the general science journal

Reading professor Dmitriev

Edgars Alksnis
e1alksnis@gmail.com

Treasure-house of unexplained and uncomfortable facts in fascinating books of famous Siberian astrogeophysicist allows me to comment on wide range of cosmogeophysical problems, opposing mainstream „explanations". More data in favour of liquid Earth's mantle concept. Possibility to ease climatic and seismic stresses by manipulation of „smart energies" from Earth's surface get some observational support and theoretic background.

Keywords: smart geoengineering, astrogeophysics, ethersphere, ligthning, domain of physical vacuum, natural glossy objects, unexplained phenomena over geological faults, liquid Earth, fraudulent geomagnetism, fraudulent solar magnetism, hurricane tornado theory wrong, Blavatsky, Roerikh, Agni Yoga, Kozyrev

Pebbles and rocks and mountains and the bottom of the sea will bear witness. Do they know of the days, recent and ancient, when the harmony of this world was interrupted by the forces of nature? Have they entombed innumerable creatures and encased them in rock? Have they seen the ocean moving on continents and continents sliding under water? Was this earth and the expanse of its seas showered with stones and covered by ashes? Were its forests, uprooted by hurricanes and set afire, covered by tides carrying sand and debris from the bottom of the oceans? It takes millions of years for a log to be turned into coal but only a single hour when burning. Here lies the core of the problem. Did the earth change in a slow process, a year added to a year and a million years to a million, the peaceful ground of nature being the broad arena of the contest of throngs, in which the fittest survived? Or did it happen, too, that the very arena itself, infuriated, rose against the contestants and made an end of their battles?

Immanuel Velikovsky. Earth in upheaval.

Hard-to-translate books of Dmitriev considers broad list of items- interaction of the Earth with outer space, harmful influence of several human activities to geophysics, anomalous phenomena on the Earth and in space, warnings from sacred texts, cosmogeobiology and so on. Gems from books „Planetophysical changes of the Earth" and „Fiery recreation of Earth's climate" are given here in loose translation with comments. Text of book of Alexei Dmitriev is given in bold. Secondary references typically are not given.

A.D.: According to data of paleomagnetology, geomagnetic field of the Earth change poles. Mentioned process has twofold character. If signs of magnetic field of the Earth („south" and „north" are changing places in hundreds of thousands (sometimes

millions) of years, specialists talk about inversion of geomagnetic field. If signs are changing not for prolonged time (first hundreds of years, sometimes thousands) than talk about excursus of magnetic poles.

...Now magnetic axis of the Earth tightens in circle, but nearing poles are losing their intensity.

E.A.:„Geomagnetic field" is doubtful concept- and irregular „pole shifts" are heavy argument against it. Velikovsky noticed in „Earth in upheaval": „*Once a professor from the University of Rhodesia came to a lecture at the same auditorium where I usually offered my challenge, and told that his expedition found the magnetic remanent intensity of lavas in Somalia and Ethiopia a thousand-fold stronger than the terrestrial magnetic field (half a gauss) could invest in these lavas when cooling below the Pierre Curie point. Further he described that in Arabia the magnetic remanent direction was found reversed from that of neighboring Somalia and Ethiopia on the African coast.*

Once more I teased the audience: "You have to turn around Arabia in relation to Africa if you wish to explain the phenomena by continental drift. And the thousand-fold strong magnetic remanence you cannot explain even by rotating Arabia."

After 1934, when naive version of geodynamo theory was assaulted by Thomas Cowling, physics in fact has not come to it's senses in this question. Different exotic fruitless geodynamo theories will be further assaulted by the fact, that here is error in determination of Earth's density (Alksnis, 2018) and therefore Earth likely do not posess liquid iron outer core at all.

Today magnetic poles are moving in direction to eachother (as it should be, along right paths and total speed more than 60km per year). For us is important, that both inversion and excursus are connected with sharp warming of Earth's climate, what we witness (for example: jump of temperatures in polar territories). Relevant is also to highlight and remember, that by geomagnetic pole shifts (inversions and excursus) proceeds also sharp decrease of intensity of geomagnetic field.

Both EXOS-A and Hubble additionally specified, that intensity of negative Brasilian World magnetic anomaly (coastal part of South America in near-equatorial part) continued to decrease and now it is around 23 000 nT. Note that intensity of [positive] World magnetic anomalies- Canadian, East- Siberian, Near-Antarctic is more than 59 000 nT.

Next fatal difficulties for fruitless geomagnetic field concept. Magnetometers obviously reacted here to turbulence of Earth's liquid mantle. (For comparison I can offer interesents to rethink strange case of „magnetism" of human heart, which can be detected from distance of several meters). Liquid state of Earth mantle best can be concluded from data of celestial mechanics (Alksnis, 2018A), correct interpretation of Earth- Sun interaction as well as complexity of global atmospheric circulation (Alksnis, 2018B) (fig. 1).

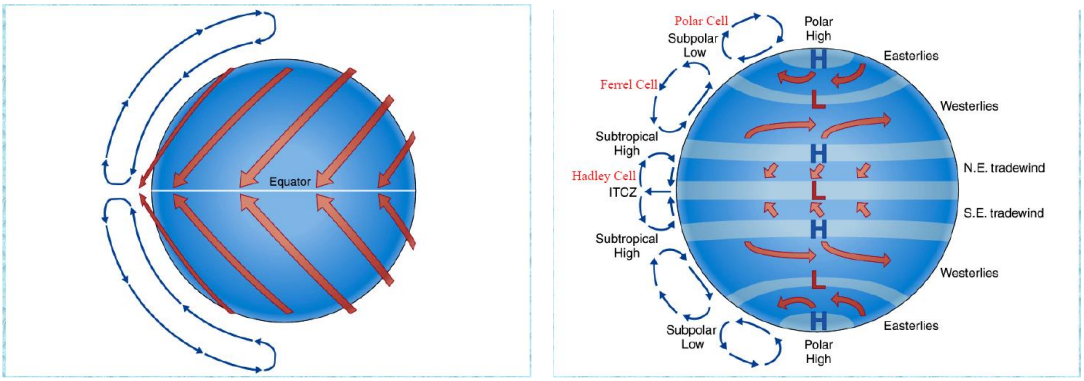


Fig.1 According to solid Earth concept, global atmospheric circulation should be like picture of the left. It is, however, much more complex (right). Similarity of global

atmospheric circulation patterns of the Earth and Jupiter indicates, that the Earth's mantle should be liquid in significant extent. Pictures from Aguado and Burt.

Thus low „geomagnetic" field strenght perhaps mean low level of Earth's mantle turbulence below the region, „pole shift"- temporary increase of Earth's mantle viscosity and appearance of several additional centers of turbulences.

Besides of magnetic poles there exist magnetocapacious and polyfunctional World magnetic anomalies (fig.2).

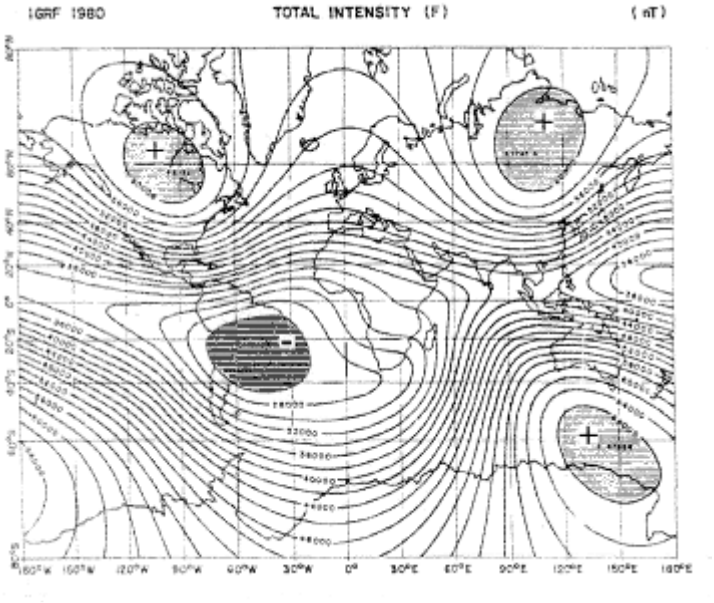


Fig.2 World magnetic anomalies. Negative magnetic anomaly (Brazilian) and positive ones- Canadian, Near- Antarctic, Near- Australian and Eastern-Siberian. (From mentioned book of Dmitriev).

World magnetic anomalies are drain columns for cosmoradioactive material. They should not be ignored, because by inversion of geomagnetic field these anomalies „take responsibility for magnetic order on Earth". Today it is known more than thirty different variation (local and global) of magnetic field, which are monitored from surface and from satellites.
... We should emphasize, that analysis of inversions of magnetic field of the Earth shows, that paths of movement of magnetic poles during known geological history have proceeded trough the certain places of Earth's surface (fig.3).

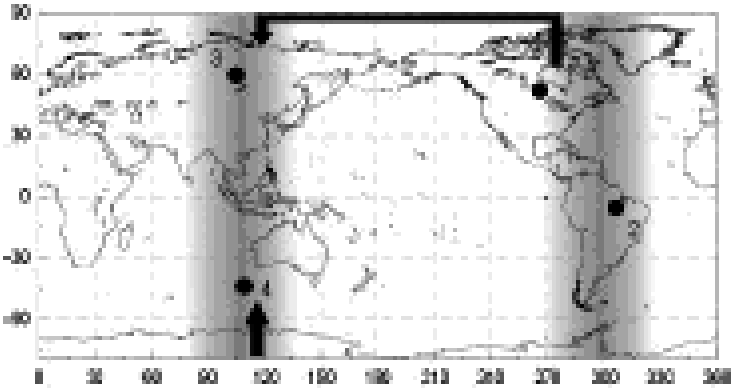


Fig.3 Routes of drift of magnetic poles during inversion. Black dots correspond to global magnetic anomalies (from Kuznetsov, 1999)

If scientists could speak not about geomagnetic field but simply about magnetometer readings, it will be better for all.

... **Nature of magnetic field of the Earth remain unknown despite investigations of many years and many researchers from different countries (Kuznetsov, 2008).**

Rare voice, supporting author's wievs. „Geomagnetic hypnosis" is distorting reasoning.

Moreover, it has been detected a good correlation between frequency of geomagnetic pole inversion and geodynamic activity, especially with intense tectonic processes. If we consider present polarity of geomagnetic pole as „direct", it has been revealed, that inversion of geomagnetic pole is accompanied with sharp and significant increase of temperature- also in Earth's crust.

Speed of movement of poles depends from global magnetic anomalies.

