

# 'GLOBAL WARMING': AN OFFICIAL PSEUDOSCIENCE

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ISBN 1-894840-35-6

# ABSTRACT

On Nov. 1, 2005, Lawrence Livermore Laboratories announced that "if humans continue to use fossil fuels in a business-as-usual manner for the next few centuries, the polar ice caps will be depleted, ocean sea levels will rise by seven meters and median air temperatures will soar to 14.5 degrees warmer than current day..." You might think that this would be a preamble to demanding investment by industry and/or governments in alternative energy research. But you would be wrong - for it is, in fact, nothing more than scare propaganda to resign you to even more gouging by the oil companies at the gas pumps and the extortionist prices now being paid for natural gas; all in order to bring us to our knees begging for more nuclear power plants, and oil and gas exploration. LLN no longer hides its being one more power mechanism dedicated to this sort of indoctrination.

By now you should have figured this one out. Recent years have witnessed a series of fear-mongering alarmist fads in pseudo-scientific meteorology and climatology, each promoted in succession by news media and mainstream science publications. Perhaps the most expensive example of these mass-hysterias is the pseudoscientific fad of 'global warming'. The present article is an examination of the science behind the ideology of 'global warming', as well as the social and political forces driving its promotion.

Few scientists would dispute the fact that climate is changing on a planetarian scale, and there are good reasons to believe that some of the changing features are not part of a natural variation, but consequences of man-made pollution. What every good scientist will dispute, however, is whether this observed and ongoing change is, as the promoters of the 'global warming' myth dogmatically assert, an upward change in the atmosphere's mean global temperature - and whether the mechanism responsible for it is  $CO_2$  emission from fossil fuel combustion. Present-day climatology is vulnerable to these kinds of faddist dogmas - pushed forward as part of a political and media-driven agenda - because it lacks a functional, comprehensive, systematic and interconnected understanding of the nonlinear system formed by the atmosphere, the oceans, the land mass and the biosphere, and their interaction with solar radiation. The discoveries and methods of Aetherometry provide inroads towards developing such an understanding, beginning with a new understanding of the role of the Sun and solar radiation in modulating weather patterns over short and long-term scales.

# I - THE FAD, THE MYTH AND THE FUDGE OF 'GLOBAL WARMING'

#### 1. The pseudoscientific fads of Official Climatology and Environmental Sciences

There is perhaps no clearer example of the arbitrary vagaries of mainstream peer-review and its promotion of non-scientific fads, driven by political and economic interests, than the recent promotion of the pseudoscientific myth of 'global warming', systematically accompanied by the recurrent fits of public hysteria it engenders amongst scientists, politicians, environmentalists (another type of politico), mainstream science journals and mass-media.

Fads of this type - the fear-mongering alarmist type - have become the mainstay of official mass-media and the object of sensationalistic 'science-journalism'. There's been a whole series of such fads associated with pseudo-scientific meteorology and climatology, that are cyclically promoted by syndicated news media and official or mainstream science publications.

In the 70's, in the wake of the atmospheric cooling experienced between 1945-1947 and 1972, there was a passing fad of 'global' cooling, supposedly buttressed by study of the fossil record and ice samples, which had 'established' the existence of cycles of minor ice-ages (see reference to the Milankovich model below). At that time, the fear was that the earth was just turning the corner into a new ice-age. Any notion of global warming was strictly anathema. Instead, it was argued that man-made contributions would aggravate this cooling by the production of carbon and sulphur aerosols. As **Richard Lindzen** points out [1], some of the best-selling authors of this rubbish, like **Stephen Schneider** and **Crispin Tickell**, have now, not so surprisingly, moved on to become apologists of the 'global warming' hysteria. **Lindzen** may argue that, amongst scientists, the fad was shortlived; yet, it is worth mentioning that, besides an ambiguous report by the NRC of the U.S. National Academy of Sciences, the two reports that initiated the 'global cooling' fad - on the natural prediction of an ice age as the trend of future climate [2], and on the effects of  $CO_2$  and aerosols on cooling global climate [3] - were both published in the journal Science, the very same peer-reviewed journal that now promotes the 'reality' of 'global warming'.

Next came the fad of acid-rain, then one heard about cows and termites being a significant source of atmosphere-polluting methane (that one was dear to Reaganism in the early 80's), then about the hole in the stratospheric ozone layer over Antarctica (back in 1985, by the British Antarctic Survey, BAS), and finally 'global warming' came of age. Each fad came with smidgens of truth scattered about in a tissue of lies, unverifiable axioms and perverse falsification of facts. And, of course, each also came with an ever growing number of climate modellers, now armed with supercomputers...

Pseudoscientific fads do not have, nor do they need, any reason to come about, being set in motion solely by the political and social forces that promote them, and the vested interests they serve. Climatology and other environmental sciences are particularly vulnerable to this sort of manipulation because, as **Lindzen** puts it, "rigor is generally impossible" in these disciplines. But since these fads are supposed to be 'scientific', they are compelled to search for pseudo-evidence which may serve as the excuse (the 'scientific reason') for their promotion in mainstream journals and the media. Typically there is a little truth in this pseudo-evidence, but

its generalization or interpretation falsifies the facts and the data, undermining both the value and the quality of the latter.

# 2. The social forces driving the hysteria of 'global warming'

But how did the official line of Royal Science and mass-media coverage manage to flip flop from the hysteria of anticipated 'global cooling' to the hysteria of 'global warming'?

By 1989, mass-media mouthpieces were promoting the notion, now dominant, that 'all' scientists in the U.S. and Europe were agreed on the reality of 'global warming'. The magazine *Science*, of course, was at the forefront of the new fashion. When **Lindzen** submitted, in the spring of 1989, a critique of the myth to *Science*, the paper was rejected *without* even being peer-reviewed. Eventually, it was accepted by the *Bulletin of the American Meteorological Society*, but *Science* took it upon itself to criticize the blackballed article *before it was even published* - one in a long line of clear-cut instances of *Science*'s unethical behavior, and proof positive of the existence of an unspoken policy of general circulation of leaked submissions.

The direct political reasons for the promotion of the 'global warming' fad are to be found in the convergence of diverse social forces:

• the evolution of left (social-democratic) political forces towards a new electoral marketing - militant form of environmentalism, and technocratic managerialism;

• the transformation of 'ecological' organizations into profitable non-profit, macro-capitalist funds;

• the design of national State bureaucracies to control the entirety of social life with new regulatory mechanisms;

• the emergence of a new International State technobureaucracy in search of supranational powers and jurisdictions.

To these social forces one must add the worldwide unregulated growth of cadres and the transformation of forces of antiproduction and destruction into profitable ventures. Thus -

• an excess of PhD's in physics and mathematics with little left to aim for other than the pursuit of a career within the *official institutions of organized dissent*, where they endlessly generate models and fads pliable to political interests, in particular those fads that are dear to the global techno-socialist management of capitalism; and

• the subsidies, grants and investment provided to 'green' groups by some of the worst polluter industries (eg oil, nuclear companies, utilities, etc) as a way to redeem their status or blanch their image, and as a sort of 'protection fee'.

Finally, there is, as we said, a softness that, so far, is intrinsic to environmental sciences, and which makes them particularly vulnerable to mystification and political manipulation.

Of all these social forces and trends, it is apparent that the main role is played by the emerging

global technobureaucracy. Taken separately, the other forces were unlikely to amass sufficient momentum for a deep social penetration. They needed a substantial partner in power, and a pseudo-scientific doctrine that could be shoved down everyone's throat. That's what they found in the UN, in its latest role as a 'regulator' of 'sustainable development and global growth', and in its highly corrupt NGO structure. From the sham Rio de Janeiro Conference, in 1992, to Kyoto, these neo-left-wing militants - their ranks swollen with crypto-anarchist volunteer slave-labor - formed the frontlines of the New Global Order, the millenial paradigm, even as they claimed to be denouncing 'globalism'. Pliable to the new international capitalism of global looting, the 'global warming' movement disguised its objectives as scientific, and 'dictated' them as being in the objective interest of mankind. The myth of 'global warming' was their precious tool:

"Global warming advocacy is big business, hundreds of millions in research and other funds are available annually for those scientists and organizations who spout the party line (just check the Pew Foundation gravy trains), don't fool yourself, scientists and professors need money and research funds, and some are willing to violate the scientific method to obtain them. (...) Sierra Club, Friends of the Earth, WWF, etc, who make these claims, (...) who present themselves as non-profit/non-partisan, are neither. They are just as biased and unscientific in their approach as the big oil, car and chemical companies are. They make money from fear mongering to collect funds from well meaning, concerned, but scientifically naive people." [4]

'Global warming' is likely to be the most expensive pseudo-scientific hoax ever implemented. As of August 22, 2005 - and since the Kyoto protocol came into effect on February 16, 2005 the Kyoto Agreement has cost 80 billion dollars for, supposedly, a prevention of warming by 0.0008 deg C... To prevent a 1 deg C increase it will cost some 100 trillion dollars [5]. One can measure this wasteful capital expenditure by the 16 billion that was needed to shore up New Orleans and the Mississippi delta from a stage 5 hurricane like Katrina, or by the paltry 3 billion that the US spends annually in orthodox research on alternative energy (reduced, in essence, to solar cells and wind turbines). 'Global warming' is a clearcut example of the central role acquired by antiproduction in global capitalism. Its promoters, with peer-reviewed mainstream publications at the forefront, have struck gold - a very lucrative business, where nothing needs to be actually produced, not even real science, in order for a 'healthy' profit to be made under the cover of an altruistic advocacy voicing demands in the name of mankind...

Nothing could outdo the power of this hoax in fuelling anti-Americanism worldwide, nor become as engrossing a plot for the 'prime time' show:

"The global warming circus was in full swing. Meetings were going on nonstop. One of the more striking of those meetings was hosted in the summer of 1989 by Robert Redford at his ranch in Sundance, Utah. Redford proclaimed that it was time to stop the research and begin acting. I suppose that that was a reasonable suggestion for an actor to make, but it was also indicative of the overall attitude towards science. Barbara Streisand personally undertook to support the research of Michael Oppenheimer at the Environmental Defense Fund, although he is primarily an advocate and not a climatologist. Meryl Streep made an appeal on public television to stop warming. A bill was even prepared to guarantee Americans a stable climate." [1]

From **Jeremy Legget** of Greenpeace, to **George Mitchell** and **Albert Gore** (who compared the 'true believers' in 'global warming' to Galileo! Caramba!), 'global warming' had become the latest soap, an international brand to sell books and plead for donations. **Lindzen** appropriately concludes:

"Rarely has such meager science provoked such an outpouring of popularization by individuals who do not understand the subject in the first place."

To the long list of circus performers, one must add that other latecomer among the plethora of modern trashcans, the populist purveyor of gross ineptitude - Wikipedia, ruled by a neo-maoist cabal of 'global warming' zealots.

#### 3. The rationale for 'global warming': manufacture of a global consensus.

One may ask, why was the global warming myth chosen to promote the new doctrine of globalization? The answer is simple: because climate *is* changing on a planetarian scale, and there are good reasons to believe that this is a man-made (anthropogenic) factor, not part of a natural variation. Few scientists would dispute the fact of a climatic change. Just what it is and what causes it, is the problem.

What every good scientist will dispute is whether the implicated change is that which promoters of the global warming myth dogmatically assert: an upward change in the atmosphere's mean global temperature. Furthermore, most good scientists will also dispute whether the mechanism proposed for 'global warming' (ie  $CO_2$  emission from fossil fuel combustion) is really the mechanism responsible for the observed and ongoing climactic change, or even the main factor.

In his book "*Dancing Naked in the Mind Field*", Nobel laureate **Kary Mullis** (molecular biologist, biochemist and inventor of the Polymerase Chain Reaction) summarizes - in Chapter 11, appropriately entitled "What happened to the Scientific Method?" - the negative consequences of the pseudoscientific fads which Official Science regularly promotes, and the widespread stupidity that this engenders:

"Very little experimental verification has been done to support important societal issues in the closing years of this century. Nor does it have to be done before public policy decisions are made. It only needs to be convincing to the misinformed voter. Some of the big truths voters have accepted have little or no scientific basis. And these include the belief that AIDS is caused by human immunodeficiency virus, the belief that fossil fuel emissions are causing global warming, and the belief that the release of chlorofluorocarbons into the atmosphere has created a hole in the ozone layer. The illusions go even deeper into our everyday lives when they follow us to the grocery store."

Let's take a look at the science behind this pseudo-scientific ideology of 'global warming'. The zealotry displayed by the promoters of this hysteria, their belligerently militant pose of altruistic motivation, can best be exposed - for all the revulsion they evoke - by debunking the pseudoscience and the main tenets of the myth of global warming. The new party line, as defined by one such pseudoscientific zealot [6], is founded upon a bureaucratic notion of a consensus with 4 tenets (the sacred pillars of the myth):

1.That the earth is getting warmer (0.6 deg C over the last 100 years, and at a rate of 0.1 deg C per decade in the last 30 years). [Some claim 0.2 deg C per decade...]

2. That the effect is man-made.

3. That the effect is attributed to the increase in carbon dioxide over the last 100 or 200 years (depending on whom one reads) caused by burning fossil fuel (in cars, power plants, etc), and as the burning will increase because it is the main source of energy, so will the global warming.

4. That something must be done about this, which means the use of political power to bring the

burning of fossil fuels to a stop.

More likely, we should add, to permit substantial increases in the cost of those fuels...

The main objections to this faddist consensus can be easily summarized: the atmosphere is far too complex a system, and too dependent on the oceans, on geothermal energy and solar radiation, to be arbitrarily reduced to processes driven by single causes, such as the emission of carbon dioxide, or even the production of 'greenhouse gases' (GHGs). Moreover, *climatology is not a real science*, not yet a discipline that has succeeded in understanding the core of its subject the way other sciences have, *nor one that is able to effectively adhere to the principles of the scientific method and thereby become rigorous*. In fact, until the present authors published their proposed enthalpy balance for the most fundamental atmospheric cycle, the allotropic cycle of water, oxygen and ozone [7], *no physicist nor chemist, let alone a climatologist or modeller, had been able to resolve this simple but most immediate problem*. Without such a solution, one cannot *even hope to establish a science of climate and weather*. Similarly, chemo-atmospheric cycles, as regards pollutants such as nitrogen oxides and carbon dioxide, remain poorly understood to this day.

Furthermore, even though meteorologists are taught that most of the atmospheric energy budget exists only in the form of latent heat, there is no adequate physics or physical understanding of the circulation and key role of this latent form of energy in the atmosphere, nor a real understanding of the energy conversions into and from it. All arguments are reduced to radiative treatments of electromagnetic energy, plus the mechanics of the movements of cold and hot air masses. In the past 20 years, the vulnerability of the field of climatology was more poignantly put into evidence by its take-over by climate modellers, bent on improving forecast ability. 1980 and 1990 models predicted temperature rises on the order of 1.5 to 2.0 deg C by the year 2000, more than 5 times what the promoters of global warming now accept 'was found' to be the case (rates of 0.1 to 0.2 deg C per decade). Modellers cannot predict even the path of a hurricane (when *Katrina* was 200 miles offshore, all models predicted a path towards northern Florida, not towards New Orleans), nor even local weather on the *same* day - and yet, they are trusted to tell tall tales about the past and spread alarmist fears about the future. It is, therefore, hardly astonishing that *climatology* has become a preferred field for *pseudo-scientific faddists*.

