



# The Geophysical Weapons – Myth, Manipulation or Truth

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Received Date: March 14, 2023

Published Date: March 24, 2023

## Abstract

A popular expose is presented dealing with the problematic topic on the development and use of geophysical, climatic, tectonic, geochemical and similar suspected weapons. Media attention to this kind of development was again actively intensified after the strong earthquakes in Turkey on February 6th, 2023. Is there such kind of weapons developed, or is it just media speculation? What is HAARP, SURA, EISKAT and other similar systems for? The physical foundations of such systems are presented in a popular form, and the seismic, gravitational, and other similar artificial effects on the Earth, its magnetic field, and climate changes are discussed.

**Keywords:** Geophysical weapons; theory and practice; climate; systems; impacts

## Introduction

Violating storms (Asia, USA, Western Europe), heavy floods (China, Japan, Bangladesh...), heat and droughts (all of Western Europe and Africa), forest fires (Greece, California), earthquakes (Turkey, Indonesia), volcanic eruptions (Hawaii, Chile, Mexico, the Philippines), landslides and a lot of destruction and human casualties - and not only that..., this list could be quite extended if statistics of anomalies in recent years were to be made. Speculators, psychics, soothsayers, pseudoscientists (for example astrologist Frank Hoherbeits - Nederland) and real scientists – anybody warned the world that we enter a period of intensive disasters. What is going on? Has nature gone mad, or has humanity caused it with its unreasonable attitude? The answers to these questions are not the easiest...because, as always, the difference between truth and lies is hard to tell, especially for those unfamiliar with basic physical laws and fundamental geophysical regularities.

## Conspiracies, speculations, manipulations

Along with the series of disasters presented to us by the

mass media rather attractively (modern drones and satellites are undoubtedly responsible for this), conspiracy theories about geophysical weapons have emerged and reactivated - tools with which (it is suspected) the most technologically advanced countries, can affect the weather, cause storms, hurricanes, rain and hail of unprecedented proportions, heat and tornadoes, some even say - earthquakes and tsunamis.

The earthquakes in Turkey of 6th February 2023. with magnitudes of 7.8 and 7.2, killed over 50,000 people, injured nearly twice as many, destroyed over 30,000 buildings and structures, affected over 1.5 million people, caused over \$30 billion in damage (direct damage losses only), re-set the issue of the seismic safety of the "Akuyu" NPP [1].

Serious political analysts suspected the artificial origin of these earthquakes, most often explained as a punishment for Turkey's "independent" policy.

In the reports of projects "Vulcan", "Mercury", etc. it is claimed:

“The regular anomalous and pre earthquake changes of high-frequency seismic noises (microseisms),...and the accumulated theoretical and experimental material allowed to develop a methodology for active impacts, including the type, power, periodicity and duration of certain impacts depending on the specific conditions of the environment in order to activate dynamic processes...and the possibility of creating lateral channels to transfer energy to the necessary area (remote from the anthropogenic trigger impact of hundreds, sometimes over a thousand kilometers)...and activate the inactive at the moment faults system.”

### What does science say about these hypotheses about earthquakes, tsunamis and volcanoes?

At the end of the 1980s, Ivan Portal ski's book “The Geophysical Weapon” was published in Bulgaria (not familiar in the international geophysical community). In it, the author explains the principles of operation of such weapons and there makes the distinction - all weapons are geophysical, in which the knowledge of mankind in geophysics is used as a theoretical basis. One subsection is the tectonic weapon, which causes processes in the tectonosphere - as area of the Earth's crust where all geodynamic processes in the solid Earth's crust take place - earthquakes, fracturing, “slow or fast” movements of tectonic elements (plates, blocks, fault surfaces etc.).

While I have not had direct access to military documentation, I have some personal experience with geophysical weapons. In 2000, a group of scientists visited the University of Krasnodar in Russia. The rector of the university, who organized this meeting and covered the expenses of about 30 or so scientists from all over the world, was at that time the almost unknown 30-year-old academician Babeshko. He presented the theory of causing earthquakes at very long distances. As a specialist, I can confirm that the theory was impeccable.

The scheme consists in the fact of several super-heavy vibrators (these are massive moving vertically platforms) vibrating under the action of an eccentric machine driven by an electric motor. All vibrators are switched on to work in synchrony. Their vibrations are directed to the other end of the Earth (there is such a method called in geophysics “grouping of sources”), most often to a seismic active zone, in which nature has prepared an unstable stressed system which can produce extremely strong earthquake.