Temperature can raise with increase of mantle viscosity. Could be some points for crustal displacement theory. „Magnetic anomalies" mean certain effects from mantle turbulence.

At the border of 19-th and 20-th centuries' integration of geomagnetic fields to closed circuits revealed currents, which later has been named as Schmidt-Bauer currents. Mentioned currents to four orders of magnitude exceed typical atmospheric currents, connected with geoelectric field. Discovery of Schmidt remain a riddle for geophysicists since ionospheric currents are not able to penetrate Earth to region of measurement of Schmidt-Bauer currents. Bauer showed in 1920-ties, that Schmidt-Bauer currents penetrate atmosphere in huge widths of Atlantic and Pacific oceans, Europe, etc. These currents, without doubts, are the same polarised Ampere's currents. Thus Schmidt-Bauer currents directly conform to "ethersphere" of the Earth, revealed by Choteev.

It goes really frightening.

By the way, physical science has not made progress in understanding even electricity and magnetism, which has been discovered centuries earlier.

No good results also with gravitation and electromagnetism.

In radiorange Earth is shining brighter than the Sun now.

...Number of intense winter storms exactly corresponds to area of maximum of nocturnal ligthing of territories of US and Western Europe.

Winter storms- electromagnetism here can mimic processes in spring in some extent.

Recently with raise of energocapacious processes of climate change importance and novelty of thunderstorm events increased. Novelty is connected with raise of diversity and intensity of thunder discharges. Up to date more than 20 types of thunderstorms are known (voluminous, sprites, jets, "angels", band-type, upholstery-type, ball-type and others). More and more frequently we can observe discharges cloud- ionosphere; number of discharges cloud- the Earth reduces. Dry thunderstorms and change of charge of linear lightning causes mass wildfires and damages high voltage lines because „positive" thunders leads to mass forest fire and damages of electric lines. Their charge is 6-8 times more strong than that of negative ones.

As it turned out, atmosphere, especially in geoactive zones and large cities, taking in account also emmissions of electrical lines (total length more than 50 million kilometers) today is not only one link of "victory over nature" but is also good electric conductor.

Another scary moment.

From this wievpoint, mining is planned destruction of vital system of planet, which is used for keeping energetic balance between outer and inner energetic medium. Also frequent and powerful nuclear tests caused total disbalance of seismic climate of the Earth. Starting from 1972, less destructive deep-focus earthquakes disappeared.

Number of earthquakes with epicenter depths 70-300 kilometers has been reduced to 60%. Centers of earthquakes raised to upper zone of Earth's crust.

One intriguing explanation here could be- due to Earth expanding a natural system of hollows had formed which have been deformed by nuclear tests.

In 1999 a thermal anomaly has been revealed in Semipalatinsk nuclear testing ground. It has area 20 000 square kilometers- ¾ from total testing ground area. Soil temperature in this anomaly is 15-20°C higher than background, which is unnatural. No investigation of this anomaly has been performed despite unique character of this techno-natural formation- with perspective to form artificial volcano...

Explanations here could be two- first, some permanent activisation of „smarter plans" of matter and second- tests created such level of crustal porosity, that liquid magma and „underground fire" could cause permanent indirect heating of soil. In latter case heating of surface water should proceed even more effective.

Since beginning of 1990-ties annual level of human energoconsumption was $3{,}8\cdot10^{26}$ erg. At the same time annual energetic capacity of all seismic processes on Earth is $5{,}8\cdot10^{26}$ erg. Annual energy of natural geomagnetic disturbances is estimated as 10^{24} erg.

...Scientists time by time warned energetics sector people, that there are certain zones, trough which high voltage line should not be projected- otherwise, electric energy could be lost. Depending from climatic or geomagnetic conditions losses on lines could reach 30-40%. Author himself investigated one such case, when during strong geomagnetic storm in 1981 voltage in 10 kilovolt line between Talda village and regional center Ustj-Kan (Altai Republic) falled to zero.

While investigating huge losses in high voltage line in Altai region, specialists noticed, that line goes along well-known active geological fault. Detailed investigations revealed, that on zone of geological fault there is electric sparkly stream from high voltage cable directly to Earth "so wide like a hand". Earth, as a sick organism, which is heavy injured by technical progress, feverishy tries to compensate deficiency of energy flow from ionosphere.

Annual energy of natural geomagnetic disturbances could be underestimated (vortical processes). Story with permanent spark from high voltage line to ground could be met with skepticism- however, within university physics only. Sudden discharge of batteries of photocameras or mobile phones in some holy places is widely known effect which requires for explanation sort of sudden increase of electrical conductivity of space. In high voltage lines scale is larger. Earth is good conductor, so, if electric conductivity of space is temporary increased by effects from physical vacuum gradients, „grounding" of high voltage line could not be mysterious anymore. Does this prove that Earth has deficiency of energy flow from space, remain open question.

In the middle of 1980-ties there was calculated, that each start of cosmic high load ship means extra 2-3 big cyclones.

Vortical processes, of course.

We will to emphasize that thunderstorm activity of the Earth has strict diurnal period (so- called Earth unitarian electrooscillation). That is, when time in London is 7.00 PM, thunderstorm activity raises globally both in Northern and Southern hemisphere.

Ball lightning, in fact, is not lightning at all, but domain of physical vacuum. Increasing of electrocapacity of our towns results in phenomenon, that today 53% of ball lightnings are observed in large cities.

Satellite data allow to define world thunderstorm map more exact. It turned out, that not all regions of thunderstorms are attached to concrete territories as, for example,

South-Pacific or African thunderstorm regions. Several important thunderstorm regions, especially in US (and regions of tornadoes with them) are drifting trough the continent. It was revealed positive, but for some regions (for example, Jakutia)- negative correlation of thunderstorm activity with solar activity.

Bad news for „our solid Earth" concept and even for mantle plumes tales. Logical for mainly liquid mantle wievpoint.

..if in different layers of core and astenosphere due to geodynamic processes energy of entrails of the Earth accumulates, it ascends along these vertical electroconducting structures. Than we start to observe anomalous phenomena of different kind, including so-called flying saucers- it is: globular, belt-type, ring-type and other glittering objects. Thus irritated physical vacuum (or etherdomains) expressed themselves. We should notice, that etherdomains are powerful energoconvertors. Depending of concentration of modified physical vacuum they can be visible or non-visible.

This is not ordinary electrical energy here, naturally.

...Atmosphere over American continent and atmosphere over ocean have not only different humidity, but also different electrostatics and electrodynamics. On border of ocean and dry land a barrier develops, which normally does not allow mixing of atmospheres. After lowering of radiation layer for 200km, all climatic processes of North Atlantic „bursted" in American continent.

...We said, that Earth now receives extra amounts of matter-energy-information. Surplus energy comes to ionosphere as thickening of plasma, to magnetosphere- as energy of additional magnetic storms, to atmosphere- as energy of cyclones, to litosphere- as energies for renewal of old geological faults and earthquakes, eruptions of volcanoes and underground thunderstorms.

Excessive information leads to change of biological activity of all nature. As for humans, this activity goes in direction of increasing of range of sensitivity (etheric and smart planes) and possibilities of consciousness and super consciousness (fiery plan).

While effects to ionosphere, „magnetosphere", atmosphere and litosphere could be wieved as different facets of same phenomenon, actions of geocosmic effects to life is more complex (see for example fig.4).

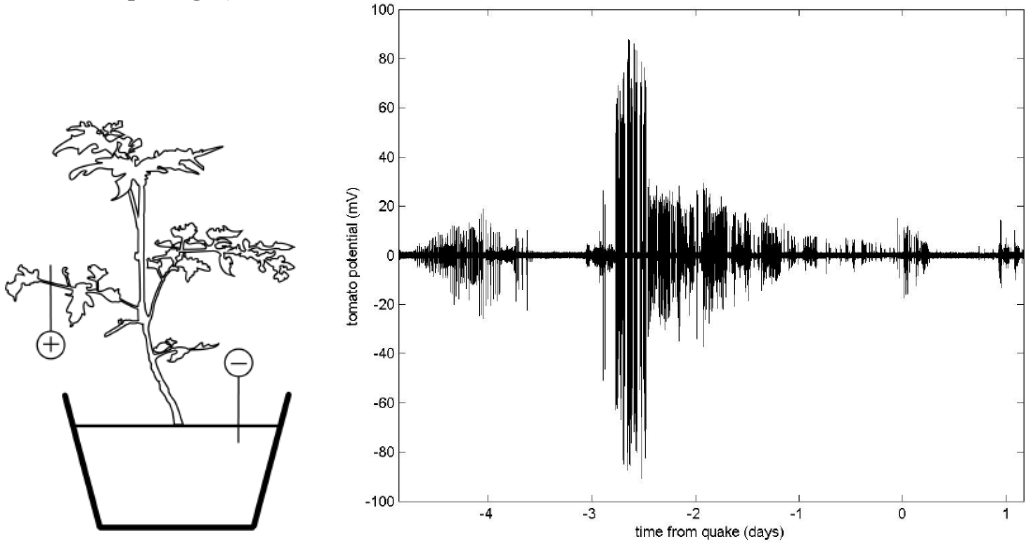


Fig.4 Measurement of electrical potential of tomato plant (left) and its changes several days before strong earthquake (right). From Lin, 2018.

As for changes in human consciousness- seems, that space weather here is shifting balance between consciousness and sub-consciousness.

Regional generators with lithospheric nature expressed themselves in zones of geological faults and are causes of dynamically sustainable correspondences between atmospheric-ionospheric heterogenicity and lithospheric structures... Lower border layer of troposphere (layer of exchange) is known for strong fluctuations of electrical conductivity of medium in vertical and horizontal directions, which are caused, first, by influences from Earth's surface...
In ionosphere stands out several zones with increased intensity of electric field. It was determined, that mentioned local zones corresponds with either places with technogenous radiation of low frequency, for example, towns... or regions with tectonic faults of rift zones (fig 5.). Key difference between ionospheric zones over geologic faults from that over large cities is sharp increase of level of plasma fluctuations (5-7 orders against background) together with increase of intensity of electric field.
...In period of consideration 45 earthquakes with magnitude 4.5 and higher were detected. There was no correlation with changes in electical field, measured from satellites. Connection of value of electrical field with local time, season and level of geomagnetic activity has not been found... At ~42° latitude orbit of satellite crossed Talasso- Fergana fault. In all channels high value of alternate electrical field was detected, flow of electrons increased 30 times, but spectral density of plasma fluctuations- to ten orders... Investigators found electromagnetic activity also of „buried" faults, not detectable in satellite imagery....
Low-altitude terracosmic gloss in Altai mountains after geoeffective flashes on the Sun October 21-23, 1981 was maximal over sublatitudinal [fault].
Geological faults are sources of non-electromagnetic radiation.