So, let's address the four false tenets of the 'global warming' ideology. In summary, we can counter them and their dogma, as follows:

1. First of all, there is no real scientific evidence that demonstrates that the Earth has been warming over the past 100 years - neither for seawater, the atmosphere, nor the land mass. There is evidence that shows that there are complex interwoven cycles of intradecadal and supradecadal warming and cooling, but no data that can even be formulated as a warming rate of X deg C per decade with any legitimacy.

2. The main effect of man-made pollution is not 'global warming' but a complex alteration of atmospheric chemistry and energy conversion processes, little of which is being investigated.

3. The role of carbon dioxide in warming the atmosphere has been overestimated, partly because so little is known about that atmospheric chemistry.

4. Instead of asking for more political and policial powers for national and supranational State structures, for more 'daddies' or 'dons' to protect us, society should be fostering and encouraging real scientific research in alternative energy systems and non-mainstream basic physics.

Finally, the pretense of 'a consensus of scientists' about the 'reality' of 'global warming' is the very underpinning of the myth, a commodity *manufactured* by mediocre scientists most often associated with State or UN 'services', and *marketed* by globalized media-chains and unethical mainstream peer-reviewed magazines such as *Science*. A poll of the American Meteorological Society in 1999 found that 49% did not believe that there was an association between man-made  $CO_2$  emission and climate change, 33% were not sure about the connection, and only 18% were sure that there was such a connection. But in aspiring populist organizations [8], where 'majorities' can be enforced by techno-bureaucratic power plays, the consensus is declared to be 'virtually unanimous'...

Yes, the consensus, too, is part of the hoax, a complete fabrication. As to what "popular consensus" really means - that too, is nothing other than an exercise in mediocracy for consumption by zombies, as performed by the likes of **Rupert Murdoch** and 'eco-sensitive' Hollywood stars.

A short sample of high-caliber scientists who have criticized the hoax of 'global warming', demonstrates by itself how media-engendered is the myth of consensus on 'global warming':

Robert White (former head of the US Weather Bureau)

Richard Lindzen (Prof. of Meteorology at the MIT)

Willie Soon (Harvard-Smithsonian Center for Astrophysics)

Sallie Baliunas (Harvard-Smithsonian Center for Astrophysics)

**Robert Balling Jr.** (Director of the Office of Climatology, Prof. of Geography at Arizona State University)

Fred Singer (President of The Science & Environmental Policy Project)

**Zbigniew Jaworowski** (Chair of the Scientific council of the Warsaw Central Laboratory for Radiological Protection, CLOR)

**Eric S. Posmentier** (Department of Physics and Mathematics at Long Island University, Brooklyn)

Michael Jorgensen (Paleoclimatologist)

**Theodor Landscheidt** (Schroeter Institute for Research in Cycles of Solar Activity, Nova Scotia)

Frederick Seitz (Former president of the National Academy of Sciences)

**Robert E. Stevenson** (Oceanographer, previously with the ONR and Secretary General of The International Association for the Physical Science of the Oceans)

Craig Idso (Center for the Study of carbon Dioxide and Global Change, Arizona)

Sherwood Idso (Center for the Study of carbon Dioxide and Global Change, Arizona)

David Legates (Center for Climactic Research, Delaware)

Chauncey Starr (Former Dean of Engineering at UCLA and founder of EPRI)

Kary Mullis (Nobel Prize, Molecular Biologist)

Add to this scientists who have reversed their originally pro-'global-warming' views, such as:

**Roger Revelle** (Prof. of Ocean Science at Scripps Institute of Oceanography)

Michael McElroy (Head of the Department of Earth and Planetary Sciences at Harvard)

But for those who have any doubts about the dissenting views of a majority of scientists with respect to the fad of 'global warming' just consult the Petition Project of the Oregon Institute of Science and Medicine (19,000 signatures, of which 2,500 by scientists in Earth Sciences), at www.oism.org/pproject/s33p403.htm

If there is a scientific consensus about 'global warming', it is that it is junk science, pseudo-science, humbug.

When the entire myth eventually collapses, scientists and the public will do well to wonder how so much of the public purse was *abusively wasted* by scientists and politicians on an issue and a field of investigation where most of the basic science is still missing, while *virtually nothing* was done to investigate basic physics (including atmospheric physics) and to develop alternative energy sources. To call this widespread abuse and overt mismanagement of funds 'a scandal' will hardly begin to describe the free-for-all gravy-train circus it has been.

## 4. A modeller's myth of oceanic warming: how the new (pseudo)science is secreted

Let us start by considering the oceans. The latest weapon in the arsenal of 'global warming' advocates is a study by Syd Levitus' group at NOAA's NODC (National Oceanographic and Atmospheric Administration's National Oceanographic Data Center), which supposedly established the 'fact' that 'the oceans are warming', irrespective of its cause. Levitus et al had previously built an extensive ocean database where yearly data from 1948 to 1998 was logged after an 'objective grid analysis' [9]. In the 2000 study, they admit that of the data they employed for values of heat content from sea surface to a depth of 300 meters, the most reliable only dates from the period following 1975, when real-time reports of data logs were initiated [10]. The determinations are made only in terms of heat content, likely so that standard errors appear smaller by attribution to supersets of data sets, rather than to actual sets of raw data. No actual salinity data is employed. In the same 2000 study, the entire set of results presented for depths from sea surface down to 3000 meters is a simulation, an estimate based on arbitrary 5-year running composites, which, in the authors' own words, was made "necessary due to the lack of deep-ocean observations" [10]. By any measure of the scientific method, this could never be mistaken for *scientific results*, for *empirical data*. It could only be considered for what it is, an hypothesis that 'massages' data, even fabricates it, in order to construe a rationale that justifies supposition of the starting hypothesis. The simple truth is that no scientist can suppose the hypothesis proven by virtue of the 'massage'! And since the hypothesis remains to be proven, it is *not yet proven*, and should *never* have been published as a 'finding'! That such could happen must be credited to the corrupt nature of our social institutions - from the 'ecology shows' to the UN-affiliated NGOs, from the oil-industry to regulatory mechanisms - and the spread of this corruption to science itself.

Could it be that only science that is incomplete, and remains axiomatic, is susceptible to official appropriation? Could it be that the greater part of Official Science is corruptible science? That only science which is susceptible to falsification, and strays so far from the scientific method that it settles for systematic inconsistency, can be official?

With no real science to back them up, **Levitus** *et al* claim that from 1955 to 1995 the 'evidence' demonstrates a net warming of 0.06 deg C down to a depth of 3,000m, and a mean increase of 0.31 deg C down to a depth of 300m depth. Taking at face value their interpretation of the treated data - that during the years 1985 to 1998 there has been a net warming trend of seawater (they actually claim in the paper's discussion that the trend began in the 1970's for surface sea water, though none of the present trends shown in their data - in the Atlantic, Indian and Pacific oceans - began in the 1970's...) - what can one conclude? One can conclude what one *should* by looking at their own data (Fig. 1 of their paper) - namely, that the data for all three oceans shows annual and quasi-periodic, supra-annual oscillations in cooling and warming. The latter oscillations appear to be decadal, or even hemidecadal, likely also with patterns that are longer term than decades. Little can be said about these patterns - and thus also about long-term trends predicated on the moving averages of these oscillations - since **Levitus** *et al* failed to make any correlation with periodic variations in solar radiation, such as the sunspot cycle, etc. But the

patterns are there, showing that long-term variations in ocean temperature, and oscillations of its thermal content, *alternate* over the period of the study.

In fact, conventional climatology accepts that between 1920 and 1940 there was a bidecadal period of surface ocean water cooling, followed by a decadal period of warming, and then from 1947 to 1967-1970 - another period of cooling. And Levitus et al's data itself, on all three ocean panels, shows that while some warming occurred between 1967 to 1977 or so, there was equally a cooling from 1977 to 1984 or so. They passed by these oscillations in silence, and instead concentrated on showing what appear to be impressive 'trends' on the simulated data for the greater depth of 3000m (their Fig. 4). Any decent reviewer should have asked for the physical rationales for constructing such conveniently smooth composites. The rationale for a statistical construct cannot be merely the invocation of a statistical technique. Nowhere do Levitus et al provide a physical and chemical reasoning for their constructs. But what is more important, they fail to test for simple physical correlations - such as correlation of temperature variations against cloud cover, salinity, or, more importantly still, solar periodicities (eg the Gleissberg, 22- and 11-year cycles of sunspot activity; the long and short solar orbital periods on the plane of the ecliptic; the variations in the solar constant, in particular, those affecting atmospheric UV photon production; the variation in speed and composition of solar winds). But aside from such tremendous shortcomings or effective cop-outs, there is a simple fact that should be staring every scientist in the face: if the data can be trusted, it presents the record of a series of oscillations, and any mean taken at any arbitrary point in time cannot be extrapolated linearly into the future (or into the past, for that matter), since it is part of an oscillation or an oscillatory train of variations. A sample of 50 years suffices to identify a small set of quasi-periodic oscillations, but the mean value of the oscillation about the mean, either way (for warming or cooling), even if it is said to be an anomaly ("the anomaly in heat content"), cannot be taken - with any scientific legitimacy - as a basis for a projection that increases the "anomaly" indefinitely at the same rate of warming (or cooling), because of some out-of-the-blue postulate of a "positive feedback mechanism"...

The real 'anomaly' is *the nonsense of the reasoning that extrapolates a global trend from a periodic oscillation*. Even the overall mean temperature of reference is a *relative* mean, dependent upon the *size* of the sample, which is merely the same 50 year period...

Yet, a paper with simulated data from scientific technobureaucrats of a government service so pleased their masters at the IPCC, the UN CLIVAR program and the US NRC, that it *passed peer-review* - during which, incidentally to our subject, *none of these objections were raised* - and was published in *Science*... Mar-vel-lous.

To further underline just what faith the raw data itself deserves, the oceanographer **Robert E. Stevenson** describes his early days at the mechanical job of data collection - by dipping a bucket into the sea water from a travelling ship, to take a temperature reading:

"Most of the thermometers were calibrated into 1/4 degrees Fahrenheit. They came from the US Navy. Galvanized iron buckets were preferred, mainly because they lasted longer than the wood or canvas ones. But they had the disadvantage of cooling quickly in the winds, so that the temperature readings needed to be taken quickly. I would guess that any bucket temperature measurement that was closer to the actual temperature by better than 0.5 deg C was an accident, or a good guess. (...) The archived data used by Levitus, and a plethora of

oceanographers, were taken by me, and a whole cadre of students, postdocs, and seagoing technicians around the world." [11]

And, as if this weren't appalling enough, there are the further unaddressed problems of the limitations in the resolution of those thermometers and thermistors, the proper calibration of the latter, their drift and noise... Science is method, or it is nothing but any odd lump sum.

Not to be outdone, the same group took the next step in another *Science* report, in 2001 [12]. There they categorically asserted that the Earth has increased its heat content in the atmosphere (all the way to the stratosphere), in the oceans, and in the cryosphere, and that this effect is anthropogenic.

What is the proof? The best fit of a modelled curve to a pre-agreed curve tracking a cumulative global warming... Even a doodling grocer coming out of Cambridge or Oxford can become a scientist.

Present-age of climatology is filled with mathematical gimmicks or 'computer games', called models, which are axiomatic and self-validating by a vast number of corrective, 'normalizing', 'fitting', 'infilling' procedures which they include in order to fit a set of overprocessed 'data' to the desired result. The precarious epistemological situation of climatology only worsens when such models are built with 'treated' data, and the whole procedure justified by the poverty of real data. In a model, an algorithm takes over which weighs a variable number of variables ('forcings'). The selection of such forcings is, itself, a matter of contention. Irrespective of that, the data is further 'processed' (blanched, laundered). In the case of the 2001 Levitus at al paper, the proof for the correlation of ocean warming and global atmospheric warming is obtained in reverse, as the fit between a modelled curve that integrates all the separate ocean 'results' of the 2000 study for ocean warming down to a depth of 3,000m, and a modelled curve for the effect of one or several 'forcings' related to atmospheric parameters (greenhouse gases and sulfate aerosols) predicted by the global warming climate model. The data of the 2000 paper was processed into 5-year running averages (the points plotted), using a 'smoothing' method (or 'Einstein-fudge factor') which is supposed to 'compensate' for the sparseness and the 'intrinsic noise' (sic) of the data. The best fit found by the Levitus group included 'forcings' representing the greenhouse gases, sulfate aerosols, volcanic aerosols, and solar variability (perturbations in solar irradiance, which is assumed to be constant otherwise). The authors conclude that their study "is evidence" that the warming of the terrestrial surface is of anthropogenic origin and due to the increase in greenhouse gases and sulfate aerosols...

One might wonder where the data is - the *real* measurement data, down to 3000m into the deep ocean; or the data for correlation, or lack thereof, with solar processes; or the data that justifies the assumptions intrinsic to the 'global warming' climate model, including those predicating it upon an increase in greenhouse gases. Where is it? Thousands of papers have been published, yet so very few are worth citing.

That the results of modelling, or even simulation, can be treated *as if they could replace and equate to empirical data and the product of empirical methodologies, is a still more dangerous corollary of the myth of 'global warming*'. It presents us, in fact, with a 'retrograde paradigm shift' brought about by the unquestioned reign of computer modelling in climatology (or that of

String Theory in physics, and so on). It is the price paid for the new hegemony of 'sophisticated' manipulation of data, and the inscrutable rule of technobureaucratic cadres. With the right selection, any fact can be omitted from existence and replaced by any of the imaginaries of modelling... This formalistic turn of Official Science may well be signaling the end of science - at least the point at which Official Science is no longer able to absorb science itself, because it ceases having a handle on what is or is not science.

*It is modelling which is a forcing, and not a reliable one*. As reliable as the predictions of the path and intensity of hurricane Katrina before it hit Louisiana, or the effectiveness of FEMA in helping people in the aftermath. One cannot apply the term "science" to that which lacks data but asserts its hypothesis as proven by the mere fact that the hypothesis itself can be enunciated. An hypothesis, no matter how 'neat', must be proven experimentally, by actual observations and measurements, before being considered "proven", or even on its way to being "proven". Even then, it is most likely destined to be disproven later by a better and finer hypothesis. But all this, the very method of science, has now been discarded by the apologists of 'global warming' and the high priests of Official Science.

In passing, we should remark how the language of these climate modellers is the technocratic language of the *neutered and the inverted*: simulations that extrapolate a model become a "control run" (!); filling in missing data becomes "smoothing" (one of the 'great evils' of modern science); statistical procedures are employed as if they were equivalent to empirical investigation and methodologies, and are referred to by such euphemisms as "optimal detection methodology"; long-term variations in temperature are called 'anomalies' with respect to operational means extracted from small sets; the "heat increase predicated on global warming", becomes the "observed heat gain". And so on.

