatures in the Troposphere and effects on the Magnetosphere

This electrostatic and microwave energy is heating the Troposphere and this is creating a shift in the earth's magnetic poles caused by a decrease in the strength of the magnetosphere.

It is possible to see the direct correlation between the increase in temperature and the movement of the Earth's magnetic poles in the graphs below

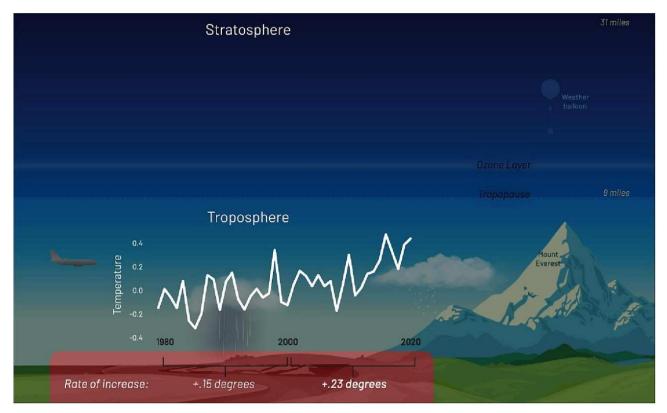


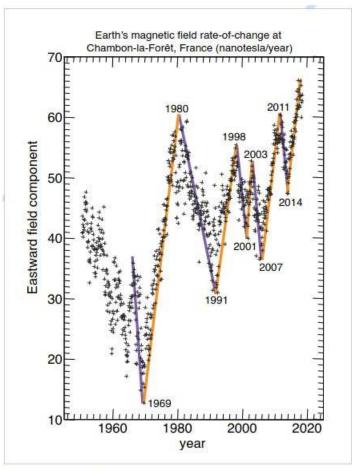
Figure 18: Temperature measurements captured by microwave sounders show unquestionably that the troposphere is warming, by .15 degrees Celsius per decade, and .62 degrees over the past 42 years, since the first sounder was launched in 1978, according to data from NOAA's Center

Source: https://www.eoportal.org/satellite-missions/atms#eop-quick-facts-section

Figure 18: Temperature measurements captured by microwave sounders show unquestionably that the Troposphere is warming, by .15 degrees Celsius per decade, and .62 degrees over the past 42 years, since the first sounder was launched in 1978, according to data from NOAA's Center for Satellite Applications and Research. And that rate is increasing. From August 2002 to December 2020, the warming rate had risen to an average of .23 degrees Celsius per decade (image credit: NASA, NOAA)

Movement of the poles:

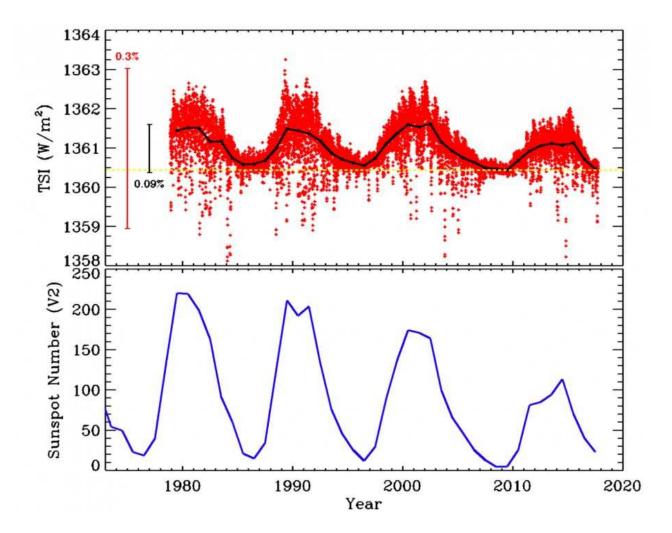
If you observe the temperature trend in the Troposphere and the trend of the poles in the same years it is possible to notice the almost perfect coincidence of the peaks in the graphs. The slight differences are attributable to the magnetic influences of interplanetary interactions.



You can spot jerks in the V-shaped graphs of the magnetic field's change in direction over time. Credit: Julien Aubert, IPGP/CNRS from French BCMT data

This weakening of the magnetosphere creates a consequence in the interaction with the magnetic fields of the Sun causing a loss of its energy and consequently in its Total Solar Irradiance (TSI), see graph below.