All this hardly make any sense until we consider Earth's mantle as liquid and highly mobile.

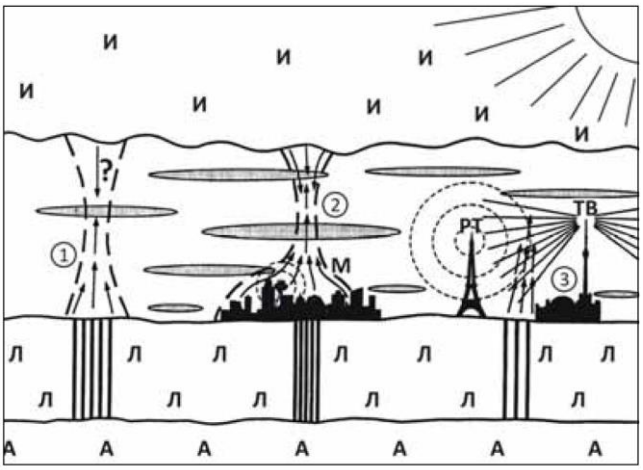


Fig.5 Interaction of earthly, ionospheric and technogenic systems (after Letnikov, 1998): А -astenosphere; Л -lithosphere; И - ionosphere. Grey ellipses- „clouds" of atmospheric electricity. 1 - interaction in system „geological fault- ionosphere"; 2 - interaction in system « geological fault- large town(M) - ionosphere »; 3 - interaction in system « geological fault – radiotranslator (РТ) -teleretranslator (ТВ)»

...in late works Letnikov deepens and broadens functional physical basics of geological fault physics, taking in account (Fig.6): action of faults to cloud cover (1); shielding of passage of cumulus clouds (2); generation of natural glossy formations (3); absorbance over region of active fault reverse radiolocation signal (4).

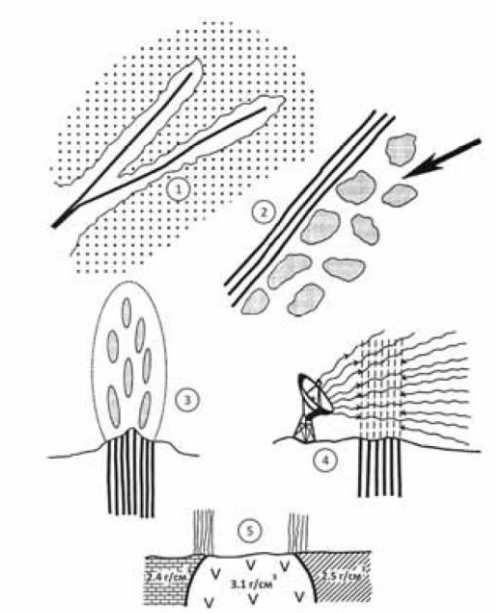


Fig.6 Strange effects over geologic faults. 5-high gradient zones over contacts of different geological bodies.

Naturally, that first places for frequency and energetic capacity of thunderstorms takes regions with increased net of geological faults and zones of vertical intergeospheric energy flows: region of joint between Australia with south of Indochina, thunderstorm focusses of Africa and Madagascar, Carribean zone and rapidly developing hotbeds of thunderstorms in South America (especially eastern „radioactive" coast of Brasilia). Meanwhile we observe increase of registration of new thunderstorm and pre-thunderstorm conditions...

Actually this is example of interplay of 1) Earth's mantle turbulence with atmosphere and 2) „smart energies" with that of Standard model of physics.

Letnikov (2003) noticed zones with high gradients of geophysical fields with certain loss of its density, deep Earth electrogeneration, changes in conditional resistances in depths till 21km, walls from not known matter over active geologic faults. It is possible, that by certain energetically extremal conditions periodically proceeds separate emmissions of gigantic quantities of thermal energy.

It should be vortical activity, which is misinterpreted as infrared.

We had noticed localisation of forest fires near to geologic faults...

Yes, vortices make things dry. In last years, however, solar vortices are destroying summer atmospheric blocks in Europe, thus bringing some relief. Interestingly in connection with dry places in forest is, that second name for famous Devil's Tramping Ground in US is „Chatham County Vortex" (fig.7).



Fig.7 Devil's Tramping Ground. North Carolina. It has been alleged that nothing has grown within the 40 feet (12 m) ring for a hundred years.

Autor lives in another energetic place- Taurkalne, Latvia (Europe) (56 33' 52" N, 24 55' 43" E). Strong Earth radiation (no known faults) typically steers NW and SW thunderstorms away from 1-3 kilometer circle around Taurkalne center, so NOAA frequently is not able to forecast rain here (but in distance of 1-3 kilometers from dry place typically all is in order with forecasts). In rare cases here is opposite picture- thunderrain appear only in 2-3 kilometer diameter typically „dry" circle. In recent years Latvia had seen a thunderrains without wind, after which temperature is not lowered.

From cloud anomalies one can conclude, that [geophysical] activisation of geological faults proceeds in geologically momentary time- several minutes (lifetime of anomaly- less than 100 minutes). Within high gradient zones on borders of geological bodies with differences of gravitational, magnetic and electromagnetic parameters an oscillatory system originated with hourly, daily and more lenghty periods of change of many geophysical parameters.

Geophysical „current circuit" together with mildly stratified by hight atmospheric region includes plasma ionospheric-magnetospheric and solid state magnetosferic envelopes, high conductivity of which is necessary condition for functioning of system. Circuit is open for outer influencing systems- galactic cosmic rays, solar wind, intermagnetic magnetic field. Special role in circuit plays high latitudinal region, polar cap, zones of longitudinal currents as regions of enhanced activity of ionospheric-magnetospheric sources, which are able to influence electric properties of lower atmosphere.

...Till now consensus about interpretation of ionospheric disturbances, which appear several days before strong earthquakes, is not reached. One can conclude, that in reality in nature exists a set of mechanisms- determination of increments of each mechanism is task for future investigations.

...If existance of warm thunderstorms are real, than mechanisms of generation of charges in them are completely different from these, we discussed above.

...That tornado is anomalous phenomenon, knows just all, including both experts and ordinary people. That „ordinary" thunderstorms are anomalous phenomena, knows only experts.

...due to not clear causes before beginning of 24th solar cycle minima of solar activity and streams of galactic rays coincided. Yet generation of near-Earth thunderstorms and connected X-ray and gamma radiation continued and only deficiency of advanced registration points allow us to consider, that „nothing special happens there".

...Finally, it is reasonably to emphasize connection of thunderstorm processes with generation and prolonged existance (years) of unseenable „magnetic bodies" in air. Within standards of laboratory physics this, naturally, should not exist. But it exists and

„lives"for years- simple magnetic dipole 0.45 and 1.2m over grass layer of „Lightning strike ridge".

Terms from Standard model actually clouds all picture and distort thinking. Waiting for new Francis Bacon.

Emerging physics of physical vacuum facilitates reaching of task of new generation- to understand deepest properties of local space as special spatial segments (etherdomains) with large concentration of manifestations of life events (in unity- matter, energy and information). Carrier and space for this unity is physical vacuum of different sorts... Naturally, that increase of concentration and variability of physical vacuum in connection with transition of space to new physical quality, leads to increasing pressure of new natural processes. In fact, all processes (especially energocapacious and fast processing) of intergeospheric interactions are accompanied to thunderstorm events.

Faraday had considered, that electricity and magnetism are different sides of physical vacuum.

...There is well-known Kunguro- Solikamsk anomalous zone in Siberia. Geophysicists and geologists report certain geological and geophysical tension. This zone is heliosusceptible- in periods of active Sun over this zone appear significantly more glittering formations and anomalous phenomena. In highest part of atmosphere a glittering rings, balls, circles, belts and other objects appeared.

For many of glittering objects- within and outside of them- an unusual electromagnetic processes have been detected. More often- strong electromagnetic radiation. Frequencies of such radiation could be- from parts of micrometers till meters-long light emmission and even radiowaves. Near to glittering objects parameters of geoelectric and geomagnetic fields changed. Electrical ruptures, magnetisation of rocks and technical objects occured- in several cases- sharp raise of radioactivity and electrical discharges.

Forecasters of earthquakes also reported, that they could detect signals in ~0- 1 000 000Hz range before earthquakes. Looks like these are not really Hertzian.

Surplus [Earth] energy is transforming to polarised non-homogenous physical vacuum. Process goes not with destructive physical effects, but with lighting effects of different intensity, i.e., accumulated „underground fire" can leave depths of the Earth without earthquakes.

Obtained models show influence of electric field to magnetic one, influence of magnetic field- to gravitational one, influence of gravitational field- to spin one and back to electric field. In domain of physical vacuum mentioned fields are in constant interaction.

Effects from domain of physical vacuum can be measured with different methods. University course of physics will not help.

Comparison of emergences of etherdomains with seismic activity lead to unique discovery: maximum saturation of formations of physical vacuum and thunderstorms mean- minimum of large earthquakes.

Well, here it is. Terrestrial „fire" needs to be balanced with cosmic one, as Asian natural philosophy systems are telling us. Author is advertising principle of smart geoengineering for some time.

It was noticed, that in active geological faults an intense vertical flows of energy proceeds. So-called self glittering objects, as it appears, intrudes in state of geomagnetic field and seismic activity of region. After analysis of total effect of their influences one can consider, that this intrusion restores natural energy emmission of the Earth to it's gas envelopes.

For more advanced understanding of process of shunting of seismic processes by physical properties of domains of physical vacuum, let's notice that waves of mechanic oscillations in lithospheric depths by $\varepsilon_1 = 0$ and $\mu_1 = 0$ are accompanied by electromagnetic radiation because they are connected with *oscillation of masses*, which, correspondingly are connected with gravitational and spin variations of fields. But in the media, where $\varepsilon 1 \neq 0$ and $\mu 1 \neq 0$, mentioned fields necessary transform itself in electric and magnetic fields.

Not really. Underground „fire", which can be measured with several methods.

We observe „gale" style warming in polar regions. Warming proceeds on icy plaines, especially in Arctic, ice of which are intensively melting, their area is reducing. After disappearance of polar caps, reflecting possibility on sunrays of polar regions will be sharply dimished and absorbance properties of sunrays of polar regions will increase. Sea level will rise...