## 5. Where is the evidence for global atmospheric warming?

Just like seawater shows oscillations in temperature or content of sensible heat, the atmosphere, too, is subject to long-term oscillations in energy content, including sensible heat and its measure by temperature. In fact, the evidence indicates that the atmosphere undergoes regular periods of cooling and heating, both near the ground and all the way up, through the troposphere, to the tropopause and the stratosphere. The scientific evidence collected over the past 50 years suggests that there are periods of cooling and warming superimposed on cycles of various scales, and that these variations are connected, in ways not yet understood, to solar periodicities, geothermal energy, varying atmospheric electricity and latent heat, and varying cloud cover and cloud composition. As suggested by a number of investigators (viz. **Richard Lindzen, Willie Soon, Sallie Baliunas**, etc), these cycles may also involve negative feedback, likely through diverse physical processes - chemical ,evaporative, radiative and electrical.

Temperatures of the atmosphere close to the surface have had oscillations of a secular character - a fact that for some time now has been recognized by glaciologists, paleoclimatologists, archeologists, etc. Changes in the amount of heavy oxygen isotopes (which is proportional to the amount of ice) in marine fossils have been correlated to three separate cyclic changes in the movement of the Earth with respect to the Sun, to produce the so-called Milankovich model of climatic periodicity: a 90-100k-year periodicity associated with variation in the orbital eccentricity; a 40k-year cycle associated with the tilt of the Earth's axis; and a 21k-year periodicity associated with the wobble of the axis. Between 83 and 18k-years ago, a 'great freeze' seems to have taken place, and it is commonplace to infer that our epoch lies near the end of an interglacial that began some 12 to 10k-years ago. Within this interglacial, it was apparently warmer at earlier times, for example in the period of 850 to 1250 AD (so-called Little Climactic Optimum), than it is today. A recent study of the last 1,000 years by **Willie Soon** *et al*, concluded that "many records reveal that the 20th century is likely *not* the warmest nor a uniquely extreme climatic period of the last millenium" [13].



As others (viz Theodor Landscheidt, Michael Jorgensen) have pointed out, in parallel with

the long-term oscillations of ocean cooling and heating. variations in atmospheric temperature also occur on scales substantially shorter than those of the Milankovich model - as decadal, supradecadal and intradecadal oscillations. This is readily apparent even in the IPCC

FIGURE 1 (top): Time-series of seasonal temperature anomalies of the troposphere based on balloons and satellites in addition to the surface.FIGURE 2A: Time-series of seasonal temperature anomalies of the lower stratosphere from balloons and satellites.

(Intergovernmental Panel on Climate Change) presentation. A graph [**FIGURE 1**] of the separate ground-, balloon- and satellite-measured temperature variation of the troposphere from 1958 to 2001 [14], presents parallel curves, with intradecadal periods of cooling ('58-'66, '69-'72, '81-'85, '91-'93, '98-'01) and concommittant periods of warming ('66-'69, '72-'81, '85-'91, '93-'98). Some of these periodicities have near-perfect coincidence with variation of solar irradiance residuals: the cooling of '81-'85 coincides with decreased irradiance residuals, and the warming of '85-'91, with increased irradiance residuals at least up to '88 [15]. Larger scale supradecadal variations suggest a three decade 'cooling trend' between '45 and '72, by 0.6 to 1 deg C, and a warming trend from '85 to '98, on the order of 0.4 to 0.5 deg C. Clearly, a period of 4 or 5 decades of study is not enough to determine the real underlying periodicities of these oscillations, *intradecadal and multidecadal*, so as to distinguish them from any lags in atmospheric and oceanic responses, and from any real trend anomaly caused by anthropogenic pollution. In other words, a dispassionate look at the 2001 IPCC data does not yield any basis whatsoever for assuming that there is steady tropospheric warming, or that the tropospheric warming trend from '85 to '98 - interrupted between '98 and '01 - is a lasting trend, or justified

as such by an hypothetical positive feedback mechanism.

Moreover, satellite and balloon curves [FIGURES 2A & 2B] for the stratosphere present a distinct and steady 4 decade *cooling* from 1958 to 2001, only interrupted by volcanic eruptions [16]. Even that is likely not a trend but a periodic oscillation. Indeed, a graph of the average monthly temperatures, from 1979 to 2005 (at www.ghcc.msfc.nasa.gov/MSU/msusci.html), presents no trend per se, just a steady mean 'cool level' on the order of -0.5 deg C since 1993. Yet, this stratospheric cooling 'trend' is presented not as something that contradicts 'global warming', or even compensates for it, but as something 'believed' to be caused by ozone depletion. This, too, is somewhat ironic, since nowhere do the acolytes of 'global warming' attribute the excess heat of urban environments to increasing concentrations of ground ozone caused by man-made pollution! Yet, if ozone depletion can account for stratospheric cooling, urban warming could just be the result of excess ground level ozone!



in essence, the same curve that is employed by the 2001 **Levitus** *et al* study (see their **Fig.** 1) as the parametric reference to be fitted with the 'optimal' modelled curve for global ocean heat content, except that **Levitus** *et al* modified it so that it further included their 'infilling' *estimates* of ocean heat content down to 3000m, and qualified it as "observed" (sic).

From that IPCC graph, one may conclude that a 4-decade warming 'trend' (by ca 0.5 deg C) from 1905 to 1945, was followed by a cooling 'trend' (by ca 0.2 deg C) from 1945 to 1968, and this, after a 'lull' in the variation from 1968 to 1972, was followed, from 1976 to 2000, by the current 'trend' with a temperature increase on the order of 0.6 deg C - or a rate of warming of 0.2 deg C per decade.

However, first of all, all these curve trends, aside from being composite and including some form of a doubtful ocean warming curve, are referenced to the 1961-1990 average of the three curves, despite being part of a graph that spans from 1860 to 2000. Though choosing a longer term average would increase the relative amount of observed increased warming, it would more strongly suggest that positive (warming) and negative (cooling) oscillations have comparable amplitudes about a better or longer-term mean, thus decreasing the likelihood of a significant anthropogenic contribution to warming (and suggesting that, if one exists, then man-made factors must also have a comparable short-term contribution to cooling, thus adding to either of the natural variations, or intensifying them).



Secondly, even at face value, the composite IPCC curve clearly indicates that there are supradecadal oscillations, suggesting that the present supradecadal warming 'trend' is likely at its temporal end.

**FIGURE 3:** Combined annual land-surface air and sea surface temperature anomalies (C°) 1861 to 2000, relative to 1961 to 1990. Two standard error uncertainties are shown as bars on the annual number.

Thirdly, one should keep in mind our

above criticism pertaining to modelling of 'overprocessed data' in recent oceanographic studies, and in particular how smoothing curves, weighting averages, infilling data, etc, are arbitrary procedures for which a mathematical rationale and a model can always be constructed. What *should* count is a physico-chemical foundation for that rationale, and that is precisely what is systematically missing from these voluntaristic models. Undoubtedly, there is *a chance* that partisans of 'global warming' *could be* right, and the composite curve could take off and go northward. But this is not a chance with a high degree of probability, nor even a chance that lies above a significant threshold of correlation. It is a very slim chance indeed, and one that needs to invoke the specter of a constant positive feedback mechanism in order to sustain its faddist projections. Yet, there is no shred of evidence for such positive feedback. While accepting a 50% increase in  $CO_2$  and a global warming since the 1970's on the order of 0.5 deg C, Lindzen bites on these exaggerations:

"On the basis of models that predict a 4 deg C warming for a doubling of  $CO_2$ , we might expect to have seen a warming of about 2 deg C already. If, however, we include the delay imposed by the oceans' heat capacity, we might expect a warming of about 1 deg C - which is still twice what has been observed."

Once again, there is no substitute for going back to the roots of real and basic science: the raw data must be re-examined.



When one compares the mean annual surface air temperature curve of P.D. Jones for the Northern Hemisphere **FIGURE** 4][18] with the composite Northern Hemisphere air curve that includes sea surface as provided either by IPCC (and the World Meteorological Organization, WMO) or the Climate Research Unit, CRU (UK) [FIGURE 5], one notes that the fundamental difference, all else aside, is the determination

of the mean: **Jones** took the mean from the 1951-1970 period, whereas IPCC and CRU took the mean from the 1961-1990 period. With the lower position of the reference mean, however, the maximum oscillation of the smoothing mean does not exceed 0.5 deg C (a single instance in 1885) - and peak annual variations do not go past 0.65 deg C (in 1864). If one considers, instead, the CRU curve, the moving average curve reaches 0.7 deg in 2005, flattens the observed variation (in warming and cooling) between 1930 and 1950, and slopes the curve of the mean progressively higher with time. One could, of course, go once more over all the rationales (exclusively modelling and statistical rationales, not physical and chemical) for the CRU and IPCC curves, and as to why **Jones**' method had to be 'superseded' - if, for no other

reason, than because 'more, better and newer' data had 'arrived', from 1987 to 2000 (CRU includes data up to the present). Yet, annual means from satellite observations of the global mean air temperature in the lower troposphere, made from 1979 to 1995 and free from the thermal distortions imposed by the 'urban heat island effect', present a very different story [FIGURE 6] [19-21]: a distinct, typically 3-year long, quasiperiodic oscillation of alternating warming and cooling is observed, with amplitudes no greater than 0.3 deg C (see an instance of cooling in 1985). This cyclic variation in the data is obliterated by the data processing of General Circulation Models (GCMs) employed by IPCC and GRU, which are neither fine enough to resolve those short-term cycles, nor capable of accounting for them. Until the processes behind such short-range oscillatory patterns are understood, little can be hoped for from loaded axiomatic extrapolations.

Very recently, on August 12, 2005, **Rupert Murdoch**'s trashy daily *USA Today* ran a feature article entitled "Scientists find errors in global warming". Penned by a dimwit called **Dan Vergano**, the 'article' reports that *Science* had just released 3 papers that confirmed global warming (yes, we know, the title 'errors in global warming' does not seem to be very confirmative, but that's Murdoch-style 'journalism'...). In fact, the *USA Today* article is a digest of another digest, an anonymous *Economist* item (the *Economist* is owned by the *The Financial Times*) from the day before (August 11th), entitled "Heat and Light". Neither article provides references to any of the claimed 3 papers.



all 3 papers constitutes a perfect denial of our own very argument above - that the warming 'trend' is short-lived, neither on the order of the claimed 0.20 deg C per decade, nor necessarily caused by

The digest of

FIGURE 6

anthropogenic factors, and that satellite and balloon data contradict the surface 'trend' claimed by 'global warming' apologists. Indeed, after much massaging of the weather balloon and satellite data for the troposphere, the partisans of global warming managed to squeeze out of them an insignificant temperature increase of 0.09 deg C per decade. This was clearly not good enough for their dogmatic assertions. So in came **Carl Mears** and **Frank Wentz** of Remote Sensing Systems, collaborators of militant 'global warming' modeller **Benjamin Santer** from the Lawrence Livermore National Laboratory, to perform a rescue operation [22]. They *believe*, they tell us, that there must be some warming of the atmosphere and that the satellites are just

not giving us the right data. It is worth quoting from the Economist:

"It **[ie the apparent atmospheric cooling detected by satellites]** is caused, they believe, because **[sic]** the orbital period of a satellite changes slowly over that satellite's lifetime, as its orbit decays due to friction with the outer reaches of the atmosphere. If due allowance is not made for such changes, spurious long-term trends can appear in the data. Dr Mears and Dr Wentz plugged this observation into a model, and the model suggested that the apparent cooling the satellites had observed is indeed such a spurious trend. Correct for orbital decay and you see not cooling, but warming."

Orbital decay is hardly news, since it has been known ever since man attempted to put an artificial satellite into orbit, and corrections for it have long been entered in altitude calculations. **Mears** and **Wentz**, however, find, with a mouse click, the model adjustment required by 'global warming': with a new 'systematic' correction in place, the decadal increase in temperature now becomes 0.19 deg C, near the value claimed by global warming apologists for the increased warming of the Earth's surface - and *finito* the contradiction! This sure ain't science, even if it's called *Science*. And there's more. As members of the **Santer** club, **Mears** and **Wentz** are part of of *Science*'s next feat: a paper by **Santer** *et al* demonstrating how the disagreements between 'global warming' models is due to data that has not been properly treated (read blanched or patrolled by fellow zealots) [23]. So far, this is all just more modelling crap. But that's not the end of the goodies offered by *Science*.

Not to be outdone, a third study reports a second (!) systematic error in balloon measurements of temperature which is said to be due to uneven heating by "tropical sunlight" of instruments from diverse manufacturers [24]. To compensate for such heating, routine correction factors are applied. Now **Steven Sherwood** *et al* report that daytime data was systematically overcorrected across all these decades of measurement. They conclude that balloon data is so unreliable that one cannot doubt the atmosphere is warming - though by how much cannot really be determined (!) if one uses balloon data. The net result of this fudging is that the decadal rate for tropospheric warming, in **Sherwood** *et al*'s expert hands, rises from the insignificant 0.09 deg C to the warming-corroborating but still insignificant 0.12 deg C...

That's enough, however, for the mediocracy of *USA Today* to declare, on August 12, 2005, that the peer-review-certified *Science* "results" (modelling corrections...) demolish "the last bastion of scientific doubt" about 'global warming'! The results were blessed by *Science* and sanctified by the **Murdoch** empire. All in keeping with **Rupert Murdoch**'s intent, stated explicitly on May 15, 2003, as aiming to bring the quality of American media analysis down to the level of a nouveau-maoist party line:

"As someone who was born in Australia and who is married to a woman from China, I feel that I and my Australian-owned news sources are the most qualified to present the true American perspective on things. (...) Between my down-under upbringing and her Red China view of things, we come up with the real American perspective, like no actual American possibly could. (...) I know the true voice of America, like no American possibly could if I didn't spell it out for them on a daily basis. (...) I would love to fully and completely own the entire American media. Just this past week the U.S. Congress was holding hearings about allowing even greater ownership of the media by a single entity. It is just a matter of time before I am allowed to weed out all of those un-American American-owned news sources and ensure that America is provided with nothing but the real American view of things, as determined by this Aussie and his lovely, wonderful wife from China."

Who's taking who for a ride? Yes, Murdoch is funny - in a macabre sort of way. Members of

the international mediocracy, the true rulers of the present global system, speak for the 'down-under' as **Chairman Mao Dze Dung** once did: swallow the bitter pill of 'global warming', and get the remedy from science; pardon us, from *Science*, from the American Association for the Advancement of Science. Ain't that sweet? **Murdoch** and the advancement of science. More American than any American. The global dictatorship of the mediocrats.

In January 2005, Roy Spencer of NASA had written [25] :

"A scientific report on what this apparent discrepency **[sic]** between the satellite and surface data means in the context of global warming theory will be completed in 2005 as part of the US Climate Change Science Program."

Now we know how the "discrepency" was resolved - by the introduction of still more fudge factors.

The immediate question that surges to one's mind is: how can so much trust be put by *scientists* into data that has so many systematic and diverse errors associated with it - errors in collection, errors in processing, errors in intrinsic parameters, errors in calibration, etc? And then, how does such *dubious* raw data get *dubiously* processed in order to provide 'evidence' for what it still does not prove?? Any sane individual will be left wondering - after thousands of papers, and a veritable Niagara Falls of them in *Science* - where is the evidence that would prove that there is global atmospheric warming??