Under the influence of the interfering and focused rather weak vibrations at the point of a given hypocenter of the earthquake and as a result of the minimal addition of energy, the prepared source is activated and generates a strong earthquake.

We were shown the action of a 20-tons vibrator that shook the ground beneath our feet so much that a glass of water placed on a chair splashed to the bottom. They explained to us that a 200-tons vibrator was built in Novosibirsk for the same purpose. A few years later, during a visit to Novosibirsk, I managed to catch a glimpse of this monster as well. Three more 1000 tons vibrators were planned...

However, due to expensive maintenance and high energy consumption, this type of development in Russia was abandoned during the so-called “conversion”. It turns out that a medium-powered atomic bomb which is cheaper and much more effective and can reach the same goal.

Huge tsunami waves reaching the coast with a height of more than 10 meters were caused by the French nuclear tests in the Pacific Ocean (New Caledonia) and Muroroa Atoll by the United States in the 1960s. In Russia in the 1980s in the Garm region (Uzbekistan) at the Earthquake Prediction Polygon, Prof. Ulomov used a magneto hydrodynamic generator to send electromagnetic pulses to the Earth's mantle. Whether the trials had other purposes is unknown. But it is known that there is a special body under the President of the United States that monitors the behavior of the Yellowstone super volcano. It is believed that it could be activated by a targeted impact from a nuclear weapon and could cause heavy damage on US territory. The effect of its eruption would affect the atmosphere, which would change the weather and could even cause a volcanic winter on Earth.

All these experiments are based on the “butterfly effect”, where small impacts on unstable nonlinear systems can cause significant effects in the behavior of the entire system. Here the role of the so-called “mediator” (the device that transfers energy from the source to the unstable system) is essential. Despite the theoretical possibilities and practical solutions above, can it be argued that the earthquakes in Turkey are a product of artificial impact? Let's look at the arguments FOR and AGAINST taking into account the earthquake danger in Turkey [2].

#### FOR

There is ONLY one suspicion (due to theoretical considerations) of such an effect. There is NO other data on this assumption.

#### AGAINST

- The earthquakes occur in a highly active seismic zone, known as the East Anatolian fault, where similar earthquakes have occurred many times in the past (just for example - in 1904 in Bulgaria, in the Kresna Gorge, the same 2 earthquakes with the same magnitudes occurred in an interval of 20 minutes. Similar events are called “doublets” and most strong earthquakes in Bulgaria occurred according to this mechanism.
- There is no any evidence of “sending” seismic energy from external sources (which could be detected by the global seismograph network), although a foreshock with a magnitude of about 5.0 was observed about 12 hours before, which was felt by the population.
- It is extremely difficult for modern science to locate areas with accumulated stresses which „are ready” to be triggered by weak vibrations and to generate strong earthquakes.
- There are several military bases nearby [3], which could seriously suffer from such an experiment.

- Nearby is also the almost completed “Akuyu” NPP, which could seriously suffer, and this could lead to its shutdown.
- Subsequent development of the seismic process is typical for natural earthquakes (Figure 1).
- The conclusion from the presented data and evidence completely rejects the hypothesis of an artificial impact in the generation of the strong earthquakes in Turkey from 6 February 2023 [4].