Exact speed of melting of Arctic ice more and more intense depends from speed and volume of methane hydrates from solid state to gaseous. According to estimations, Siberian shelf contains around 10^{15} cubic meters of gas hydrate and each cubic meter of gas hydrate produces around 150 cubic meter of gaseous methane. About „methane attack to Earth's climate [we announced] in 1991. According to analysis of separate explosions of icecap gas hydrate in surroundings of Bennet island we have proposed a „thermal dynamo: more methane- warmer- more methane- warmer" what in reality proceeds now. Natural oxidation of methane scaled up volume of CO2 and water, according to equations

$$3CH4+4O3=3CO2+6H2O;\ CH4+2O2=CO2+2H2O$$

...what is sufficient for regional (and more intensily- local) modification of temperature regime in direction of warming.

Well, we have here strongly nonlinear processes which influence eachother. No place for chaos theory, however. (Pre)historic submerging of bottom of Atlantic ocean (Zhirov, 2001) created global oceanic rivers which changed Earth's climate. So the Earth was thrown out from previous climatic scenario. Now Gulf stream is slowing down...

Fresh data show however, that icecaps are increasing (Sircus, 2018) so other factors should have been interrupted in processes, ascribed by Dmitrijev.

Let us assume, that within domains of physical vacuum (i.e. self-glittering objects, ball ligthning, plasmoids and tornadoes) electrical and magnetic vacuum polarisations has relative big values, but out of mentioned bodies- small, even zero. Than on borders of self-glittering bodies so-called „chained" electrical and magnetic charges and „Ampere's currents" should appear. Obviously, that „chained" electrical and magnetic charges and „Ampere's currents" caused similar fields as ordinary „free" charges and ordinary electric currents. However „chained" charges and Ampere's currents by emerging of self-glittering objects perform differently as ordinary, well known charges and currents, observable in technics. It is obvious, that „chained" charges and Ampere's currents are connected with domains of physical vaccum and in fact they are similar with currents of superconductive media by high temperatures. So it is not surprisingly that electric and magnetic fields of ball lightnings, plasmoids and tornadoes can exist for prolonged time- minutes, hours and more.

... Energocapacious atmospheric processes, known under the name tornado, are realisation of „cord type" vacuum domain. Wide distribution of self-glittering objects by emerging and passing of tornado shows one of the mechanisms of vertical transient energyflow. „Cord type" vacuum domain also is shunting seismic activity, what we can see on example of California and Nevada states of US- there are not a lot of tornadoes and earthquakes in one region.

Interestingly in this connection is to analyze rare natural phenomenon- volcanic eruption connected tornado (fig.8).



Fig.8 Volcanic eruption associated tornado. https://hilo.hawaii.edu/csav/lightning.php *"Tornadoes form over dry land, so that's not a true tornado, but their formation is similar. Basically, the air in the plume is very hot and buoyant. As it rises, it draws more air in from underneath, but because the wind is blowing the plume sideways, the air from below gets pulled in sideways too, forming a vortex. When an eruption plume is over the land, it draws in cooler air from below and creates vortices too, but these are invisible. The ones over the ocean are visible because moisture from the ocean gets caught up in the vortex. Dust-devils are only apparent when dust is present; swirling leaves in a parking lot indicate local winds; water from the ocean exposes the presence of these eruption plume vortices. This is not a true waterspout, either: waterspouts connect to cumuliform clouds".*

Mainstream explanation for formation of vortices here is pathetic. They admit that there are invisible vortices. All case can be wieved similarly with unexplained phenomena in places over geological faults- vortices are certain fractals of irritated physical vacuum.

Spin polarisation is well-known between specialists of paramagnetic and nuclear resonance and in branch of impulse overmagnetising of ferromagnetics and ferrites. From other side, mentioned polarisation has dimensions of distributive movement momentum and is good known in mechanics of continuous media or hydrotechnics. Full derivative to time of spin polarisation gives us distributed mechanic momentum, which spins material media, connected with this polarisation. Merkulov (1988) showed, that vacuum spin polarisation within column of tornado allows to describe "till details" movement of air of this column.

Similar should be mechanism of emergence of hurricanes. Smaller vortices merge in a big one (cf. Alksnis, 2017)

Surprisingly, that "standard" Maxwell's equations from textbooks contain all necessary for ascribing of electromagnetic component of non-uniform physical vacuum. It was obvious however, that modification of experimentaly proved Maxwell's equations unavoidably will cause non-observable physical effects. That „non-observability" of events demanded formulation of localisation of space in physical vacuum. Physical vacuum is electric, magnetic, gravitational and spinning in nature. Thus in developing theory of physical vaccum a new object for investigations appear- vacuum domain. Vacuum domain represent special case of non-uniformity of physical vacuum, which can vizualize itself by glittering objects".

For Altai mountains, ocurrence of self-glittering objects increases 2.5-3 times in years of active Sun. Occurrence of spheric glittering and fiery balls raises also by bypass of tornado and over craters of volcanoes.

By severe geomagnetic storms, created by geoeffective solar eruptions (with changing values of Forbush decrease) it is possible that thin vacum domain (not visible) is catched by strained tectonophysical zone... Appearance of vacuum domain proceeds by increased concentration of modified physical vacuum, which may express themself in local region of space. Domain in this condition could play the role of specific antenna for electromagnetic fields. Geomagnetic storm (nuclear test or high voltage lines) can pump vacuum domain, localise it strictly and turn it in active and visible condition.

...1. for last 30 years global warming has following quantitative latitudal maximum estimations: for equatorial regions- (+0,7°C – +1,1°C), for moderate latitudes- (+2,2 °C – +3,1 °C); for polar regions– (+4,8 °C – +6,2 °C).
2. Intensive warming is observed in regions with maximal cold (polar, near-polar) and in periods of maximum cold- winters become more warm, but summers- more cold.
3. Values of temperature gradients are growing, for several places tend to reach 100 °C changes per single day; frequency and geography of high-gradient temperature events are growing.
4. Since the end of 20th century increase of global water circulation and precipitation are observed („gale" type precipitation of rain, snow, hail now reached 4% of volume. Increase of Earth's water content are due to oxidation of methane).
Considerations about mixtures of causes which facilitated all mentioned things, allow to state, that base of planetophysical, biospheric and climatic processes of change are: cosmic, earthly and anthropogenic.

Mode of global warming should be influenced by peculiarities of Earth's mantle turbulence, which should be significantly more rapid than in textbooks (Alksnis, 2018B) - microwave type distant heating. Poles appear as anomalous places with emmission of certain energy which is misinterpreted as „magnetic anomalies". Climate changes sometimes are clearly counterintuitive, as showed in fig 9.- northern European areas near to seas and ocean in July, 2018 are more dry than other ones.

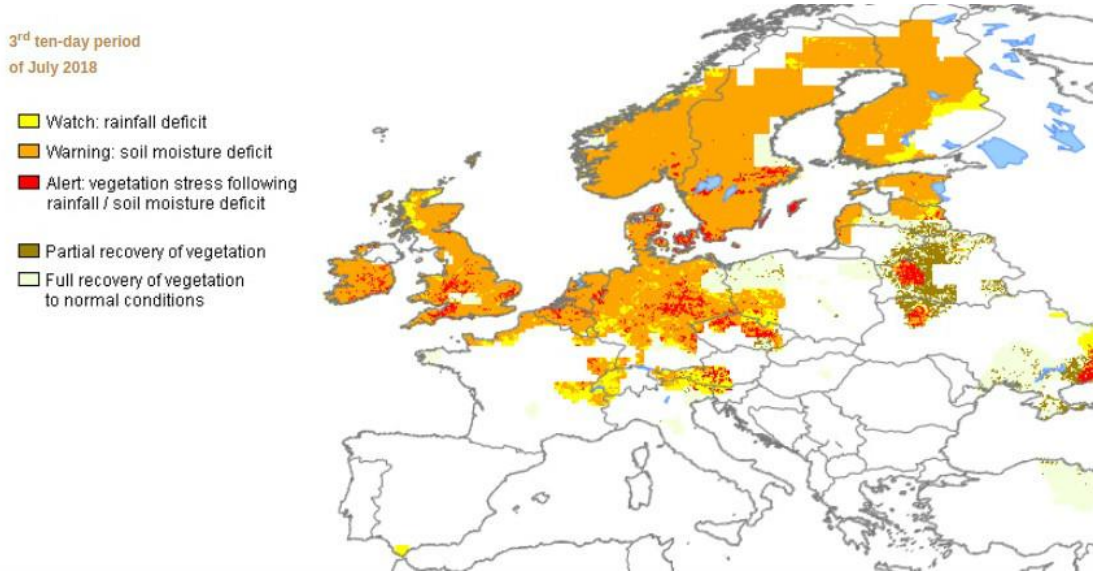


Fig.9 Combined Drought Indicator, based on SPI, soil moisture and fAPAR for Europe, 2018. Note dryest places near the sea/ocean. *Source: The Watchers.* Poland also is affected by drought (announcement of Ministry of Agriculture, Aug. 9, 2018).

„Gale" type precipitation means that fragile balance, which allow heavy rainclouds to fly, suddenly is deranged. Similar mechanism could be used in tactical weather manipulation.

Trying to understand causes of ocurrence of El Nino, scientists for long searched in ocean source for thermal water keels which contain huge masses of warm water. Mentioned keels reached depths 50-400 meters and lenghts- from coasts of Peru and Chile to Australia. Answer has been found only, taking into account cosmic factors- origin of thermokeels coincide with maximum of density and speed of solar wind.

Once again- thin solar wind is a plight explanation for what is happening. *El Ninjo* is a result of interplay of celestial and terrestrial „fire" (cf.Alksnis, 2016). Looks like starting point of *El Ninjo* is second „Great Red spot" on Earth (cf. Alksnis, 2017)- better observable maybe in certain „smarter plans". Here connection with underground „fire" could be spotted better- region of NE to Australia is known for seismicity.

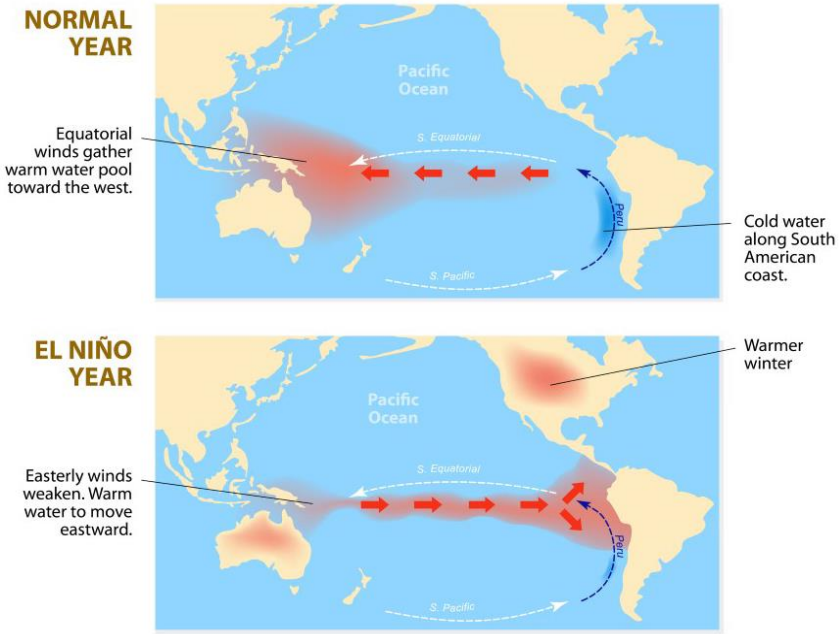


Fig. 10 *El-Ninjo* phenomenon. Credit: wonderopolis.org

Not surprisingly, most intense El Nino's of 20th century coincide with specific planetary positions (fig.11).