The hypothesis of 'global warming', now so often enshrined as 'fact', has been called *junk* science. It is indeed junk, and if its reasons to exist are both political and economic, the 'evidence' for its supposed veracity has been fabricated piecemeal by official scientists - read: technobureaucrats - who have gravely departed from the scientific method. Many weather stations do not have complete records for the 1961-1990 period used to determine the global mean, so methods were employed to estimate these values from neighbouring records or inferences. Over the oceans, the data could not be organized for fixed or repeating points, so inferred data was interpolated. The composite land and marine surface data takes values from each set, and in the case of the CRU analysis, it is 'weighted' in latitude/longitude grid boxes, by area and neighbouring values, with so-called 'infilling'. Also in the CRU model, 'variance adjustment' is carried out relative to an underlying 30-year timescale trend, whose establishment requires estimation of grid box temperatures into the future (beyond the end of each record, including the present)! Furthermore, in the same model, the so-called thermal anomalies do not average to zero in the period of reference - though this results in a lower mean baseline. The truth is that even collection of basic data raises many questions as to the validity of the data simple questions like: why hasn't the data been generated differentially for urban, rural and wildlife environments? Or for cyclonic versus anti-cyclonic conditions? Or between anticyclonic days of the burst type versus nonburst type [26]? Or why hasn't it even been properly integrated as to the time of day?

One of the grimmest jokes that passed itself off for science in the pages of *Science*, was a statement from the 2001 **Levitus** *et al* paper. It's a riot: "Estimates of the melting of continental glaciers (Antarctica and Greenland) range from -1.8 to 1.8 mm of global sea level change per year [the provided reference for this statement is ICCP 1995]. Using a value of 1.8 mm per

year, the amount of heat required to melt...etc" [27]. In other words, a reference to a biased study now suffices as replacement for any actual gathering of data! Further, when a range is given, no quality or statistical qualification needs to be attached to the polar figures of the range. Then, if the range were real, the mean change would be 0 mm per year. Lastly, as neither 0 mm, nor -1.8 mm of change would require, presuppose or justify the notion of increased melting of the polar ice caps because of 'global warming', only the value of +1.8 can be, and will be, employed. After all, no other value would permit the supposition of melting, the "required to melt".

With such modeling gimmicks, militants of 'global warming' establish the conclusion that any skepticism concerning the myth is both undeserved *and* suspect... They are the unwitting and not-so-unwitting tools of global mediocracy.

In closing this section, we should mention that a 2000 study at 9 selected weather stations distributed across Canada, since their inception and spanning periods of 50 to 150 years, failed to detect increased temperature at any location, urban and rural, except in Toronto, and marginally in Moncton and Indian Head [28]. No evidence either was found for a trend of increased precipitation, save for Moncton. Of course, had the study examined Vancouver in 2004-2005, they would have found increases in both temperature and precipitation, for the problem of 'global warming' is most fundamentally the problem of atmospheric pollution in cities, in urban environments, particularly growing ones. Curiously enough, the posture of the ideologues of 'global warming' is to admit half-heartedly that local climates may be cooling while insisting that the global climate is warming.

#### 6. The case for the increase in atmospheric carbon dioxide

We now come to the fulcral question: *is there evidence that the concentration of carbon dioxide has increased in the past 100 or 200 years*? Here begins the story of one of the most egregious instances of scientific skulduggery. All begins in 1958 with **George Callendar**'s dubious treatment of carbon dioxide data [29]. **Callendar** arbitrarily discarded, amongst other things, all measurements above 350 ppmv (parts per million by volume), most measurements above 320 ppmv, and all measurements taken in city environments (not even a comparison between rural and urban environments was carried out) - to arrive at the notion that the mean carbon dioxide concentration during the 19th century was 292 ppmv. Inclusion of the data discarded by **Callendar** would have placed the 19th century carbon dioxide mean 15% higher, at 335 ppmv [30]. If one accepts the **Callendar** treatment of the data, one accepts that there has been an increase in carbon dioxide in the past 100 to 150 years (but not in the 100 years before that), ie an upward variation of at most some 21% - from 292 ppmv to a maximum of 350-355 ppmv. This is an essential tenet of 'global warming', but it is noteworthy that some critics of this myth accept this variation, or the existence of a variation that may be as high as 25% (eg **Jorgensen**) or 50% (eg **Lindzen**). Typically, this increase is explained by deforestation (preponderantly before 1905) and increased fossil fuel burning (after 1905) - by coal-burning plants, internal combustion engines, etc.

It is obvious that, if one accepts instead the value provided by **Giles Slocum** [30], the increase in carbon dioxide is either of threshold significance (ca 7%), or actually nonexistent. This is the position of other critics of 'global warming' - viz. Zbigniew Jaworowski - who assert that there is no evidence for the observed increase being significantly different from the variations recorded in the past, in the compiled data for the last 200 years and in the fossil record [31]. But the militants of the 'global warming ideology' do not limit themselves to defending the **Callendar** manipulation of the data, they further hold that for the past 10,000 years the carbon dioxide concentration remained below 270-290 ppmv. Once more, these are grandiose statements based on flimsy data, if any at all. Stomatal frequency in fossilized Holocene leaves suggests that levels of carbon dioxide reached 310 and 325 ppmv, respectively, at 8700 and 7,800 years BP, with decreases of 25 ppmv between 8,400 and 8,100 BP [32]. Still others have reported levels on the order of 333 to 348 ppmv at 9,600 to 9,800 years BP [31]. Furthermore, the inconsistency between such fossil studies and the lack of Antarctica ice-core data supporting a temperature-CO, correlation during the Holocene is explained by a variety of physico-chemical processes, including the presence of liquid water, in the air bubbles trapped in ice crystals of polar ice cores, which effectively falsify the use of the carbon dioxide content of such air inclusions to construct a record of its past concentration [34]. Moreover, "formation of  $CO_2$  clathtrates starts in the ice sheets at about 200 meter depth, and that of O2 and N2 at 600 to 1000 meter depths. This leads to depletion of CO2 in the gas trapped in the ice sheets. That is why the records of CO<sub>2</sub> concentration in the gas inclusions from deep polar ice show values lower than in the contemporary atmosphere, even for the epochs when the global surface temperature was higher than now" [31]. So much for using the evidence from ice-cores to show that with respect to the past, there has been a 25% increase in atmospheric CO<sub>2</sub> content. And so much, also, for the rigid view that before 1850 or so, the CO<sub>2</sub> concentration was stable and at 270 to 292 ppmv. This is nothing but more hogwash not sustained by actual data.

From the perspective of the present authors, the simple fact is that there is no data on which to reliably base any meaningful statement about the  $CO_2$  content of pre-1945 terrestrial epochs. The data is tentative and subject to interpretation – thus the best interpretation must be cautious and must not place too much stock on any one value, trend or statement. The existing data, even post-1945, is widely diverse in the methods employed for its collection over the period of 200 plus years, different in reliability, in quality, even in the real nature of the scientific interest or dedication of those who collected it. There is no doubt that combustion of fossil fuels is generating massive quantities of  $CO_2$ , along with carbon monoxide, unburned carbon compounds, lead vapour, sulphur aerosols and oxides of nitrogen. The present authors are not in the pay of any of the Oil Sisters and have never been, nor will be. We have, in fact, no intent to deny or downplay the toxic ill effects of the oil, coal and nuclear industries - their poisoning of the air we breathe, the water we drink, their destruction of the environment, their threat to ecological habitats or their causing of countless grave ailments, not to mention

wars. In fact, the reader should ask hirself why it is that oil, coal and nuclear companies now embrace the green movement, agree with the tenets of 'global warming', and are so intent on spending to reduce  $CO_2$  emissions and in the same breath of (polluted) air, also ask hirself why it is that all these militants of the ecological anti-'global warming' movement are so averse to the non-polluting energy technologies invented by these authors; in fact, as averse to considering them as the Oil Sisters are. Is there a link here too? A good question indeed.

But our concern here is the hocus-pocus of  $CO_2$ -induced 'global warming'. It could be true - and certainly  $CO_2$  pollution is real enough in our cities and urbanized territory. As real as the incessant traffic noise. But the data presented by adherents of 'global warming' is not convincing because it is the product of too much forcing - a forcing of the  $CO_2$  concentrations, a forcing of what they do and do not mean, a forcing of the effect of  $CO_2$  upon temperature. Yet, despite all these forcings - or because of them! - no real science can be squeezed out...

The parody is so intense that a recent third-rate study on the categorical 'Antarctica warming', by two technobureaucratic 'scientists' (one of whom is a civil servant with the British Antarctic Survey), "studied" (sic) *simulations* by 3 different 'global warming' models and actually "reported" that *none of the models produced the desired warming* (ie "a significant enhancement in warming"), "even with enhanced forcing" (what a pleonasm! - even with forced forcing...) [34]! That 'enhanced forcing', incidentally, did not yield warming either, even when the  $CO_2$  concentrations were greatly accelerated (some modelling!). The same pseudoscientific study then concluded that either the unquestioned Antarctica warming which will occur over the next century "is a response to forcings not included in the models or that the [Antarctica] Peninsula is sensitive to effects poorly modelled". In other words, by the models of 'global warming', there shall be no warming over Antarctica in the next century... Yet, even when the model of warming does not generate nor predict warming, the warming is still somehow there, to be *believed in*, to be marketed - it is just modelling that needs a facelift, just as the modeller needs job security in an age where that is now past.



#### FIGURE 7

Now, let's take a dispassionate look at the Mauna Loa data for the variation of the annual growth rate of lower tropospheric CO<sub>2</sub> content from 1958 to 1995 [FIGURE 7] [35]. It presents a pattern of annual and biennial variation that suggests a short term negative feedback control, not a positive one. Also, though the moving average rises, from 1958 to 1995 the rise merely goes from a rate of 1 ppmv/yr, to 1.6 ppmv/yr, on the threshold of being both an insignificant growth rate, and an insignificant variation of the growth rate.

Now see what the fanatics of 'global

warming' do with the Mauna Loa curve. You're about to contemplate one of the greatest frauds in the history of science.

Indeed, perhaps there is no more poignant mystification or forced falsification of science than the so-called Siple, Antarctica curve - not the original curve of the data taken at Siple per se, but the curve which has become the banner of the Big Warming zealots. Jaworowski's presentation to the US Senate unwrapped this mega-fudge cake, which was stamped and approved by Official Science and its peer-reviewed publications, with the vanguardist Science at the forefront. Jaworowski first presented the data for CO<sub>2</sub> from ice cores taken from Sipel in Antarctica [FIGURE 8][36-37]. This curve, spanning 1601 to 1901, is used generally as proof of the anthropogenic nature of the CO<sub>2</sub> concentration. Yet, Jaworowski found that it presents a nearly linear inverse correlation with the pressure (from 5 to 15 bars), that is, with the recorded and variable depth of the cores employed to collect the data! Be that as it may, Big Warming zealots desperately needed to relate the Siple, Antarctica curve to the atmospheric readings at Mauna Loa from 1958 on - which were performed a mean 83 years later (1973-1890=83) than the time the ice last probed in the Siple curve had been deposited (1890) [FIGURE 9]. By royal decree [36-37], subsequently stamped by the IPCC, an ad hoc assumption was made with no evidence to back it up, and the problem of relating the two curves was simply and 'elegantly' solved: even though a core was formed, for example, in 1890, the air trapped in it was not as old as the ice, but younger by exactly...83 years! So the curve was moved upscale by 83 years and aligned with the Mauna Loa record to give the illusion of a staggering, steady increase from 280 ppmv in 1744 to 350 ppmv in 1973.



FIGURE 8

FIGURE 9

This procedure of mainstream climatology sanctioned by IPCC in 1990 is an outstanding example of pseudoscience employing sheer arbitrariness and outright forgery of the data record to establish a 'scientific' dogma - a falsified Siple curve, made official by a supranational institution of Official Science. The blatant moving of a curve along the X-axis of time to fit the desired result has perhaps only one other parallel falsification in the recent history of science: another institutional event of Official Science, one that moved a curve along the Y-axis of energy (heat) to raise the baseline and conceal the anomalous heat from a cold fusion cell. This took place in 1989, and the whistleblower was a vertical man, a scientist, science-journalist and engineer who would later become a very close friend of the present authors - Eugene Mallove. The subject was room-temperature fusion, aka 'cold fusion', and Mallove, in charge of the MIT news office, was at the time a 'cold fusion skeptic'. But when he studied the data from MIT's attempt to reproduce the Pons-Fleishmann experiment, he realized that the baseline line (or control curve) had been delberately shifted by an amount required to render the small excess heat null [FIGURE 10][38]. When Mallove blew the whistle, and no corrective action took place (in fact, the graph in question was simply suppressed in the final publication of the MIT report), he resigned his MIT job in protest. Here a forgery, a fudge factor, was employed to deny the existence of a phenomenon; there, in the Siple curve, a fudge factor, a forgery, was employed to 'prove' the existence of a phenomenon. In both instances, Official Science availed itself of zealots, of scientists who have become technobureaucrats, and who will do whatever it takes to prove a desired point - either that global warming exists, or that room-temperature fusion does not. In the first instance, a veritable pseudoscience is promoted into the hall of fame of Official Science; it acquired status. In the second instance, science, a nomadic or eccentric science, was demoted into the pit of disgrace and treated officially as if it were *pseudoscience*. Two different outcomes of the same anti-scientific lunacy, of the same ideological scientifism. Two more examples of the socially adverse effects of allowing the logic of power to rule the world of science impunely, and beat us all into submission with the sticks of Official Science and 'mainstream consensus'.

#### Graphic Proof of Serious Scientific Misconduct at MIT in 1989

The two pairs of graphs (below), referring to the same experiment, are from two drafts (executed three days apart) of the MIT PFC Phase-II Calorimetry comparative study of a heavy water (D<sub>2</sub>O) Fleischmann-Pons cold fusion cell and an ordinary water (H<sub>2</sub>O) control cell. In the July 10, 1989 draft, there is clear evidence of excess heat (beyond electrical input power) in the D<sub>2</sub>O cell, but no visually apparent excess in the H<sub>2</sub>O cell. The data were averaged over-one-hour intervals to produce the July 13, 1989 draft, which shows no excess heat in the D<sub>2</sub>O cell. There is now no doubt that to produce the July 13, 1989 draft, the D<sub>2</sub>O data had to be treated differently than the H<sub>2</sub>O data to give the final impression of a "null" result—no excess heat for D<sub>2</sub>O. The results were



published in this form in the *Journal of Fusion Energy* and a MIT PFC Tech Report, widely cited (especially by DoE) as evidence that the Fleischmann and Pons claim was false. In essence, the hour-averaged data were properly transformed from the intermediate processed form (July 10) for the  $H_2O$  control experiment, but the  $D_2O$  experiment curve in the July 13 draft appeared to be arbitrarily shifted down to make the apparent excess heat vanish. There is no justification for this curve shifting.