Il grafico mostra la STI dal 1978 e il numero annuale di macchie solari:



Numero di macchie solari e irradianza solare totale 1978-2017. Credito: SDO

In the graphic above, scientists from NASA's Solar Dynamics Observatory have drawn in red the daily average of the TSI points measured (14,187 points). On the left is a red vertical bar showing a change by 0.3% in the TSI. The black curve represents the average of the STI over the course of each year. The dashed horizontal line shows the minimum value of annual average STI data.

The vertical black bar shows the variation of 0.09% that we see in that average. The graph below shows the in blue annual number of SIDC sunspots in Belgium.

The decrease in Total Solar Irradiance (TSI) has allowed a notable increase in cosmic rays arriving on earth. (5)

The magnetosphere is continuing to function thanks also to the magneto-gravitational interactions of the other planets of the solar system, this is one of the causes of the variations in power intensity of the magnetosphere.

It is difficult to say how long this process will continue, I don't think for much longer, after which a critical point will be reached whereby the magnetosphere will collapse and the magnetic poles will reverse and the current living conditions on Earth will undergo a drastic change.

The other planets of the solar system will also suffer the effects because their magnetogravitational fields will continue to have an interplanetary electromagnetic interaction with the Earth until a critical point is reached.

All of this will have as its first effect the same change in living conditions that occurred thousands of years ago where there was a catastrophic climate event that almost completely wiped out life on Earth.

After that, planet Earth without the magnetosphere will become like Mars or Venus.

The processes and effects on the weather:

We know that the solar wind is a flow of particles (plasma essentially made up of protons, electrons and, to a small extent, alpha particles) that flows from the Sun and pervades interplanetary space, also affecting the Earth's atmosphere. These proton charges, encountering a lower resistance of the magnetosphere, penetrate faster and in greater quantities into the Earth's atmosphere. The sum between the protons of the solar wind and the electrostatic charges in the Troposphere increases the heat and electrostatic energy in that area even more.

So when this energy encounters altered climatic conditions it only increases this imbalance exponentially.

So if there should have been rain, instead a large water bomb occurs, if instead there is electricity, hundreds of multiple lightning strikes occur, etc... all due to the chaos of electrostatic energy and its concentration.

Another factor to consider is that these large sudden and unnatural precipitations of rainwater and therefore fresh water are influencing the level of salinity of the seas and their currents. Added to this phenomenon is the melting of the ice at the poles and the increase in the ozone hole. All this is creating a considerable increase in marine glaciers that are extending into the Arctic polar area.

The ozone hole and the correlation with electromagnetic pollution in the Troposphere

"The ozone hole has caused cooling of the Stratosphere (Gillet 2003) and this strengthens the cyclonic winds surrounding the Antarctic continent (Thompson 2002). Winds push ice around the continent, creating areas of open water known as polynyas, and more polynyas mean more sea ice production (Turner 2009). Another factor is changes in ocean circulation. The Southern Ocean is characterized by a layer of cold water near the surface and a warmer layer below. The relatively warmer waters that rise to the surface melt the ice. However, the increase in air temperature causes an increase in rain and snow. This makes the surface waters sweeter, giving rise to a surface layer that is less dense than the saltier and warmer layer below. This creates stratifications that reduce mixing. Less heat is transported upwards and therefore less ice melts. (Zhang 2007)." (6) Source:

https://skepticalscience.com/antarctica-gaining-ice.htm

One of the important reasons for the ozone hole, which not surprisingly is increasing precisely in the lower stratosphere (7) is the layer of electrostatic and electromagnetic energy that accumulates in the underlying layer and so in the Troposphere. "Electromagnetic waves with a frequency of several kilohertz known as "chorus waves" were observed to trigger electrons over a wide energy band of geospace to fall towards the Earth all at once and generate the flickering aurora referred to as a "pulsating aurora". The high-energy electrons in the radiation belt penetrating into an altitude of 60 - 80 km were discovered to be responsible for the depletion of ozone in the middle atmosphere.... The results demonstrated that when chorus waves are generated in geospace, electrons with a wide range of energies are scattered into the Earth's atmosphere, creating a pulsating aurora and at the same time, electrons from the radiation belts deplete ozone in the middle atmosphere (Figure 5). It has been pointed out that ozone depletion in the middle atmosphere is an important process that could affect climate change. The results from this study therefore suggest that the precipitation of electrons from geospace may impact the middle atmosphere and thus, climate change. (8)

The proof that this process is underway are the anomalous aurora borealis that are recently being produced throughout the entire range of territories under the Geographical North Pole: Italy (Liguria and Emilia Romagna, in the north of Puglia), Bulgaria, Romania, Slovenia, Greece, Germany, Austria, Holland, Ireland, UK, Northern and Southeastern Europe, Ukraine, Belarus, Georgia, Russia and other regions, northern states of the United States, Canada.