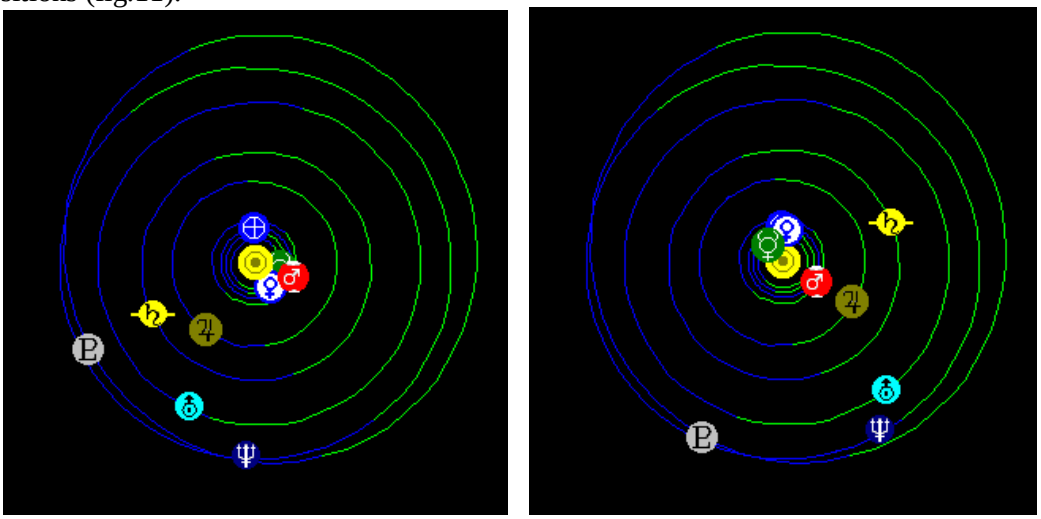


Fig. 11 Enigmatic planetary positions in the beginning of most intense *El Ninjo's* in 20th century- Dec. 25 of 1982 (left) and Dec. 25 of 1997 (right). The Earth here is disturbing important galactic connection.

Interesting looks also detailed analysis of El-Ninjo phenomenon by NOAA which brings some counterintuitive moments (fig.12). Note dry region north of Australia.

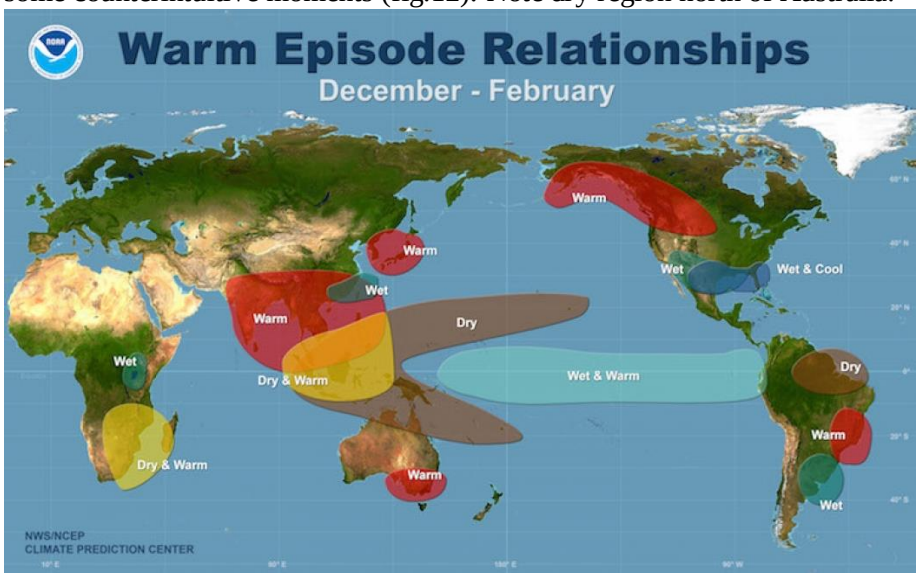


Fig.12 Effects of El-Ninjo phenomenon to atmosphere. *Credit: NOAA.*

Satellite data had shown, that after 1994 inversion of oceanic surface water temperatures occur. System of oceanic streams is changing, a reverse streams have appeared.

Nobody has explained mechanisms behind oceanic streams. Could be also differences in water structure.

Remarkably was highly tense situation with forest fires in Altai mountains in 2001 (extreme of fires in June) and zero intensity of such in 2004.

2001 was year of high solar activity, but number of fires in 2004 in Altai mountains should not be zero within ordinary thinking. Analysis of planetary ephemerides (fig.13) gives following considerations

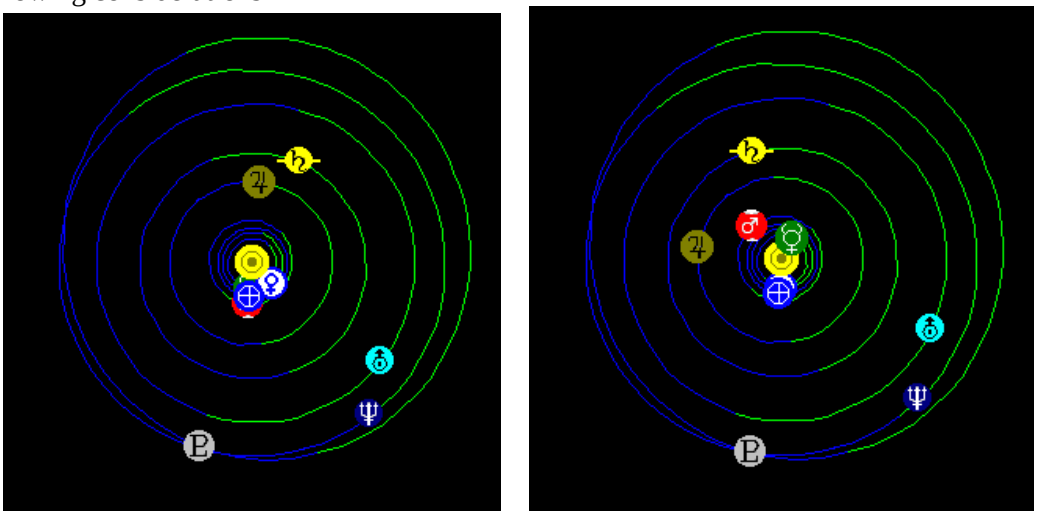


Fig.13 Planetary positions in June 15, 2001 (left) and June, 15, 2004 (right). *Credit: Fourmilab.*

In 2001, Jovian planets have pushed the Sun by sharp angles, making it active. Mars was behind the Earth and could act as certain reflector of solar energy. Even Mercury could not interfere (in this August's drought Europe received some relief from Mercury conjunction). In

2004, Venus could block solar energy in critical period. Than „wetting function" has been provided by Neptune conjuction.

(Mars effect has been seen also in extremely hot summer of 2018 for Europe).

...Gas-plasma envelopes of the Earth are „organ" for interaction of geospheres with surrounding cosmic medium. This global matter-energetic „gear" submits signals to depths of our planet about continually changing space weather.

... in 1940-ties Chotejev reported about discovery of „ethersphere" of the Earth, that later was confirmed by experiments in satellites, conducted by A.Mozhaisky Military Engineer academy.

Complete nonsense for Standard model believers but not for geophysicists. Earth is emanating several factors („charge field", effects from liquid mantle turbulence and spin) which are in certain equlibrium with energy of outer space. Thus „smart energetic" warming and cooling element should be not forgotten. (*Qi* and *Prana* in Eastern natural philosophies). Or, as in translation of Newton:

"Tis true without lying, certain & most true.
That which is below is like that which is above & that which is above is like that which is below to do the miracles of one only thing
And as all things have been & arose from one by the mediation of one: so all things have their birth from this one thing by adaptation".)

Similarly, mind-matter interactions in climatology likely can be real.

Form and height of geoide will change, that will cause redistribution of oceanic water masses and catastrophic sea level changes for dry land regions. All this will be accompanied with intensive warming.

Said is not obvious in case of „our solid Earth", but quite logical for our liquid one. Thus efforts to decrease viscosity of Earth's mantle seem to be vital task for survival.

At the same time, we can agree, that technogenous increment in global warming could be 30%. Here are many factors of human influence: huge productivity of electricity (up to 10^{27} erg/year), contamination of atmosphere with technogenic aerosols, burning of methane sidegas (in oil business)- till 100 million cubic meters per year and so on.

It is not widely known, that on land territories of Arctic and Antarctic now proceed intensive development and spreading of plant world. Taiga is attacking in north direction and, naturally, animal world follows. For example, nordic border of forest in Canada has migrated more than 100km.

Here is interaction of physical vacuum with liquid matter. Part of mentioned energy for catastrophes should come from liquid Earth's mantle and normally manifestate in complex unexplained global atmospheric circulation patterns (Alksnis, 2018B). As the Earth posess solid lithosphere, mantle turbulence is not able to act distantly to atmosphere and hydrosphere on equator. Polar regions are special in several aspects, understanding of this requires „demagnetisation" of reasoning.

Characteristic of results of catastrophic events for 57 years (from 1950): first moment, most important for geopolitical analytics is- just exponential increase of events (fig.14). People are aware about phenomena with significant catastrophic events, so called fast proceeding energocapacious processes. At the same time slow proceeding and weakly expressed natural processes remain without analytical assesment, despite in absolute weight they always had and have dominance un critically influence destinies of humanity.