#### FIGURE 10

Of course, there is no doubt that  $CO_2$  is constantly released in great quantitities from automobile engines, coal-fired plants, natural gas plants, etc, along with other still more noxious pollutants. What happens to it, what conversion cycles it may engage in, what, if any, is the evidence for a negative feedback atmospheric response to its increased concentration, etc, are all good questions - questions where little investigative effort is being spent, questions that do need answers, and answers that the promoters of Kyoto do *not* really want to know.

## **II- THE SUPPRESSED ECCENTRIC SCIENCE OF CLIMATE AND WEATHER**

## 1. The different and opposing effects ('forcings') of man-made pollution

#### 1.1 Atmospheric anoxia and the flaws of Climatology

For our part, we have little trouble in accepting that there *may well have been* an increase in overall atmospheric  $CO_2$  by some 25% in the last 100 years (see below), or that this could effectively contribute to the overall *anoxia* of the planetarian atmosphere. Yet, the truth is that there is no firm data, no honest correlation that permits us to call this a fact, or attribute to it a reliable measure, such as a  $CO_2$  growth rate. All one can do is calculate the factual tons of  $CO_2$  released daily by man-made pollution. There is, of course, plenty of directly measurable evidence that the concentration of  $CO_2$  over cities and urbanized coasts is definitely and substantially higher than over the rest of the planetarian land surface. This was also the case, for example, for England during the coal-burning epoch of the Industrial Revolution, or for London's combustion-engine smog crises of the 1950's.

In general, myths like those of 'global warming' thrive on the limitations - actual and self-imposed - of climatic models of the earth-sea-atmospheric system and its interaction with solar radiation. Whatever flaws affect adversely those climatological models are only amplified, magnified by 'global warming' studies. An example in point are all three recent models that fit the notion of a 'global warming' trend [12]: they go from the failure of climatology as a science to the falsification of natural reality - which falsification is then promoted by media to the status of 'reality'.

In general, the flaws of present climatological models are a consequence of the complex failure of climatology with respect to the basic science required to understand climate and weather. Climatology fails thrice: once, by a failure to generate an integrated model of the main natural factors affecting climate; twice, by an apparent failure to come up with an integral or integrated hypothesis regarding the different and often opposing effects of pollutants and other anthropogenic factors; and thrice, by a failure to put together what are natural and man-made factors in a manner that is scientifically adequate - and independent from social and political pressures to manufacture predetermined results - and thus adequate to the object of study, which is climate and its variations.

To these three failures, a fourth is added - one that has led Robert Stevenson to state:

"The science of climate has been buried alive by an avalanche of ideology-based computer models" [39]

Simulation results produced by deliberately impoverished models are now treated as reality substitutes on which 'research' can be conducted, and all the 'right' kinds of answers obtained. This flaw, however, pertinent as it may be to Official Climatology, is not intrinsic to a science of climatology. It is only intrinsic to the political power with which that science can be wielded. It is true that the lack of an integral approach is compensated by computer (over-)modelling which, most often, only magnifies the errors. Yet, this lack is not entirely caused by the insufficiencies of physics or physical chemistry. There is a stubborn resistance on the part of

climatologists to learn the basic physics of the system - a resistance based largely on a sentimental attachment to outdated methodologies. The cybernetic compensation comes in to dress up as science what is nothing more than wild speculation and a computerized game of probabilities. It is the sense of an endemic failure of climatology, a failure that includes even reticence to consider that which is well known to other disciplines, that leads **Richard Lindzen** to state:

"Unfortunately, the way current models handle factors such as clouds and water vapor is disturbingly arbitrary."

It is. And it is a sign, in turn, of an intellectual anoxia. And when **Lindzen** adds - "In many instances the underlying physics is simply not known" - he is now referring to that most forgotten basic fact, the very first failure we mentioned above: that neither physics nor chemistry actually knows enough about their subject matters to be able to provide unequivocal answers to climatology questions.

A failure to comprehend the natural atmospheric processes and their variability also means a failure to grasp the existence of any negative feedback mechanisms. Plant photosynthesis is a major sink for  $CO_2$  and water, but other processes - physical and not necessarily biological - are likely at play that can serve as such sinks. Likewise, atmospheric *trapping of energy and anoxia* may occur, and so may temperature variations, through other physico-chemical processes than the greenhouse effect or those mediated by  $CO_2$ . Simply sweeping all these complex processes into the GHG model of 'global warming' - for example, calling ozone a GHG - does not even begin to explain anything. Even in terms of conventional electromagnetic theory, there are no IR transitions of relevance that involve ozone. And, as we shall shortly see, statements like "ozone absorbs all electromagnetic radiation below 290 nm" are also false, an objective error.

## 1.2. Warming over urban environments and the different effects of pollutants

Where there is little doubt *that there is consistent and anomalous warming* is over the exploding megalopolis, the concentrated urban environment of deforestation and asphalt, reflective concrete, glass and metal buildings, vehicular traffic and industrial plants, where generation of pollution is concentrated. Like a viral pandemic, the urban territory spreads across the Earth's surface, concentrating in coastlines.

Asphalt absorbs a wide spectrum of solar radiation and releases it as radiant heat (IR photons) during nighttime; deforestation impedes re-entry of  $CO_2$  into the natural biochemical cycle, removing the natural sink for  $CO_2$ ; concrete, glass and metal buildings reflect solar radiation back into the atmosphere, impede ground absorption of water and thus promote its vaporization back to the atmosphere; emissions from the internal combustion engine release not just  $CO_2$  and some carbon monoxide, sulphur dioxide, aldehydes - but, more importantly, unburned carbon compounds and oxides of nitrogen, which ultimately generate increased ground level ozone concentrations. Diesel engines, coal burning, and natural gas plants all release soot and benzopyrenes which are powerful irritants of the respiratory system and all mucosas, eyes included, and are also potent carcinogenic substances. We should just mention in passing that a

veritable epidemic of sinusitis affects modern day city dwellers.

Technological advances in car catalytic converters have been able to remove most carbon monoxide and some hydrocarbons, but this increases the  $CO_2$  release - along with the production of water vapour. The removal or reduction of the oxides of nitrogen so as to release nitrogen and oxygen gases has proven far more difficult to achieve. Likewise, little has been done to remove sulphur and lead pollutants.

If one sticks solely to warming, it is apparent that these pollutants have opposing actions: GHGs absorb the heat reflected from the Earth's surface, whereas volcanic dust, soot and other carbon aerosols acts as a shield, preventing solar radiation from reaching the surface. Indeed, it is well established today within official climatology that sulphur aerosols and volcanic aerosols, as well as soot and a variety of hydrocarbons from man-made pollution, function as surface and lower troposphere cooling factors, just as carbon dioxide and other greenhouse gases are warming factors. In fact, during the 70's craze of 'global cooling', the former fact was invoked as the anthropogenic contribution that would amplify and even trigger the orbital-determined new glacial.

# **1.3.** The real story of CO<sub>2</sub>

The notion of GHGs functioning as the cause of global warming is entirely tied in to the idea that the heat reflected from the Earth's surface and the heat radiated by it during nighttime are trapped by the increasing concentration of  $CO_2$  near the ground, instead of being released into space, thus interfering with the Earth's radiative balance and causing 'excess heat'. However, reality is far too complex to be amenable to such reductionism. Many other factors come into play. If one considers  $CO_2$  alone, as the prototypical GHG, one must realize that the problem goes far beyond the lack of an adequate science of the variations of its concentration across different epochs, or even of definitive data correlating its increase in concentration with warming and its decrease with cooling.

Even at the level of an account of the atmospheric processes involving  $CO_2$ , much too much remains to be understood, and this is rarely said. How is  $CO_2$  trapped in the ground on hazy anti-cyclonic days? How is it transported to the stratosphere? If little is known about the transport of  $CO_2$  into the stratosphere, even less is known about the stratospheric pathways for its decomposition, including those pathways that result from diurnal interactions with solar radiation and changing ozone concentrations. Even though water is the main source ('parent') of (1S) and (1D) metastables of oxygen,  $CO_2$  is a more efficient producer of (1S)O than is water [40].  $CO_2$  is considered to be a "linear symmetric molecule" incapable of absorbing visible or near-UV photons [41]. However, it absorbs photons at the far to vacuum UV transition, in a range from 199 to 216 nm, to produce the so-called Cameron bands of CO [42]. Such photons are generated high in the stratosphere and mostly in the E-layer by decelerating electrons and positrons, and they will generate (1S)O and CO which, with vacuum-UV absorption, becomes another potential parent of oxygen metastables. In particular, in aqueous phase at very acid pH, or in the gas phase, capture of free or decelerating electrons by protons to generate atomic hydrogen (free radical), produces photon emission in the range of the Cameron bands. How these metastables of oxygen figure in subsequent conversions affecting the allotropic cycle of oxygen-ozone, becomes one of the key questions. Likewise, what happens to carbon free-radicals.

Of even greater concern is what happens in the lower troposphere, in particular close to the ground over the urban environment, when an acidified atmosphere traps sufficient energy to generate hydrogen free-radicals. This will produce Cameron photons, which will in turn decompose  $CO_2$ , without the latter having to be transported to the stratosphere. This high energy cycle has nothing to do with the IR or thermal transitions of  $CO_2$  that are foundational to the myth of global warming. Furthermore, this high energy cycle traps far more energy at ground level in other chemical species, the allotropes of oxygen in particular, than is trapped by  $CO_2$ .

#### 1.4. Effects of carbon and sulphur pollutants upon cloud composition and cloud cover

Let us move on from  $CO_2$ -fuelled atmospheric processes to take a cursory look at other processes which are affected by human activity, and which are also poorly understood, if at all, by GCM's (Global Climate Models) and 'global warming/greenhouse' interpretations. When considering carbon and sulphur aerosols, it is not sufficient to just consider how a dusty atmosphere impedes penetration of solar radiation, or how the amount of cloud cover acts as a variable absorber of IR radiation; it is also a question of the size and thickness of cloud systems, of the molecular density of a cloud and its chemical composition, of the physical action of the cloud, its type, and the meteorological system it is associated with. A doubling of  $CO_2$ -induced warming can be cancelled by as little as just 1% variation in cloud cover [43-44].

Some clouds acts as cut-off filters of solar radiation, others as absorbers or 'wideband' filters. Volcanic eruptions have been linked to supradecadal cooling, because they contribute dust to cloud formation. So do man-made aerosol particulates. Clouds laden with volcanic aerosols, soot, sulphur and carbon aerosols are not mere 'sunshields'. They also absorb high quantities of solar radiation. The solar radiation that reaches the ground is attenuated substantially, but the energy remains in the atmosphere, trapped in the cloud system. In turn, the latter, because of its high density of carbon, permits much greater densities of water vapour and greater electrical potentials. Less heat reaches the ground during cloud formation, but more latent heat is trapped in the cloud system. Intense electric storms, capable of holding more water per unit volume and developing greater wind speeds, are now possible. They release more heat, present weaker cold front components (less 'relief' following rain), and leave ambient air after precipitation, particularly in urban environments, prone to saturation with water vapour (fog and smog). Carbonaceous and sulphurous clouds may cool the ground atmosphere while forming, but in turn contribute to its 'anomalous' (ie man-made) heating during precipitation. However, during nighttime, they radiate heat outward into space, just as during daytime they are fed from below, by man-made pollution and, from above, by solar radiation.

## 1.5. A variety of possible chemical atmospheric pathways

Stratospheric ozone is attacked by  $N_2O$  (nitrous oxide) and  $CO_2$ , and if the interaction is 'humidified' (hydroxylated), it results in the production of acids (HNO<sub>3</sub> and HCO<sub>3</sub>) that fall down to the troposphere, and are released in acid rain. But in the case of  $CO_2$  it also releases oxygen, and in the case of  $N_2O$ , it may engage, instead, in alternative pathways that release oxygen (only at altitudes above 20 km), while consuming atomic oxygen or ozone. Hence, production of  $N_2O$  in ground atmospheres, given the 'right' energy input (see below) and in the presence of ground ozone, will regenerate nitrogen gas ( $N_2$ ) and oxygen ( $O_2$ ), while releasing IR photons. Here is an example of another pathway that releases radiative heat and, at the same time, counteracts ground ozone and restores normal chemical composition of the atmosphere.

Pathways are not simple static distributions ascertained by statistics. They are complex, dynamic energy shunts involved in system self-regulation.

## 1.6. Nitrogen oxides and ground ozone

Perhaps the most important effect of man-made atmospheric pollution is the generation and accumulation of the highly toxic ozone at ground level and, in particular, over urban environments. The effect presents a seasonal variation that intensifies in the Spring, and has a variety of sources. The main ones are emissions of NO<sub>2</sub> (nitrogen dioxide) and NO (nitric oxide). Photolysis of nitrogen dioxide by the absorption of ultraviolet photons produced by solar radiation or, more pertinently still, associated with spontaneous photon emission from the free-radical processes involved in what we perceive as the 'haziness' of smog, results in production of ground ozone and still more nitric oxide. The latter, in turn, interacts with oxygen to generate more ground ozone and near-UV photons. Hence, the haziness of those anti-cyclonic days which are unmistakably polluted is, in very large measure, due to the chemical action of these oxides of nitrogen. Carbon monoxide (CO) has a pathway analogous to NO that generates ground-level ozone.

Such processes of ground ozone production and accumulation are, furthermore, driven by injections of solar energy, with ozone production declining after sunset, and the pollution residuals precipitating with condensing water vapour, after transferring most of their energy to it.

Instead of focusing on the complexity of the problems, the acolytes of the myth of 'global warming' focus on  $CO_2$  and the greenhouse mechanism, as if it were the end point for thermal or energetic release. This gross oversimplification is performed at the expense of a full account of the altered chemistry of the atmosphere, in particular, of pollutant free-radical reactions that release far more energetic photons than do GHGs.

## 2. The 'greenhouse effect' misnomer

#### 2.1. What is meant by greenhouse effect?

The term 'greenhouse effect' is meant to convey the notion that excess production of  $CO_2$  by fossil fuel burning and other so-called GHGs like methane and water, and their accumulation in the troposphere, results in a radiation imbalance; the GHGs retain reflected or incident photons associated with solar radiation, decreasing the amount of heat that the Earth releases to space, and releasing it at ground level as IR during nighttime. This supposedly creates a thermal anomaly, ie 'man-made global warming'.

#### **2.2.** What really is a greenhouse?

A greenhouse is an enclosed environment for plant growth, where the enclosure blocks air circulation and serves as a filter for photons associated with solar radiation, blocking most UV and thus 'letting through', so to speak, some visible and IR photons. These photons and that filtered radiation transfer their energy to a water vapour-saturated enclosed air volume, or to photosynthetic plants that, by absorbing them (ie in their presence), fix  $CO_2$  and uptake water-vapour to release oxygen.