This makes us understand that not only is an increase in the ozone hole underway, but also a breakdown of the magnetosphere which has started from the access point of the Earth's magnetic field where the Aurora Borealis are created.

Conclusions:

The data described above make us understand that massive electromagnetic pollution in the Troposphere is raising its normal temperatures, this is having the effect of weakening the magnetosphere which manifests itself with the movement of the Earth's magnetic poles. An alteration is therefore created in the interaction of the magnetic fields between the Earth and the Sun. This massive electromagnetic pollution, but also chemical pollution (9), is one of the main causes of the increase in the ozone hole. This has as an immediate consequence extreme meteorological, but also seismic (10) and volcanic (11) phenomena even in multiple areas of the Earth and simultaneously.

To all this must be added a considerable decrease in the strength of the magnetosphere and the Sun which had the effect, due to its modified electromagnetic interaction, in a decrease in its Total Solar Irradiation (TSI) with a consequent increase in cosmic rays towards the Earth.

The climatic variations described above are currently creating an expansion of the polar marine glaciers, but the extension of the aurora borealis in the northern area of the Northern Temporal belt which recently occurred makes us understand that there will most likely subsequently be a further extension of the marine glaciers towards the entire northern band of the Northern Temporal zone.

References:

- 1. Space mission first to observe key interaction between magnetic fields of Earth and Sun University of Maryland. "Space mission first to observe key interaction between magnetic fields of Earth and sun." ScienceDaily. ScienceDaily, 12 May 2016. https://www.sciencedaily.com/releases/2016/05/160512145509.htm
- 2. Electron-scale measurements of magnetic reconnection in space <u>J. L. Burch</u>, <u>R. B. Torbert</u>, <u>T. D. Phan</u>, <u>L.-J. Chen</u>, <u>T. E. Moore</u>, <u>R. E. Ergun</u>, <u>J. P. Eastwood</u>, <u>D. J. Gershman</u>, <u>P. A. Cassak</u>, [...], and <u>M. Chandler</u>... (https://www.science.org/doi/10.1126/science.aaf2939)
- 3. Interplanetary magnetic field orientation and the magnetospheres of close-in exoplanets E. P. G. Johansson, J. Mueller and U. Motschmann

https://www.aanda.org/articles/aa/full html/2011/01/aa14802-10/aa14802-10.html

4. Powerful electromagnetic waves for active environmental research in geospace <u>T. B. Leyser</u>, A. <u>Y. Wong</u> https://aqupubs.onlinelibrary.wilev.com/doi/full/10.1029/2007RG000235

- 5. Cosmic rays decreasing as Solar Cycle 25 gains strength https://watchers.news/2021/07/14/cosmic-rays-decreasing-as-solar-cycle-25-gains-strength/
- 6. Increasing Antarctic Sea Ice under Warming Atmospheric and Oceanic Conditions JINLUN ZHANG

http://psc.apl.washington.edu/zhang/Pubs/Zhang Antarctic 20-11-2515.pdf

7. Evidence for a continuous decline in lower stratospheric ozone offsetting ozone layer recovery

Ball, William T.; Alsing, Justin; Mortlock, Daniel J.; Staehelin, Johannes... https://ui.adsabs.harvard.edu/abs/2018ACP....18.1379B/abstract

- 8. Depletion of mesospheric ozone due to the pulsating aurora Arase (ERG) reveals the impact of radiation belt electrons on the Earth's atmosphere Yoshizumi Miyoshi, Keisuke Hosokawa https://www.isas.jaxa.jp/en/topics/002656.html
- 9. Basic Ozone Layer Science EPA (United States Environmental Protection Agency) https://www.epa.gov/ozone-layer-protection/basic-ozone-layer-science
- 10. Influence of Solar Cycles on Earthquakes
 Marilia Tavares, Anibal Azevedo
 https://www.researchgate.net/publication/
 258471897 Influence of Solar Cycles on Earthquakes
- 11. Sun Disturbances on Earth's Volcanism

 Marilia Hagen, Anibal Azevedo

 https://www.scirp.org/journal/paperinformation.aspx?paperid=122352