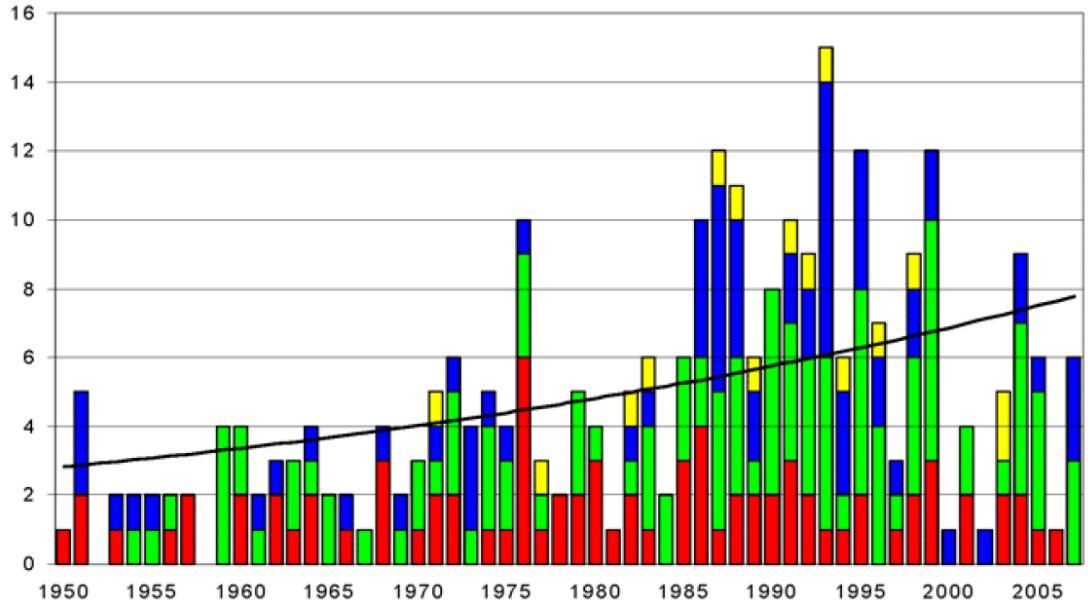


Fig.14 Large global natural catastrophes (1950-2007). From http://pulse.webservis.ru/Science/MunichRe/1950-2007

■ Earthquakes, volcanos, tsunami; ■ Storms, strong winds;
■ Floods; ■ Extreme temperatures

As in mythology, storms and floods are becoming more important for people than earthquakes and volcanoes. Volcanoes can easy increase productivity, however. Since here is change in solar activity cycle, we should observe energetic cycle of global volcanism in coming years.

Solar activity cycles had been linked to increased density of numbers of unusual events.

. . . **In territories of megacities and technocities we can observe increasing amount of pumping of energy into Earth. This energy can transform into different kinds of low-frequency oscillations. Interaction of physical fields of different nature are obvious, but still is not investigated.**

...**Therefore, starting from 1945, correlations of illnesses with mode of geomagnetic storms for all urbanistic zones deteriorated. In the middle of 1960-ties correlation of sicknesses with solar activity in megacities disappeared and survived only in remote countryside.**

UFOlogists consider plasmoids as „alien spaceships" within glittering envelope. Some physicists reasoned, that observed effects are natural plasma formations. Against second possibility in case of ball lightning speaks plasma theory specialist Smirnov. For maintaining of plasma state of matter it is needed contionous influx of energy (especially when taking in account atmospheric pressure. When influx of energy is absent, plasma very fast relaxes, i.e. „burns out".

It is not possible to point out source of energy for such energocapacious state of matter as in ball lightning, plasmoids and tornado. Investigators are confused first by clearly unbalanced but prolonged character of glittering in mentioned objects. Inability to explain self-shining bodies with plasma one can easy see in the fact, that they can pass water and solid bodies, do not loosing their glitter.

Plasmoids can be detected as disturbances in radiolocation process. These „angels" typically are connected with active geological faults.

When Standard model believers has nothing to say, they grasp for „particles" and „plasma". A „plasma" card here is beaten- and Kozyrev, likely, had realised this fifty years ago. He noticed also certain radiation from turbulent liquids.

During expeditions to Altai Mountains in region of Terektinsk ridge there was about ten encounters with plasmoids in short distances. Sometimes plasmoids „surfaced" from single „spot", connected with dense net of geologic faults. Most frequently objects were globular self-shining objects with diameter 3-10m, sometimes hundreds of meters. With emergence of such object in rare cases tornado appeared, that resulted in strong stressory depression of members of expedition- some of them hided themselves, some-fled from place of observation. People sensed not only strong and strange horror, but something more influental.

After emerging and soft „surfacing", plasmoid typically moved away in direction of mountains, sometimes passing trough the nearby rock. All this was accompanied with strong whistles and noises, corresponding with hidden electrical charges, or in deep silence.

Analysis of large variations of magnetic fields in expeditions near plasmoids and tornado's had shown, that for creation of artificial fields of necessary strenght one will need capacity of great electric power stations and terribly heavy technical constructions. At the same time, investigators of plasmoids and tornado's agree, that mentioned objects cause large electric discharges and therefore, posess large electric fields. Medium of physical vacuum plays here role, similar to segnetoelectric of ferromagnetic materials.

Interplay of factors in and out of Standard model. Readers of Velikovsky, Eliade and others should remember „fear from heavens" when passing planetary god disturbs local astrogeophysics. Movement of plasmoids in deep silence shows that exactly electric increment here is not obligatory (if silence is not connected with dry condition of atmosphere, for example).

We will not deny application of concepts of physics of high energies to research of anomalous phenomena. However, some observed properties of anomalous phenomena clearly has nothing to do with it. For example, ball lightning has temperature, which do not exceed 100^0C and its radiation has clearly non-equilibrium character. It is obvious, that physical properties of anomalous phenomena on the Earth typically pertain to low energy physics and have macroscopic character.

Well, well**.** Contours of Kozyrev's low temperature astrophysics become more visible.

Spatial-timely variations in global map of seismicity is real sign of global change. Emerging of strong earthquakes in non-seismic regions of Earth's crust is direct evidence, that underground fire tries to unite with spatial one before time-limit (warning from Living etics books). In terms of Agni Joga fiery body of the Earth should continously be in contact with fiery body of outer space.

Mankind's non-accepted Fiery energy caused unexpected and new processes of fiery order. In places of significant shielding an underground fire starts to activise, what causes additional earthquakes („psychogenic seismicity"). By isolation of underground fire from cosmic one with their thoughts and actions, mankind thus causes more and more strained non-conformity between fiery current of the Earth and Fire of space.

First, geology should trash plate tectonics nonsense. „*Before time-limit*"- sounds like someone knew timetable of global changes more than century ago. We know, that the Earth has not been completely melted- but know also about sharp ocean level changes and periods of active global lava eruptions.

Balance of underground and celestial „fire" is popular idea also in western occultism. Organised interaction of mankind with underground „fire" sounds intriguing.

If one tries to systematize information, which has been offered to mankind in „Mahatma letters", „Secret doctrine", „Isis unveiled" and „Living etics", it can be divided to several main directions. First, it was proposed to see all system of cosmos- from atom to human and from human to planets and stars- as certain unified living organism, which are in continous state of matter, energetic and informational exchange.

Life of all system in time is divided in periods- Jugas (four in total). Jugas cyclically replace eachother; each Juga has it's own characteristics, material forms, energetic and informational parameters, which are determined by tasks of current stage of evolution of all system and it's component parts.

After understanding of Milankovich cycles as dependent from changing positions of self-rotation axis of the Sun and the Earth (Alksnis, 2016) in system of vortical celestial mechanics, reformed Juga system looks quite profane. Sacred layer could be always added, of course, (Eliade, 1959).

Helen Ivanovna Rerikh in her letters wrote „Fiery energies are coming from outer space, but, if they do not meet on the Earth sufficient quantity of conductors, they turned destroying.

A good riddle, Helen Ivanovna. Autor's reasoning is, that spatial fiery energies is kept away in certain level due to terrestrial ones. Here could be look one layer deeper. According to Wiki, „in March 1920, the Roerichs founded their own school of mysticism, *Agni Yoga*, which they referred to also as "the system of living ethics."" Thus fire here has been put in foundations of the world. Fire isn't stranger in western occultism for centuries, however (nor Christianity).

Let us turn to Agni Yoga once more: *"...water is replaced by fire*". (Signs of Agni Yoga, 182).

Like Dmitriev, author is convinced, that metaphysics and mythology are valuable sources. If „water" here could be understood as „stationary factor X", than „fire" perhaps- as „dynamic factor X".

Dmitriev sees writings of madame Blavatsky and "Mahatma Letters" as certain preemptive information, submitted to mankind. (Analysis of holy scripts typically also reveals domains of such information). For example here we can mention chapter about solar theory from "The secret doctrine". Blavatsky tells us, that "*Occult philosophy denies that the Sun is a globe in combustion, but defines it simply as a world, a glowing sphere, the* real *Sun being hidden behind, and the visible being only its reflection, its* shell". Rethinking of available information after loss of credibility of thermonuclear solar model gives us exactly that picture. Similarly, recent events in solar system could be ascribed in "occult way"- *there is a regular circulation of the vital fluid throughout our system, of which the Sun is the heart -- the same as the circulation of the blood in the human body -- during the manvantaric solar period, or life; the Sun contracting as rhythmically at every return of it, as the human heart does.... . . . The Sun* in abscondito *being thus the storehouse of our little Cosmos, self-generating its vital fluid, and ever receiving as much as it gives out".* With "vital fluid", which reemerges in modern times with dissertation of Franz Anton Messmer (1766), one can understand density gradients of physical vacuum or something on that vein.

Preeemptive information from Mahatma Letters, „Secret Doctrine" and Agni Ioga contains much information about „ether". It was remarked energocapacity, penetrability, multiformity and changing functional roles of it (in origination and disappearance of „visible" worlds).

Multiformity illusion could disappear, if we consider world strictly after DesCartes (unfortunately main work of DesCartes- „Le Monde"- is preserved only in fragments). For example, there is mysterious influence of Mars to the Earth, which could be explained perhaps only with it's fast rotation. Thus, for comparison, „fiery" influence of rapidly spinning Moon to the Earth in the past could be enormous.

Analysis of magnetosynoptic solar maps from 1878 to 2001 reveals that during this time area of one of solar magnetic poles doubled. Authors had concluded, that climatic changes and even possible transition of internal structure of the Sun are connected with

huge magnetoactivisation of polar regions and magnetic streams. This conclusion directly conforms with several reports from „Mahatma letters".

Last three cycles of solar activity — 21-st, 22-st and 23st — submitted for researchers such amount of new information and such number of questions, that they have not seen during all earlier solar cycles. For example, typically time of reaction of the Earth to solar flares is 1.5-2 days. Late 1997 there was a flare, to which Earth reacted after 9 hours. Effect has been explained by rise of concentration of matter between the Earth and the Sun.