## 2.3. Does the functioning of a greenhouse explain the so-called 'greenhouse effect'?

Were the analogy to be valid, it should. But it doesn't, not even in principle. The reason is that most plants do not release  $CO_2$  in response to solar radiation, filtered or not. Plants are not, therefore, the analogue of man-made fossil-fuel burning. It is only during nighttime (or in the dark) that most plants respire, reverting the daytime process by reducing (fixing) oxygen and releasing  $CO_2$ , heat and water vapour. But this occurs not in the presence of sunlight or because of the atmospheric interaction with it (as is the case for the claimed 'greenhouse effect'), but in its *absence*. It is true that some plants (called C3 plants) will photorespire, that is, in the presence of photons associated with sunlight, they will not fix  $CO_2$ , but instead consume oxygen and release  $CO_2$ . However, even these plants only do so when the concentration of  $CO_2$  is less than 50 ppmv, thus invalidating even an analogy between the so-called 'greenhouse effect' and a greenhouse of C3 plants.

Moreover, a greenhouse only becomes warm and humid because it has man-made walls blocking both wind currents and the escape of heat and humidity, and because of man's action of watering and humidifying it during the daytime.

So the term 'greenhouse effect' is a total misnomer: greenhouses during the day generate oxygen, not  $CO_2$ , and fix  $CO_2$ , not oxygen; greenhouses during the day absorb water, they don't release it; greenhouses during the day trap heat because of their walls, not because of an absorptive ground like asphalt, or a reflective environment like concrete, glass and metal;

greenhouses allow IR photons in and block UV because of artificial walls and ceilings made of glass or plastic - not so the atmosphere, which has no such protective enclosure and is perfectly capable of 'transmitting' UV photons associated with solar radiation or produced *in situ* by physico-chemical interactions of acidic water vapour and free-radicals, particularly in the lower troposphere over urbanized land surfaces.

The only parallel between a greenhouse and the so-called 'greenhouse effect' is that, at nighttime, a greenhouse (ie its plants) releases  $CO_2$  and water vapour - both of which serve as latent heat storage molecules which can convert their kinetic states, including their latent heat, into IR photons (sensible radiant heat). It is only the nighttime heating that serves as a kind of parallel. But this parallel is not driven by solar radiation nor by man's action, nor by a combination of the two. Plants do this without need for man, and only in the absence of that radiation or its photon byproducts.

Furthermore, in the open atmosphere, the 'enclosure' is a dynamic process - the 'enclosing' occurs at the transitions between troposphere and stratosphere, between stratosphere and ionosphere, where energy and chemical fluxes going out into space and coming from space incessantly interact with the Earth.  $CO_2$  is not impeded from rising in the atmosphere, nor is water vapour, precisely because there are no rigid enclosures stopping them. So, the so-called 'greenhouse effect' begs the very question - what is it that causes the trapping of water vapour and  $CO_2$  at ground level? And why do man's action and solar radiation combine to intensify it? The very name of the effect explains nothing. It is, in fact, a sordid misnomer that unconsciously insinuates that plants are, like man, toxic polluters.

Lastly, but not least, just because a gas can release IR photons one should not indiscriminately call it a 'greenhouse gas'. The atmosphere is warmed by solar radiation byproducts. In the context this warming, qua radiative release of sensible heat, IR photons play a secondary role with respect to the warming caused by UV photons. That's right, even the term warming has suffered this dissonance - it pretends to designate only 'heat photons' and their effect, but it has the pretension to mean sensible heat in general, and even to serve as such like an index of energy, of total energy. Three errors in one. And all three errors put into evidence the lack of understanding that all blackbody photons, optical or not, are a source of radiant sensible heat. In fact, most such radiant sensible heat is generated as blue light and IR photons, not by  $CO_2$  or water vapour, but by the atmospheric cycle that forms oxygen from ozone together with the formation of water from atomic oxygen, protons and electrons. The joint formation of oxygen and water are the main natural processes releasing heat in the atmosphere. And plants, by the way, are what absorbs  $CO_2$  and regenerates that oxygen under the action of solar radiation.

Now, days with little air movement, characterized by low-altitude thick cloud cover, do indeed trap the energy of longer wavelength photons, and filter out UV and most visible photons associated with incoming solar radiation. Such days present an analogy with the effect of the translucent walls of a greenhouse, which filter solar radiation and keep heat and humidity from rising and escaping. But these effects in nature are natural constraints of low-pressure (cyclonic) systems, specifically, of their barimetrically stable center (it is not only hurricanes that have a nearly quiet 'eye' zone). One can speak of high-pressure (anticyclonic) systems with analogous properties of trapping heat and humidity, but this phenomenon is due, instead, to the
particulates of man-made pollution (haze, not cloud cover) that trap water vapour and heat. Yet, the action of these pollutants is neither defined by, nor limited to, this trapping of water vapour and heat - since they introduce into the oceans and the atmosphere a whole other set of chemistries which suppress oxygen and trap other forms of energy besides radiant sensible heat.

#### 3. Diverse natural factors and their climatological effects, which have been ignored

#### 3.1. Negative feedback mechanism with respect to net electrical charge

Leaving aside the political forces that serve as *ratio essendi* for the myth of global warming, one must still wonder how such a myth found the semblance of a scientific basis that has permitted it to take hold of official climatology. At bottom, this was made possible by the lack of understanding of the natural decadal, supradecadal and intradecadal oscillations ('trends' is definitely not the right term) in the temperature and chemical composition of the atmosphere. These oscillations reflect a complex interplay between various natural factors and their fluctuation, most prominent among which are solar radiation, atmospheric latent heat, atmospheric electricity and geothermal energy. Without a serious physical and chemical grasp of these natural factors, there is little hope that one can isolate the climatic and meteorological impact of man-made actions - deforestation, urbanization, pollution, warming and cooling. We have presented evidence, in this context, that at least in what concerns monopolar oscillations of charge in the anticyclonic ground-level atmosphere, there is a constant compensatory (negative feedback) *process* at work to keep the overall net charge neutral [26, 45]. Furthermore, we have also shown that incoming solar radiation is not simply captured locally in the form of photons (light and heat), but also in the form of latent heat associated with weak intermolecular bonding and the heats of state [26]. In other words - one may not infer the energy of the atmospheric system simply from a determination of its temperature or its content of sensible heat!

#### 3.2. The basic allotropic cycle of the atmosphere

Earth climate is inextricably linked to the fundamental allotropic cycle of gas substrates that constantly regenerates the atmosphere, and in which water and oxygen play a privileged role. But climate modelers and global warming acolytes make parameters such as ozone or CO<sub>2</sub> concentrations into end-point references, disregarding the complexity of such interlinked processes. Allotropic states, particularly of conjugated key molecules (such as water and oxygen), are not systematically understood or studied. Ozone is not an end point, but a stage in the oxygen cycle, and cycles exist exactly so that systems may self-regulate via negative feedback. The fact that the enthalpy of the basic allotropic cycle of the atmosphere, which is the main regulatory cycle, has not even officially been balanced (see our analysis and proposed enthalpy balance [7]), is one more proof of how far meteorology and climatology are from grasping their subject. They have not been able to show energetic balance, even in terms of heat theory alone, between absorbed solar energy and released atmospheric heat for as fundamental a cycle as that of the allotropes of water and oxygen.

#### 3.3. Physical chemistry of water

Water is a simple yet complex molecule. It plays a key role in all interlinked systems - in the liquid state and interacting with salts, in the oceans, and in the vapour phase in the troposphere,

clouds and the stratosphere. It is an energy carrier in a variety of ways - and not just in the chemical sense of energy. Yet, aside from chemical energy, and the key role played in the atmospheric metabolism of sensible and latent heats through evaporation, little is really understood about the way water functions as an energy carrier. To underline but the main lines:

## 3.3.1. Noncovalent bonds & salinity

Water forms a complex variety of inter-molecular non-covalent structures, further complexified by the ionic bonds promoted by its salt content. These bonds are *an instance of a variable latent heat content that is not associated per se with a phase state*. Solubility varies with relative size of anions and cations (and this depends on the chemical composition of the salt and its relative concentration), and as a function of lattice and solvation energies. In their 2001 study, **Levitus** *et al* admit that their claim of a substantial melting of sea ice is an estimate "that requires additional assumptions, such as assigning a salinity and temperature to the sea ice that melted" [46]! Once more, this demonstrates the volitional character of the interpretation of the 'data' as evidence for 'global warming'. If it is this arbitrary, even with respect to the matter of salinity, what can be expected on any other matter - such as the chemical composition of the diluted salts, their variation over time, the exact composition of samples, etc?

## **3.3.2.** Role of the oceans as a store of latent heat

Atmospheric metabolism is a complex process driven by the interplay of solar energy, atmospheric latent heat and electricity, and geothermal heat. But the main energy reservoirs in this system are the oceans of this planet, and the entire metabolism of the atmosphere is largely tied into the interaction of solar, atmospheric and geothermal energies with the energy tank of sea water. Land-mass *surfaces* cannot hold energy for long periods; they radiate most of the energy they absorb - from solar radiation and atmospheric sources - back to the atmosphere during nighttime, as happens with the frigid nights of a hot desert. Like the atmosphere, but with much greater energy density because of higher specific gravity, higher pressure and higher specific heat, sea water is a gigantic reservoir absorbs solar radiation and converts it into latent heat, releasing some of this latent heat into its surface and to the atmosphere (at the interface) in the form of sensible heat, along with production of water vapour by evaporation. In turn, water vapour carries the rest of the released latent heat into the atmosphere and the clouds.

The estimates of the specific heat (and energy contribution) of oceans are based solely on extrapolations from thermal data. There are no real experimental confirmations. None of these extrapolations takes into account the variation of the content of latent heat in water (liquid or vapour) or seawater (associated, for example, with barometric variations), its varying response to a variable energy magnitude of solar radiation, the electric energy or the electrical radiative states of water, the inter-conversion of latent heat and electric energy. In fact, the greatest mystery for oceanographers and climatologists is how the ocean can absorb solar radiation, store it as latent heat, and thus sequester energy from being expressed as sensible heat.

Climatologists refer to this problem as that of the ocean's "*removal* of heat *from direct contact* with the atmosphere"... It is the problem of the storage of latent heat in oceanic depths. But even when latent heat is taken into account, it is regarded solely as a function of sensible heat, a function of absorption of sensible heat - in particular, radiative or electromagnetic heat.

The traditional view of the interaction between solar radiation and the oceans is that the latter absorb electromagnetic radiation from the sun down to an average depth of 160m, called the *pycnocline* depth. Below this depth, temperature correlations do not appear to be responsive to the electromagnetic signals associated with solar radiation (they fail to detect them). The deepest penetrating electromagnetic component is attributed to UV-rays, whereas at the opposite end of the spectrum, infrared rays only penetrate a few millimeters below the surface. When the acolytes of global warming cite the trapping of heat and the infrared production by so-called GHGs, as a major factor in the alteration of climate, one can only smirk since, by accepted mainstream physics, this radiation could not affect in any significant way the mass of ocean water - neither the total mass, nor the mass that lies above the pycnocline, nor even sea-water in the main thermal zone which lies in the upper 2 or 3 meters, above the more familiar *thermocline*. So, by the tenets of Royal Physics itself, the myth of global warming is patently inconsistent - infrared radiation could never significantly affect the temperature of ocean water.

#### 3.3.3. The 'reinterpretation' of thermohaline circulation

See on this topic **Stevenson**'s criticism of the sheer mind-boggling stupidity of the now mainstream interpretation of thermohaline circulation. To explain thermal turnover inside the oceans, the 'global warming' zealots are obliged to reinterpret 'thermohaline circulation' as a thermal 'subduction' or inversion. Thermohaline circulation is the sinking of cold water, or water rapidly cooled by wind and heat loss (IR radiation), when it is layered over warm water. But with the myth of 'global warming', *presto*, it becomes warm water which, by change in salinity, not only sinks in water as warm as itself, but in colder water too [11]...

#### 3.3.4. Water vapour as a latent heat carrier

What's valid for saltwater, is *a fortiori* valid for water vapour. How it forms noncovalent bonds with other molecules, how it rises in the atmosphere as a function of its latent heat content, how it stores this latent heat in its phase state, how its latent heat content is trapped in the formation of clouds - all these basic questions have been insufficiently explored to be understood or incorporated into general climatological models.

When designing their models, climatologists have tended to take into account only thermal radiation, specifically electromagnetic radiation in the IR range. Oceanographers have been more prone to take into account the dominant role of the oceans in climate, by considering the effect of their specific heat on evaporation, the role of convection in heat transfer, and the flux of thermal air masses. Yet parameters for the greater shedding of latent heat by evaporating water at lower altitudes and the base layers of airstreams constitute a critical variable affecting

atmospheric temperatures near the ground (where the effect of 'global warming' is said to be detected).

#### 3.3.5. Latent heat distributions and the chemical composition of clouds

As we noted above, the chemical composition of clouds alone is never considered by general circulation models or so-called 'studies' on global warming; and yet the composition of clouds is substantially altered by man-made pollution, as it is by volcanic eruptions, and this altered chemistry changes both the thermal and the electric energy states of clouds - the amount of latent heat they trap in the different phase states and in the noncovalent structure, and the charge density and electric potential of cloud systems.

#### 3.4. A new concept and function of solar radiation: aetherometric contributions

## **3.4.1.** Shortcomings of a 'radiative physics' of atmospheric sensible heat fixated on IR production

The true radiative nature of the interaction of the atmosphere with solar radiation is actually unknown to existing climatology (see below). This shortcoming is not climatology's doing, however - it is a flaw of standard mainstream physics, one that is well summed up by the reign of that 'common sense' notion which holds steadfast that all energy has mass, carries mass and equates to mass. Since the existence of massfree energy is thus proscribed, ignoring its dynamics in physical and chemical processes is not just permissible but in order. The only permissible radiative interactions are those that reduce solar radiation to its electromagnetic byproducts - and this reduction is then generalized by assuming that photons travel through space. Accordingly, the interaction of solar radiation with the atmospheric/ocean/earth system is reduced to the mere absorption and emission of photons. Furthermore, the matter interacting with this electromagnetic radiation, in particular, atmospheric matter, is always presented as a given; its genesis or creation is never understood past the existence of chemical processes of molecular reactions, where one molecule is always the parent of another. The account of the input effect of solar winds is deficient, and altogether lacking is any notion of regulating chemical cycles or, 'god forbid', cosmological processes of the creation of matter. Ionizing electromagnetic radiation - caused, for example, by solar flares or storms - is understood as having an impact on the transmission of electromagnetic signals (noisy E-layer, etc) and the production of electrical phenomena like the Aurora borealis, but not as having any influence on the weather. Beyond that, while there is some understanding of the interaction of 'synchrotron radiation' and UV photons with stratospheric gases, the bulk of the treatment fixates on IR photons and their role in conveying atmospheric sensible heat.

Typical treatments begin by assuming that the energy balance is exclusively radiative in the usual electromagnetic sense. Even without introducing a new physics of energy radiation, it is clear that this is the wrong assumption, since convection, at least, plays a role in the heat transfer from the troposphere to the stratosphere - not to speak of adiabatic lift or the role of molecularly

bound latent heat. And conventional understanding of the interaction of solar radiation with the Earth's atmosphere begins by assuming that the atmosphere is transparent to 'solar radiation', and that, in essence, it gets its warmth -

1. From the trapping of IR photons 'reflected' from the Earth's surface, or radiated during nighttime, from that surface or from ground atmospheric 'greenhouse gases', amongst which water vapour.