In the beginning of 23-st solar cycle there were antisymmetric series of flares of high intensity. April/May serie of flares (1998) beginned with large proton flare which was followed by four X-ray ones. August serie, on contrary, started with four X-ray flares and ended with large proton event.

Within border of 23-th and 24-th solar cycles solar physicists were pressed to rapidly invent new terms in order to ascribe obtained results- like „blinkers", „solar quakes and tornadoes", „wet spots", „solar rivers", „magnetic bubbles" and other.

Finally, on May 11-12, 1999 Sun stopped to emit corpuscules at all and solar wind decreased on 98%. This caused several new conditions of magnetosphere of the Earth: radiative layer disappeared, because border of magnetosphere „bounced" from the Earth to 380 000 kilometers (instead of 50 000- 60 000), stream of solar electrons caused in Northern hemisphere huge auroras and atmospheric X-rays.

Numerous heliophysicists feared that here could be a solar superflare (with energy to 10^{44} erg), which could cause ionising of atmosphere and recreation of magnetosphere.

...By measurement of magnetic disturbances in May 2, 1998 it turned out, that they are out of range of measuring devices. Scientists had to create additional technical solutions for correct measurement of geomagnetic turbulences in Polar Regions.

... In the beginning of 2002 acustic tomography shows, that sunspots are vertical magnetic structures with countercurrent flows of matter.

Interesting events on the Sun proceeded in April of 2002: in region AR9878 there was class C3.1 flare, accompanied with sharp decreasing of energy (hundred times lower than background level. So to speak, during this flare a „negative splash" occur- from 10^{-6} till 10^{-8} watt per meter. That was accompanied with process of stripping of electrones with intense ionisation of elements- fourfold ionisation of oxygen, ninefold- of magnesium, fifteen- and twentyfold of iron.

In 1992-93 years an american probe „Ulisses" has been sent to the Sun for investigation of dipole of solar magnetic field. Clear dipole could not be observed- Sun appears to be specific „magnetic monopole".

Solar magnetism is fraudulent science- like „geomagnetism". Sunspots are simply countercurrent flows of matter (Thomas Cowling (1934) could liked this explanation). Many riddles for Standard model believers routinely are explained with „solar wind". But, as we can see, solar wind could disappear- and effects are not such, as can be expected- because „solar wind" is only visible part for vortical interaction. Naturally, volume of „magnetosphere" (Earth's vortex dominated zone) temporary expanded.

Looking to solar- terrestrial interaction trough the mainstream „magnetic" and corpuscular googles could produce wrong forecasts. For example, solar superflare will bring also temporary squeezing of Earth's vortex- thus actually „magnetosphere" should become more dense" and hopefully could protect us better.

Regarding processes of „solar adaptation" to energo-material dotations from interstellar cloud- it can be seen in delay of eleven-year solar cycle and in changes in heliophysical scenario of activity of 24th solar cycle. Weakness and non-conformance of natural reality of heliophysical „standard solar model" becomes more visible. Our luminary turned out to be not „simple nuclear reactor" but something significantly more serious.

In vortical cosmology, gravitational compacting of sufficiently large ball of plasma (water, hydrogen) automatically results in self rotation of ball. (Thus stellar spin should be forecasted from their chemical composition, density and radius). Interaction of local interstellar cloud

can brake rotation of the Sun a bit. In process of braking here could be increase in solar activity, than, solar rotation and solar activity should diminish- if there are not effects from solar energy, which could not radiate in space so easy than today due to increased interstellar medium density. It will be interesting to look to Earth's geologic history from this angle.

Another heretic points for solar "magnetism" contained work of Abramenko et al (2010) "*Calculation of the harmonic power spectrum of the solar magnetic field demonstrates a greater prevalence of multi-pole components over the dipole component in the 2007 solar minimum compared to the 1996 solar minimum. The unusual large separation between the dipole and multi-pole components is due to the very low magnitude of the dipole component, which is three times lower than that in the previous 1996 solar minimum.*

... The enhanced coronal holes (CH) area is related to a recurrent appearance of five persistent CHs, which survived during 7-27 solar rotations. Three of the CHs are of positive magnetic polarity and two are negative. The most long-lived CH was being formed during 2 days and existed for 27 rotations".

According to cosmophysical data from satellites, cosmic probes and radioastronomy on border of heliosphere (volume, filled with solar wind) detected peculiarities for interstellar region, in which solar system moves. Mentioned interstellar medium is characterised with sharply increased density of matter (atoms, molecules, ions) and energy, and, subsequent, also information. About this fact first I have heard from report of academician Ambarcumjan in 1-st presidium of Siberian branch of Academy of Sciences of USSR back in 1958.

According to observations, next 3000 years we will fly within „Local interstellar cloud" at the same time crossing galactic plane of ecliptic (?-E.A.). From this is not difficult to guess that, for example, if warming of the Earth proceed with intensity of that of on Uranus, than annual mean temperature on our planet was more than 120^{o}C today.

Solar wind has density some 8 atoms per cubic centimeter, so definition of heliosphere by means of solar wind is clearly unsatisfactionary. Heliosphere should be understood in terms of interaction of cartesian vortices of different stars. Interaction with local interstellar cloud could also be partially interaction with disturbed physical vacuum. As per Uranus- scientists typically are not able to differentiate between temperature and vortical effects, thus on Uranus surface could be high turbulence and not necessarily temperature 120^{o}C.

Galactic celestial mechanics is vortical. It is Cartesian „waterworld" (Schuster, 2005), based of following principles:

1) compacting of gas clouds results in liquid balls, which automatically starts to spin (spin from microworld hops into macroworld- certain paralellism with Einstein-De Haas effect and alternative look to tornadoes). Bigger masses typically spin faster, than lighter ones.

2) stars and liquid planets are mainly homogenous (error with large Earth iron core concept (Alksnis, 2018) has multiplied in planetary science); plasma with density around one and higher is considered as liquid;

3) one star can transfer angular momentum to another (idea of Nikolai Kozyrev- distant interaction of vortices (cf.Alksnis, 2016A),

4) because stellar energy output is connected with their spin (Alksnis, 2017B), a „black star" in center of galaxy can increase energy of galactic stars, thus making galactic rotation curve flat (Alksnis, 2016A).

Solar system resides in Orion spur- substructure between two galactic arms (fig.15). "Magnetic galactic belt" here perhaps is vortical stream from neighbors- spiral arms or even "black star" of Milky Way. Effects from upward movement of the Sun could not also be ruled out.

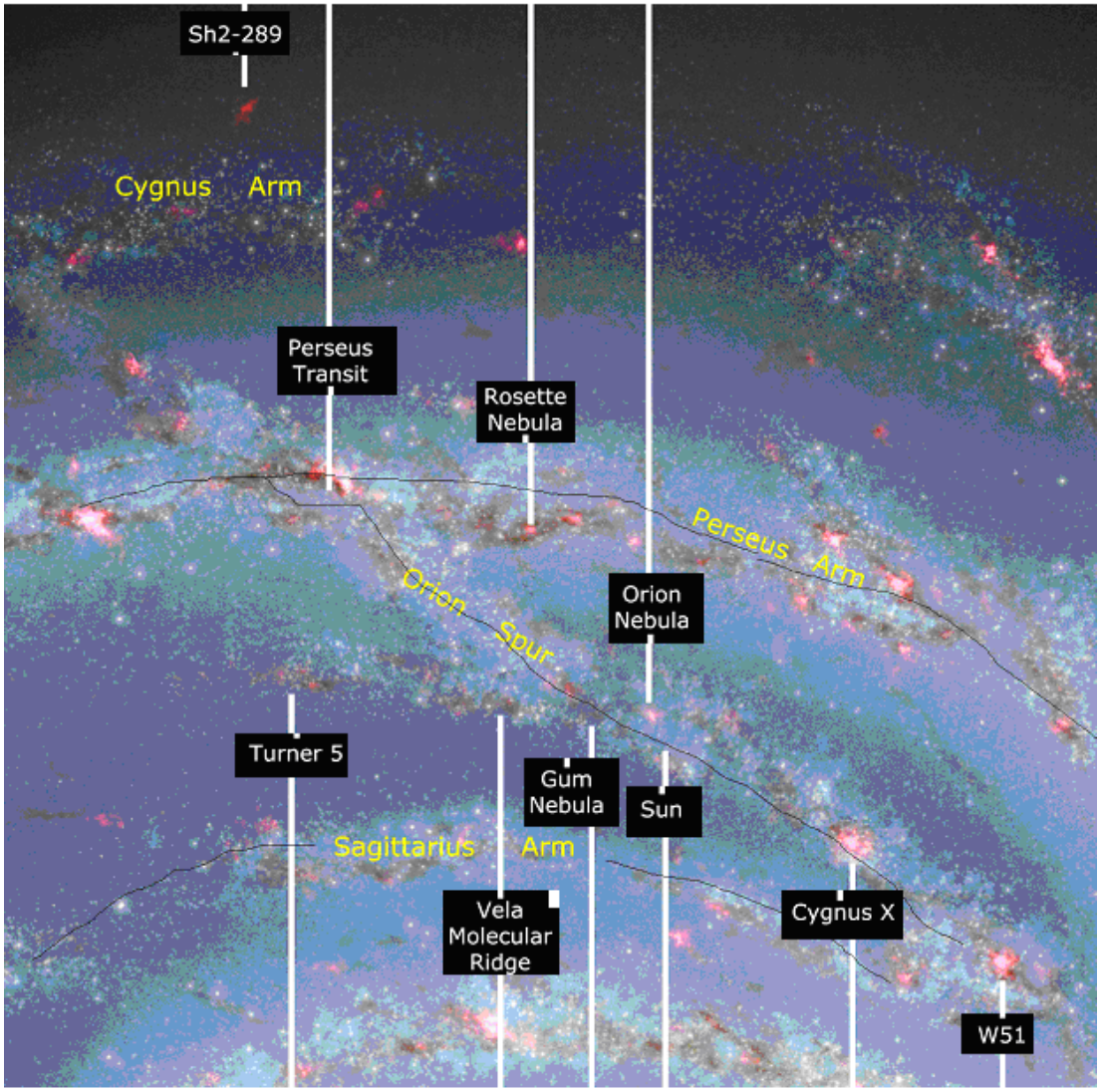


Fig. 15 Our galactic neighborhood. Modified from R. Hurt derivative work: Roberto Segnali all'Indiano.

In the end of 1990-ties it turned out, that Uranus is increased electromagnetic production for more than 30 times... „Ulysses" cosmic probe detected two-fold increase of electromagnetic radiation of Jupiter.