2. From IR photons released from the ocean's surface, ie sensible heat released from the oceans.

3. From the release of the latent heat of seawater, particularly along coastal lines, through evaporation and convection of water vapour.

However, the fact of the matter is that the atmosphere is *not* transparent to solar radiation, *nor is it primarily driven by IR heat*. This general problem underlines the lack of a proper physical and chemical understanding of the complexity and systematicity of the processes involved in weather formation and climate change. The major cause of this lack is a total miscomprehension of the nature of energy, coupled to a willful resistance to consider, and inability to understand, the world of massfree energy.

In fact, the present authors contend that there is a more general, basic and widespread error still, which Royal Physics and 'global warming' zealots more regularly commit, a hidden act of faith not consistent with science itself, and thus not consistent with good physics: when pontificating about atmospheric energy, they focus only on temperature, which is merely an indicator of sensible heat (kinetic and radiative), and ignore: (1) the physics of latent heat, and what is effectively meant by the specific latent heat of sea water, and how latent heat is mostly generated from the capture of solar energy; and (2) electrical processes of energy conversion, not just those of lightning but also those of massfree electric radiation. Even the relation between atmospheric energy and pressure is generally omitted.

These authors further contend that the nature of solar radiation is not electromagnetic, and that light, photons and their various 'rays', are a local production. Furthermore, this local production of blackbody photons requires threshold densities of matter, the acceleration of this matter by 'electric fields', and a mechanism for charge deceleration or stoppage. Remove any of these three conditions and you have no photon production at all; but you still have transmission of electric massfree energy across 'that space', and thus transmission of energy - but not in electromagnetic form.

Finally, even the atmospheric variations in net monopolar charge, its concentration in clouds, or even traditional electric interactions - such as electrostatic and electrodynamic ones - are barely understood in ways that actually fit with the electrical facts of cyclonic and anti-cyclonic systems [26]. Here, too, an excessive reliance upon the theory of ionization has led to a great deal of confusion about charge accumulation and separation processes.

The oceans also interact with solar ambipolar radiation to absorb all that was not absorbed by the atmosphere, storing it as latent heat at high pressure and then releasing it, by conversion into sensible heat. The process is mostly driven by solar radiation, but there is also a terrestrial

component ('geothermal heat', see below), indeed one that is even more poorly studied. Furthermore, the behaviour of oceans, from the viewpoint of an atmospheric system, is that of a gigantic tank of energy, closer to a blackbody having the internal properties of eutectic salts, than to a mere relay mechanism in the metabolism of radiant sensible heat.

The result of our contentions - derived from original research in atmospheric physics - is that the interactions of water and fundamental atmospheric gases with *nonelectromagnetic* solar radiation, and the physics and chemistry of latent heat, cannot be inferred from variations of sensible heat alone, nor are they a consequence of the latter. Rather, production of electromagnetic 'radiation' and generation of fluxes of sensible heat with attendant temperature variations, are the outcome of the underlying physical processes driven by *solar non-electromagnetic radiation, its conversion into latent heat and the transfer of that latent heat.* So, the obvious question is: *without understanding the real nature of solar radiation and the energy processes that convert that radiation into latent heat and the latter into sensible heat, how can the science of meteorology ever become a science*?

#### 3.4.2. The real physical nature of solar radiation

Let's right away address IR photon production in the atmosphere. Unlike the tenets of accepted electromagnetic theory, the present authors must agree with **Nikola Tesla** and **Wilhelm Reich**: neither do IR photons reach the atmosphere from the Sun, nor is most of the energy reflected from the Earth's surface in the form of photons, or in electromagnetic form. The facts of the matter are substantially different, indeed: solar radiation is electric, massfree and nondispersive - what we have called ambipolar radiation [47-48]. There is a substantial capture of solar ambipolar energy throughout the E-layer, the stratosphere and the troposphere, ranging from 28 to 100 keV, which drives the convective activity, the vaporization of water, oxygen, ozone and hydrogen [49]. Formation of water and oxygen are, in this cycle, the very steps whereby the bulk of solar energy is transformed into blue light and into IR photons, ie radiant sensible heat. In fact, *it is the very formation of oxygen which is the natural source of IR photons*. A variety of other blackbody photons are absorbed and released in this cyclic process, but its understanding requires a proper grasp of the nature of solar radiation and its true electrical potential and energy.

**Tesla** was quite correct in arguing that solar radiation was not electromagnetic, but electric and filamentary. But he was not able to provide the physical and analytical links between this radiation and the spectrum of blackbody photons [48, 50]. So, he failed to explain how the main mode of that solar electric radiation corresponds exactly to the production of blue light, when that electric radiation interacts with free electrons or excitable 'outer' electrons in the 'orbital shells' of atmospheric molecules. No blackbody photons, IR or otherwise, reach the Earth from the Sun, or 'reflect' from the land surface or the seas. What reaches the Earth and bounces off its surface, land or water, is electrical radiation of massfree filamentary charges. Blackbody photons are always and only produced as a residual of the interaction of this radiation with massbound charges, ie with electrons, protons and molecular ions.

The reflected - and, in the process, refracted - ambipolar radiation is attenuated in electric potential, and that natural process displaces the residual photon mode towards the IR part of the spectrum. In particular, due to the seas' constant agitation, sea surfaces act as 'displacement' concentrators of solar atmospheric energy through their reflective and refractive properties An ordinary confirmation of this concentration are the multiple reflections of the sun, low on the horizon, from a sea surface at the end of a clear anticyclonic day. These reflections may tan or burn the skin even more effectively than the midday sun precisely because they multiply the radiative energy reaching the surface (converging lens), and more heat is absorbed over a wider surface. Yet, a single one of those reflections is never as intense as is the solar source itself - as seen by the fact that each reflection displaces the blue solar mode of visible photons towards the green, yellow, red, IR portions of the spectrum. It is here that  $CO_2$  plays one of its roles (the ground level role), by absorbing the attenuated ambipolar radiation and releasing sensible heat in radiative form (ie IR photons).

**Tesla** also knew that one could change the functioning of an inductor to generate either (or mostly) local photons (electromagnetic 'radiation'), or filamentary electric radiation ('resonance loading'). A true Tesla transmitter does not function by way of the principles discovered by **James Clerk Maxwell**, **Heinrich Hertz** and **Enrico Marconi** for the generation and transmission of electromagnetic signals. Its objective is not to generate an electromagnetic signal or optimalize it. Its objective is to propagate longitudinally an electric signal under conditions of resonance [51]. A target may or may not, then eventually resolve that electric energy into a local electromagnetic signal, but the energy propagation is, otherwise, electromagnetically silent or 'dark'.

## **3.4.3. Understanding the interaction of ambipolar radiation with pollutants and the generation of free-radicals**

Because it lacks a correct understanding of the physical nature of solar radiation, mainstream physics is condemned to a deficient grasp of the production and absorption of blackbody photons, and thus to an incorrect physical chemistry of water, oxygen-ozone and atmospheric pollutants. Hence, too, it is barred from understanding the interaction of ambipolar radiation with pollutants and the generation of free-radicals.

A central case in point is that of ozone. Perhaps the *single greatest myth of mediatic geoscience is that stratospheric ozone protects the earth from harmful UV radiation*. But enthalpy balance and a painstaking analysis of energy and radiation shows that, in fact, ozone does *not* absorb harmful UV. It emits near UV (336 nm), and does so upon its formation from atomic oxygen (30), or oxygen and atomic oxygen  $(O_2+O)$  [7]. What absorbs energy are the monoatomic states of oxygen, and the energy they absorb is not 'photonic', but ambipolar radiation near 71 keV [7, 49]. Once formed, however, ozone is capable of absorbing near UV radiation at 315 nm - but this radiation is emitted *locally* from free electrons, and does *not* come from the Sun. If this absorption takes place (1) in the presence of atomic hydrogen, and (2) in the presence of solar ambipolar radiation, so that further energy absorption (of ambipolar radiation) may occur at 48 keV (near solar mode) and 28 keV, then both water vapour and oxygen are formed

together, *as ozone is photodissociated by that 315nm UV photon.* The result, as we have already said above, is the release of IR and blue light photons. Thus ozone is a step in the production of water and oxygen - their direct parent. Water vapour may be the parent of monoatomic oxygen and its main metastables, but the parent of water and oxygen is ozone.

Furthermore, the solar energy that the atmosphere and all living beings need protecting from is not 'solar far-UV', but ambipolar radiation of energy greater than 79.4 keV. The interaction of this energy with excitable electrons locally releases far and vacuum UV (or extreme UV, EUV) photons, which, in essence, are absorbed by (molecular) oxygen and atomic oxygen. In the course of 'protecting us from harmful components of solar radiation', it is oxygen that gives rise to toxic species, monoatomic oxygen and eventually ozone; thus oxygen, molecular or monoatomic is ozone's parent in turn. The entire cycle is driven by solar ambipolar radiation.

In light of the preceding, to say that 'stratospheric ozone over the Antarctica has decreased over a given period of time x' is not proof of anything; it could be due to reactions with pollutants that bind ozone in acid form or those that regenerate oxygen, but it may just as well be due to variations in the 71keV band of solar ambipolar radiation - a decrease permitting therefore more stratospheric oxygen to exist in the monoatomic state. Since the latter was not studied in conjunction with ozone, nothing can be said intelligently about such a shunt. And since it is not the only possible shunt (for instance, less ozone might exist because less monoatomic oxygen was produced and conveyed to the stratosphere, because, in turn, ambipolar solar radiation in the 85 to 99 keV range also decreased [49]), claims of a 'hole in the Antarctica ozone' and 'consequent increased melanoma risk of skin exposure', etc, patati-patata, are only further instances of media-driven alarmist faddism, senseless scientifically, but with plenty of logic when it comes to the jobs of Antarctic climatologists, or the profits of media empires and sunscreen industries.

These facts are not State secrets. Foukal said as much when he wrote back in 1990:

"Changes in solar UV emissions might cause a variation of 1 to 2% in total global ozone. This could account for much of the global decrease in stratospheric ozone measured by satellites between 1978 and 1985, a period of mostly declining solar activity" [52]

#### 3.5. The dominant solar control of weather

Here much too much could be said. It begins perhaps with all those studies that never succeeded in understanding the complex variation of the motion of planets and the solar system, nor the different solar cycles caused by distinct motion components, nor the effect of these cycles on the variations in the intensity and spectral composition of solar emissions. Almost everything in this chapter of climatology needs to be redone, since the sun does not determine terrestrial weather, but drives its patterns and controls or modulates its responses. Yet, so little is understood about this by Official Science, and the pace of the investigation is so slow, that it truly makes one cringe. In fact, solar-minded climatologists are largely shunned by Official Science; they are an eccentricity of climatology.

This ties in with the subject of the previous section because, in still another sense, the problem begins with not understanding the physical nature of solar radiation and thus not understanding the variations in intensity or spectral energy of this radiation. Yet, a displacement of solar ambipolar radiation towards emissions having electric energy greater than 50 KeV would result in a greater transfer of energy from the sun to the atmosphere, and would readily promote UV photon production in the atmosphere. As **Landscheidt** remarks, it is well established (see the references that he provides [43]) that -

"change in the UV radiation of the Sun is much greater than in the range of visible radiation. The UV range of the [electromagnetic] spectrum lies between 100Å and 3800Å. Wavelengths below 1500Å are called extreme ultraviolet, EUV. The variation in radiation between extrema of the 11-year sunspot cycle reaches 35% in the EUV range, 20% at 1500Å and 7% around 2500Å. At wavelengths above 2500Å, the variation reaches still 2%. At the time of energetic solar eruptions, UV radiation increases up to 16%."

Where are these variations taken into account in the models that predict what they assume, namely, 'global warming'? **Landscheidt** provides an answer to that question as well:

"There is not even an attempt to model such complex climate details, as GCMs are too coarse for such purposes. When K. Hasselmann (a leading greenhouse protagonist) was asked why GCMs do not allow for the stratosphere's warming by the sun's ultraviolet radiation and its impact on the circulation in the troposphere, he answered: "This aspect is too complex to incorporate it into the models."

So, in this chapter of forcing climatology to study what it should be studying, a first entry would be an effective taking into account of the variation of the so-called solar irradiance constant caused by such solar features as 'faculae' [52]. A second entry would further propose that *the solar 10.7 cm radio flux has been abused as a proxy for the UV flux associated with solar radiation*, to paraphrase **Fred Singer** [53]. Further, we claim this is a double abuse, since the ultimate cause of that EUV flux is solar ambipolar radiation greater than 79.4 keV. In both of these entries, it is actual research into basic science that is missing. Yet, the myths of global warming rely upon the glorification of this absence.

Decadal ranges of variation in the irradiance 'constant', spanning  $3W/m^2$ , or 0.22% of the mean value of that 'constant', are observed by satellite radiometers. The usual calculation is that 30% of this energy is reflected, and only one quarter of the remainder absorbed (on the order of 239  $W/m^2$ ), with the result that the variation in absorbed energy only amounts to  $0.53 W/m^2$  [43]. If one accepts that global warming reaches  $2.4\pm0.4 W/m^2$ , the variation of the solar 'constant' only accounts for one fifth of this magnitude. Even inference of the "solar radiative forcing change" as "slightly less than  $1W/m^2$ " [54] cannot account for that accepted value of global warming, nor for more than 0.27 deg C out of the claimed warming by 0.5 to 0.6 deg C [55]. The conclusion of 'global warming' advocates is, of course, that the remainder of the warming must be man-made.

This is something of a false conundrum, since energy reflection varies for land masses, oceans and ice cover, and to convert watts per meter squared into degrees of atmospheric temperature is a relatively arbitrary process with a range of 0.3 to 1.4 deg C per W/m<sup>2</sup>. As **Landscheidt** puts it, if one chooses the mean value at 0.85 deg C/W/m<sup>2</sup>, the solar variation of 0.53 W/m<sup>2</sup> accounts for 0.425 deg C of change. A mean value of 0.55 deg C/W/m<sup>2</sup> would suffice completely if the absorbed variation was "slightly less than 1 watt", as **Soon**, **Baliunas** *et al* proposed. Yet, all

these researchers conclude to the need to postulate a positive feedback mechanism that enhances climate response to solar 'forcings', **Soon** and his group going as far as proposing a "climate hypersensitivity model" where substantially more absorption of solar radiation occurs in the stratosphere [55]. This is only necessary if one can establish the conversion rate to be ca. 0.27 deg C/W/m<sup>2</sup>. Yet, simple thought suffices to suggest that this rate must vary with varying atmospheric pressure and gas density. Moreover, with respect to latent heat, one cannot make rigid inferences about its quantity on the basis of some of its byproducts, temperature and radiant photon energy. **Landscheidt** quotes a profound remark of **Juan G. Roederer** relating precisely to this fact - a vintage aetherometric fact that is also obvious to non-aetherometric scientists, and is pregnant with still more consequences than even they suspect - and he employs it to argue for the existence of positive feedback processes:

"In a highly nonlinear system with large reservoirs of latent energy such as the atmosphere-ocean-biosphere, global redistributions of energy can be triggered by very small inputs, a process that depends far more on their spatial and temporal pattern than on their magnitude"  $[\underline{56}]$ 

For example, since ozone formation releases near UV photons, but ozone itself does not release blue and IR photons unless certain conditions are present (those needed for the production of water and oxygen), low ground ozone is a heat trap - retaining, as latent energy, the sensible heat that must be released in the course of the allotropic cycle. Hence, there is another aspect pertaining to the trapping of heat that is amplified in surface atmospheres by man-made pollution: namely the role of atmospheric free-radical pollutants in trapping latent heat, prominent amongst which is the role of ground-level ozone.

But on an even more basic level - one that does not need to invoke any aetherometric knowledge of ambipolar radiation, or an understanding of the variations in UV photon production by solar radiation - a full or complete account is yet to be made of the relative impact on weather systems and climate of variables such as the 21.33 year sunspot cycle, the 9 to 12 year oscillations of long and short solar orbitals in the plane of the ecliptic, the quasi-biennial oscillation of stratospheric winds [57-58] and its corresponding counterpart in the Southern Hemisphere.

In this context, we should cite as one of the important analytical contributions the rather Aspdenian study by **Landscheidt** of the relation between variations in solar radiation, solar rotation and orbital angular momentum in the plane of the ecliptic. He identified a contribution of the latter, on the order of 25%, to the total solar angular momentum [59], and has, for more than two decades, been proposing a transfer of angular momentum from the Sun's orbital in the ecliptic to the Sun's rotation around its axis. **Foukal** suggested that increases in production of UV and X-ray photons associated with stellar radiation could be a consequence of the differential rotation of the solar chromosphere (fastest at the equator), ie the process behind cyclic formation of sunspots and faculae [52]. He further suggested that only stars with high rates of rotation had high energy photons associated with their radiation spectra. **Landscheidt**'s proposal explains what feeds the cyclic changes in that solar rotation, and serves as its periodic accelerator. This is of great consequence, first because the process in question is likely the main factor altering the intensity and spectral composition of solar radiation, and secondly because, in terms of aetherometric theory, the motion of the Sun in the plane of the ecliptic is matched by a periodic motion of the Sun and the entire solar system transversely to the ecliptic so that the total

angular momentum of the Sun is a still greater quantity than heretofore suggested, and thus constitutes a still greater reservoir for momentum transfer.

# **3.6.** Understanding the nature of geothermal energy and its modulating influence upon weather

If, to the preceding, one should add that virtually nothing is understood about geothermal energy - how it is generated within the earth, trapped in its insulating, high-pressure mineral structure (whose understanding has been reduced to the mantric formula of "a molten or semi-molten iron-nickel planetarian core"), etc - then it becomes apparent how nearly irrelevant are all the accepted, mainstream climatological models and their pretensions to encompassing an actual and factual science of the atmosphere. In fact, the processes at the core of the Earth are likely not that different from those at the core of the Sun, and there is a net, non-negligible contribution of these processes to heating ocean and land masses - a contribution which is simply not taken into account. Even as volcanic aerosols contribute to surface cooling, their release of sensible heat contributes to atmospheric warming.

## 3.7. An integral account of atmospheric energy

The atmosphere is not an isolated system, and neither is its energy content reducible to sensible heat, let alone radiant sensible heat. As **Roederer** puts it, the atmosphere is part of a nonlinear system also involving land and ocean masses, and their joint interaction with solar radiation and geothermal energy. This system is complex, as it contains energy in various compartments: radiant sensible heat; molecular kinetic energy of thermal drift (convection currents); latent heat of phase state, conformational or noncovalent; but also electric energy. And the latter includes both electric energy in the form of the kinetic energy of massbound charges in 'static' or 'dynamic' interactions, and ambipolar energy either solar-sourced or radiatively released by cooperative emission from those massbound charges [60]. Likewise, a more comprehensive understanding of latent heat is needed, all the more as its role in the atmosphere and oceans is recognized as being a primary one by meteorologists:

"The atmosphere as a whole acts like a steam engine [as] heating is effected at high-pressure on the surface of the ground (...). (...) The heat used to evaporate water remains in the water-vapour molecule as 'latent heat', which is liberated when the water-vapour condenses again [to form clouds or fog] (...). This liberation of latent heat is one of the most important sources of energy in the free atmosphere. (...) The turbulent transfer of latent heat (...) obeys the same laws as that for sensible heat and is measured by the product of the exchange coefficient A, the vertical gradient of water-vapour content ((...) known as specific humidity), and the latent heat of vaporization."

Though recognized as a major energy compartment in the atmosphere and the 'hydrosphere', the understanding of latent heat is limited to the heat of phase, or the energy associated with phase states. Obviously, from a climatologist's viewpoint, the accent on 'latent heat' is placed with respect to its metabolic cycle of conversion into sensible heat, and particularly as this concerns the energy of water in the vapour phase. But we could also describe 'latent heat' as the 'intrinsic

potential energy' of a variety of air molecules - allocated to their rotary and vibratory states and which increases with more rarefied phases of Matter - or just as well to the noncovalent bond energies of such molecules.

We have already pointed out the existence of natural processes that withdraw energy from being expressed through thermally radiative or convective states, and discussed as well Tesla's original claim that one could make an inductor generate either a predominantly electromagnetic emission or a predominantly ambipolar emission ('filamentary current waves' [51]). And even if meteorology were ruthlessly ruled by a physics of electromagnetic radiation or a thermodynamic theory dominated by sensible heat considerations, there is still that other energy component - the electrical one - which, in the atmosphere and in the oceans, is completely ignored by climatological and meteorological models (really, doctrines). Atmospheric energy is not exclusively distributed in the form of sensible heat, nor by a closed cycle of sensible and latent heats. Electrical interactions are another source of energy and present a conversion of solar radiation, as well as direct conversion into latent heat. A true atmospheric physics must take into account (1) that component of atmospheric radiation which is present in electric form, both incoming (solar and terrestrial) and outgoing (eg sprites); (2) separate bursts of solar ionization from variation of solar irradiation, and take the former into account in any energy budget, including diurnal variation of the distribution of various ion species [26]; (3) the energy discharges of lightning and electrical storms, including the electrical resonance of the earth; but also (4) the ambipolar radiation of massfree charges cooperatively emitted by atmospheric gases, water vapour in particular, and its frequency tuning by acidification [60]. Until a comprehensive account of all forms of sensible heat (radiant and convective), latent heat (of state, as internal energy or noncovalent) and electric energy (massbound kinetic energy and massfree radiation) is made, there will be no science of weather and climate, no meteorology or climatology that can claim to be a science and is able to predict climate change and hurricane paths. Until then, it will remain what it is - a media spectacle of pseudoscientists in the pay of the State and corporate interests, an Official pseudo-Science.



#### **III - CONCLUSION**

Without a comprehensive, systematic and interconnected understanding of the nonlinear system formed by the atmosphere, the oceans, the land mass and the biosphere, dogmas like those of a man-made,  $CO_2$ -mediated global warming can only be pushed forward as part of a political and media-driven agenda. With a functional, comprehensive understanding, these dogmas are shown to be worth no more than a child's chimeras. If there were really a majority consensus that global warming is real and man-made, then one would have to conclude that it was the

consensus of a majority of infantilized adults - not scientists capable of thinking by themselves and applying the scientific method, but mass-conditioned zombies vying for technobureaucratic jobs.

So, one must ask - what is it that these pseudo-scientists are hiding when they sell their globally warmed sausages or their smelly fish?

They are hiding the real climatological change now under way: the increase in aerosol particulates, including the sulphur and nitrous oxides from coal burning (sources of so-called acid rain), and the aromatic or cyclical particulates of diesel, gas and oil burning, which engage a new atmospheric chemistry whose end products are low-level concentrations of ozone and the trapping of water vapor and carbon monoxide near the ground.

This phenomenon has been called 'smog', but this term, too, was the product of a fad that reduced the phenomenon to the presence in the air of carbon or soot - in reality only one of the particulates in question. The designation 'smog' is no more adequate than is the myth of 'global warming'. Indeed, what open-minded scrutiny presents to us is that certain effects of atmospheric systems have intensified; but these systems cannot be judged from the human catastrophes they generate, since global urbanization and explosive demographic growth alone have contributed to the intensity of these catastrophes, as hurricane *Katrina* so poignantly demonstrated (unbridled urbanization of low level river, lake and sea shore areas obviously vulnerable to cyclonic systems and sea level changes). They must be examined by looking at the data (the rates of precipitation, wind speed, concentration of particulate types, etc), and by critical consideration of this data - which is neither homogenous nor certain in a variety of technical senses. The intensification of the parameters of both cyclonic systems (the strength of hurricanes, the frequency of high-strength hurricanes, the electric potential of thunderstorms, the non-discharging condition of rainstorms, the extremes of heat and cold for hot and cold fronts, etc) and anti-cyclonic systems (the trapping of free-radicals and humidity that turns sunny days into 'smoggy' or 'helmet' days, the distinct types of 'anti-cyclonic days' [26]), can be directly connected to the emergence of an altered atmospheric 'metabolism', an altered energy process and an altered air chemistry.

We have in fact argued that this altered metabolism is not simply due to the chemical properties of free-radicals in the atmosphere, or their generation from a variety of particulate emissions; we have presented a variety of evidence (enthalpic balance of the allotropic cycle of the atmosphere [7], a new treatment of the Nernst equation that integrates acid-base and redox processes [60], a model for the emission of non-electromagnetic Tesla waves from electrons and protons [60], demonstration of absorption of Tesla waves or radiation by a variety of fundamental atmospheric molecules [49]) that shows that a massfree form of atmospheric electricity (ambipolar radiation) constitutes a significant variable which climatologists and physicists have steadfastly ignored to this day. Our work has identified the physical processes whereby acidified water (in the liquid or gas phase) and ozone can generate this radiation, but with properties that are biologically damaging and which promote the production of free-radical chemical species. One of the main consequences of this alteration of atmospheric physical and chemical processes, and the production of high-energy ambipolar radiation, is the trapping of latent heat by free-radical particulates, and its interference with the evaporative cycle of water

that concentrates water vapour in clouds. All the observed climatological alterations now underway - oxygen-depleted anti-cyclonic systems, excess ground-level ozone, the dangerous over-heating of city environments, violent precipitation discharges from cyclonic systems, intensification of hurricane winds, desertification of the planet, etc, are related, in one way or another, to atmospheric alterations in the absorption and emission of ambipolar radiation.

We were obliged to make a concise statement on what is the real man-made climatological problem under way, to explain to the reader that the problem is neither one of global warming, nor merely one of increased production of carbon dioxide. The problem is far more complex, and the ideology of 'global warming' merely reduces it to an ineffectual, marketable caricature of the issue.

Secondly, there is little to argue against regarding the correlation made between the climatological change now underway and human activity, though there are also plenty of natural factors involved (reaction processes that may either increase or diminish the impact of these human activities). But global weather change cannot be defined by a dubious global increase in temperature, nor does it require such an increase in order to be real.

Thirdly, it is obvious that the burning of fossil fuels is one of the major polluting process contributing to the climatological change now underway - coupled with tropical deforestation, rampant urbanization, nuclear explosions and emissions.

But what man-made pollution fundamentally contributes is a carcinogenic chemistry of free-radicals, with the noxious radiations (electromagnetic and non-electromagnetic) attendant to it, and an altered atmospheric metabolism of water, oxygen and latent heat - not a mere or necessary increase in temperature.

Of course, the pseudoscientific consensus of the leftist ideologues of global warming does not restrict itself to marketing this fad: they want to do 'something' about the 'warming'. A demented posture, only deserving of more laughter. For, what do they mean by 'doing something'?

One would think that, at the very least, they would mean to be part of the solution; but in fact they are literally scrambling to be part of the problem - and the reason is that the solutions they propose are not solutions at all, but bureaucratic and regulatory nightmares. With no underlying interest in, nor commitment to, the development of alternative energy technologies, these "solutions" constitute instead a veritable power grab on the level of the new technocratic planetarian order.

In fact, we ourselves have experienced a most poignant and consistent disinterest in our innovative energy technologies on the part of such highfalutin' organizations as WWF, Greenpeace, Save the Planet, and so on. One might think that people and organizations like these - WWF, Greenpeace, etc - would at least be sufficiently open-minded to explore the possibility of new physics, paradigm changes that might open the doors to innovative alternative energy technologies which could bring to an end the era of fossil fuels and oil-dependency, or the alternative dependency on nuclear fission. But no; in our experience, they are some of the most destructive and rabid enemies of alternative physics and energy research. A typical example is that of **William M. Connolley**, a minor zealot of global warming, who is also a

self-appointed watchdog of the "purity of science" on Wikipedia, taking it upon himself to combat, with falsification and slander, any possible insertion into Wikipedia of accurate information about non-mainstream scientific developments - and this in areas of research in which he has not read a single scientific publication and of which he has no understanding whatsoever. But all this should come as no surprise - as these people are, for the most part, in the pay of bureaucratic, political and corporate interests which have seized the ecological and climatological catastrophe as the latest commodity they should sell and regulate; most are either leftist militants, technobureaucrats with government paychecks, or employees of polluting industries - ecologists in Exxon's pay, and so on. British Petroleum, for instance, has now become a major subscriber to the fiction of global warming. And they've put the myth to some use in their August 2005 commercial campaign as a justification for their (mythical) switch towards 'a hydrogen economy', as if such an economy were viable and did not specifically rely on the employment of fossil fuel for the generation of hydrogen... Smooth falsities, made even smoother. So why on earth would they want to know about alternative energy from nuclear fusion, solar ambipolar radiation, or the proscribed Aether?

The new manufactured consensus thus stands revealed as a grievous pseudo-scientific myth, one with no other use than the politics of globalization - for the benefit of the new capitalists and technocrats of international order - and one which requires a systematic policy of suppression of scientific and technological innovation. Its science must be magical, just as its global consensus *is* magical.

The last underpinning of the dogma of global warming is one that its defenders seldom put forth, but that is contained in the current policy statement of the American Meteorological Society - that "global warming" does not necessarily mean warming at all... but "all the climate and environmental effects arising from natural climate variability (!!) as well as from anthropogenic changes in atmospheric composition and land use". With this ridiculous definition, global warming could literally mean anything and everything, including the authors' model of increasing free-radical particulates and their ambipolar radiative properties. Acid rain would be "global warming", even global cooling could be global warming... Why not? The magik of global capitalism, and the magik of Science, with its 262 affiliated societies and academies of science - the largest peer-reviewed journal in *Die Welt*. Little wonder, then, that the informed public does not give a hoot about science - about the science of the establishment, mainstream science, Official Science. And no wonder, too, that so many official and officiating scientists and science journalists do not mind to bend the truth to eke out a living. They know that Official Science is like the media - it's all about catchy shades of the false, distortion of facts, the infilling of data - about packaging. About the spectacle of the Big Warming, the succession of fads and their impoverished cycles. They have found an outlet for their mediocre creativity, and they are being paid to 'express themselves'. It is the circus of Big Science; it is Knowledge Warfare, the rule of the mediocracy. It is Kyoto as merchandise, basic science as the target to mow down, and any real technological solution to the global energy crisis as the casualty. And 'they' have 'peer-review' to prove that they are right, that they are... scientific.

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