...First effect of increase of energocapacity of solar system is rise of numbers of large meteorologic catastrophes on the Earth- 4.3 times difference between 1963 and 1990. On average, each such catastrophe releases energy not less than 10^{23} Joules. What is the source of such energy? After reading of above mentioned facts it is clear, that this energy comes directly from interplanetary space.

In the time of flight of comet Hale-Bopp near the Sun, the latter reacted violently with generation of large protuberance- ring-shaped thickening of plasma. If this „bubble" had moved directly to the Earth, than atmosphere of our planet could be burned in 10 seconds. After a year, on January 5-6, 1998, Earth crossed region with mentioned plasma thickening. In Northern hemisphere there was a huge wave of warming- for example, in northern regions of Tomsk district temperature rose from „minus" 37° C till „minus" 6° C- a specific thermal shock occur. Later similar phenomena started occur more frequent and in many places.

Dmitriev is not able to see vortical effects behind the electromagnetic ones here. Thus case of burning Earth's atmosphere remain unsettled.

In 1997 scientists noticed strange performance of comet Hale-Bopp. It's movement do not conformed with Kepler's laws. Movement of comet sometimes accelerated, sometimes slowed down. Investigators were pressed to recalculate cometary ephemeris 64 times. One-two times comet dropped its so-called tail. This „tail" appears sometimes before comet, sometimes on side of it, but sometimes- past it.

... Comet Shoemaker-Levy [9] by all features pertains to class of mysterious objects with uncommon characteristics and signs of etherdomains. In June 1994 comet approached Jupiter so near, that its fall to Jupiter's surface followed. Why we draw attention to this event? According to classical physics, this „comet" should not „fall" to Jupiter at all. However, it proceeds. Why? Because rules of Kepler, Newton and Einstein do not take in account energy of spinning of cosmic bodies, that is, torsion fields. Only gravidynamic equations of Heaviside from end of 19-th century explained fact of imminent capture of comet („string of pearls") by spinning Jupiter.

Celestial mechanics is next fraudulent science- it was clear to cartesians in 17th century, Hegel in 1801 and rewieved by Mathis in our century. Heaviside could not help much since, as author has shown, effects from spinning celestial liquids are different from these from spinning celestial rocks (Alksnis, 2018A). It has been speculated several times, that water is „ether" in liquid state. Seems, that spinning molten rock is even more effective as spinning liquid hydrogen in creation of disturbances in „physical vacuum". As illustrative example here be mentioned two galaxies, which are attracting (due to inverse spinning directions) (fig.16).



Fig 16. Attracting galaxies. Matthias Jaeger, PhD in astronomy, tells us especially smart things: „*On large scales the cosmic expansion makes galaxies appear to drift apart. Appear because they actually do not move but the space in between expands. This is what the expansion of the Universe means. On cosmological short distances, however, gravity is stronger than the cosmic expansion and galaxies attract each other, interact, collide and merge. This will happen with the Milky Way and the Andromeda galaxy in a 5 billion years".* Image credit: Hubble.

...Sinking of plasma condensates in upper layers of Jupiter's atmosphere has been accompanied by huge explosions. If one considers comet Shoemaker-Levy [9] as a solid, this way only 17% of effects observed after impact can be explained. My pre-impact interwiev of August 13, 1994 in newspaper „Soviet Siberia" was titled „Comet? No, plasmoid!"

After impact of plasma bodies Jupiter entered in highly excited condition. Polar lights there reached unprecedented power and are observable in huge areas. Jupiter's

magnetic fields posess clear configuration and large intensity. Moreover, planet started to throw out plasma in outer space- in similar way, that the Sun.

...Jupiter and the Earth are in continous cosmic interaction and magnetoresonance. Congruence of inclinations of magnetic axis, magnetic anomalies, magnetospheres is really deep and mysterious. Magnetic axis of Jupiter and the Earth are positioned similarly with accuracy of one degree. Earth has four magnetic anomalies, Jupiter has also four. They are positioned on Jupiter in same longitues and latitudes as on Earth.

From other side, magnetosphere of Earth has plasma tail, which reached orbit of Jupiter. Thus besides magnetoresonance Earth has „direct communication line" with Jupiter. Recently NASA has revealed, that impulse electron streams, going from Jupiter to the Earth, sometimes exceeds solar ones. Moreover, the Earth is record-holder for magnetisation of matter and for intensity of magnetosphere which by relative intensity even exceeds that of Jupiter.

...satellite of Jupiter- Io is smaller than the Moon, but its thermal flow exceeds that of the Earth. Relative energoproductivity of Io exceeds that of the Earth. There is swelling on Io surface. First, scientists thought, that it is caused by volcanic activity, but more close examination revealed, that from place of swelling to Jupiter's center goes electric stream of unclear origin, strenght of current of which grows on an ongoing basis. From 1 million amps in 1989 it rose to 6 million amps in 1999. Io plays role of electrogenerator. To this incoming powerful stream Jupiter reacts with growing intensity of ionisation of atmosophere. In connection with processes, which proceed in outer space, plasmageneration of Jupiter constantly grows. Io provokes Jupiter to plasmageneration and at the same time closes it growing amounts in space around Jupiter. Observatories on Havaii and in Japan detecting blinking of space between Jupiter and Io. When concentration of plasma reached critical levels, it will start to glow, and we do not be able to see Jupiter anymore- only glowing ball with dimensions of orbit of Io. Here are estimations, that this can proceed by the end of XXI-th century.

In our time Jupiter is preparing to become second Sun- about this possibility we can read in works of H.Blavatsky, H. Rerikh and 92-th letter of Kuthumi.

Monitoring of effects of impact of Shoemaker-Levy 9 comet to Jupiter by unconventional means, Russians concluded: "*The rotational displacement of the asymmetric torsion balance, which occurred over the entire period of the catastrophic event on Jupiter in July 1994, lasted until 21 October, after which the torsion balance come back to its normal state with daily torsional vibrations, and, the return act had occurred without any further relaxational vibrations. ...*

Particular interest is the reaction of an old English device – of stormglass: the large ampoule contains the specially prepared the complex mixture, which combines great number of substances: water, camphor,ammonia, nitrate, and alcohol. Mariners had used this device as a predictor of the weather. After those events on Jupiter, a great layer of crystals had arisen in the stormglass and that layer was not eventually dissolved (as it usually happens), it is compacted and stored until now, that is, more than 10 years .... Moreover, in one Stormglass, which was put in the thermostat (35.1 ° C), this layer had disappeared (note that in a thermostat, a stormglass operates, in principle, as usually), but when after few years the stormglass was removed out from the thermostat, the same layer was recovered (!) with time" (Vasiliev, 2012).

Further similarities of the Earth and Jupiter means next nails in the coffin of „our solid Earth" theory (Fowler, 2004). Jupiter- Io case is extremely hard to analyze one with overlapping factors from Standard model and outside of it. First, here is distant interaction of two cosmic liquids. (Mimas- Enceladus paradox is good illustrative example here. Analogy is more with microwave oven, not with tides). Currently relative effectivity of vortex of Jupiter is small in comparison with that of the Earth (Alksnis, 2018A). However self rotation speed of Jupiter is fast and „torsion field" admirers get here full satisfaction. Wrong stellar theory (Alksnis, 2017B) prohibit to Jupiter from becoming a star, considering mass only. Within cosmological thoughts of Nikolai Kozyrev there are no such barriers. Extreme currents of Standard model, which flows between Jupiter and Io, in reality partially is outside of

understanding of university physics. According to author's opinion, typically mainstream instruments are detecting lower levels of energy, as it may circulate in total („smarter plans" including). So that „6 million amps" sounds alarming.

„Suddenly"it becomes clear, that we have no time for fundamental research of changes in nature. To mentioned changes we need to react here and now. For this task we will need additional sources of information.

Clear indeed. Besides certain classified investigations we have only experiments of anomaly researchers.

Conclusions

Stable geophysical conditions, necessary for functioning of complex civilisations, likely will not come back without fast and thougthful "geoengineering". Siberian scientists gave us very important knowledge of the topic, what confirm the feelings of disidents, that hurricane and tornado theories are wrong. Liquid Earth's interior concept allows seeing problems deeper. Seems, that we can not afford for "geomagnetic pole shift" to happen.

References

Abramenko V. et al. (2010) Low-Latitude Coronal Holes at the Minimum of the 23rd Solar Cycle. arXiv:1002.1685v1

Aguado E., Burt J. (2014) *Understanding Weather and Climate*. Pearson; 7 edition (October 10, 2014)

Alksnis E.(2016) Time for climate normalisation research. *viXra*

Alksnis E.(2016A) Dark matter? No- Kozyrev's and DesCarte's universe!

Alksnis E.(2017) Hurricane/tornado theory is wrong. *viXra*

Alksnis E.(2017B) Basics of astrophysics revisited. I. Mass- luminosity relation of G, K and M-type stars. *viXra*

Alksnis E.(2018) Earth's mass overestimated. *viXra*

Alksnis E.(2018A) Astronomers do not know, how to calculate masses. *viXra*

Alksnis E.(2018B) Global atmospheric circulation in the light of liquid turbulent Earth interior idea. *viXra*

Cowling T. (1933) The Magnetic Field of Sunspots. *Monthly Notices of the Royal Astronomical Society*, **94**, 10.

Dmitriev: see

Планетофизические перемены Земли. Автор: Дмитриев А.Н. 2015, Novosibirsk.

Огненное пересоздание климата Земли. Автор: Дмитриев А.Н. 2002, Koob.ru

Eliade M. (1959). *The sacred and the profane: the nature of religion*. Internet pdf.

Fowler C. (2004) *The Solid Earth: An Introduction to Global Geophysics*. Cambridge University Press; 2 edition.

Kuznetsov (2008) Кузнецов В.В. Введение в физику горячей Земли. – Петропавловск-Камчатский: Изд. Камч. ГУ. – 2008. –159 p.

Lin D. (2018) Quake tomato: strange electrical signals from a tomato plant in Taiwan five days before the 2008 Sichuan M8.0 Earthquake. *viXra*

Sircus M. (2018) *Climate panic*. Internet.

Schuster J. (2005) 'Waterworld': Descartes' Vortical Celestial Mechanics. *The Science of Nature in the Seventeenth Century*, 35-79

Vasiliev S. (2012) The Classical Concept of Long-range Action Fields Existence. *Applied Physics Research* Vol. 4, No. 1; February 2012, 167

Zhirov N. (2001) *Atlantis: Atlantology: Basic problems*. University Press of the Pacific.

© Edgars Alksnis, 2018