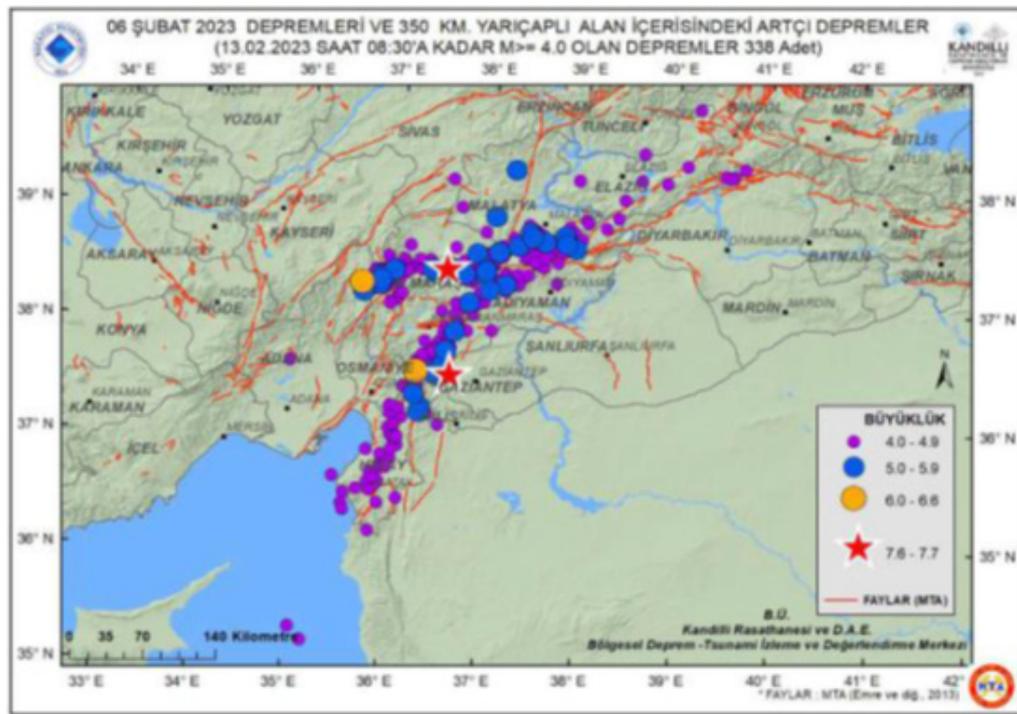


Figure 1: Main shocks (asterisks) and aftershocks (circles) as well as the fault's system.

## Geomagnetic weapon

Another conspiracy hypothesis speculates on the possibility of artificially changing the polarity of the Earth's magnetic field. Because this is still one of the mysteries of the planet - how is the Earth's magnetic field generated and maintained and why does it periodically change its polarity (?), it is fertile ground for speculation and manipulation. Regardless of the fact that humanity has experienced (most likely - one or several polarity changes), it is believed that this phenomenon is not vitally threatening to the life of humanity, but such a change, because it happens relatively slowly, can lead to a decrease in the protective effect of the ionosphere. After that it can affect many human activities and to create negative effects on all electronic systems on Earth.

Similar theses are also supported by the research of N. Tesla, who managed to create extremely powerful magnetic fields and during his lifetime declared that he was able to produce a weapon that would split the Earth by impacting its core. At the moment, science does not support such idea because such a strong energetic impact is not possible to produce such effects.

## Ionosphere impacts and consequences

Along with speculation in the media, the names of the most mentioned in conspiracy circles, ionosphere impact devices

(HAARP, SURA, EISCAT) have reactivated. It is important to note that the ionosphere is one of the most interesting layers above the Earth's atmosphere. It extends at altitudes from about 80-90 km to about 600 km above the earth's surface. Even Nikola Tesla noticed the strange properties of the ionosphere and proposed an inexhaustible source of electricity. His only problem was to find such a material with which to reach these heights and for this material to be an electrical conductor (now humanity has similar materials - they are called “graphens”). All of this is a consequence of the fact that in the ionosphere there is an innumerable amount of electrically charged ion particles (hence the name) that can flow towards the Earth as long as they are provided with this conducting channel. There is one more thing - the ionosphere changes its thickness significantly depending on whether it is day or night, as well as seasonally. And the most important thing that science (and especially practice) found is a waveguide layer through which radio waves can propagate.

And this is where the active experiments on effects on the ionosphere begin because it turns out that changes in the thickness and conductivity of this layer can be expected to affect the Earth's atmosphere, in which all meteorological phenomena develop (this layer is called “troposphere” and extends about 10 km above the earth's surface).

An interesting fact is that all such devices are located in the northern hemisphere - exactly where the majority of the population is located, as well as the largest economic potential on the planet.

### How does all this happen?

In the mid-1980s, the major military powers (USA, USSR, etc.) realized that if they could controllably increase/decrease the thickness of the ionosphere and change its electrical conductivity, it could lead to a military advantage. It turns out and helped radars "to start" to see enemy missiles over the horizon, thus providing more time for missile defense.

This is how the construction of gigantic antenna facilities began, with which electromagnetic energy is "pumped" into the ionosphere in a very wide frequency range - from about 200 MHz to nearly 1 GHz.

EISCAT (European Incoherent Scatter Scientific Association). Its construction began in 1975, the founding countries were Norway, Sweden, Finland, Japan, China, and South Korea and, above all, Great Britain joined later. The total capacity of the facilities reaches. The devices are located in different locations - near Kiruna (Sweden), Tromsø (Norway), Sodankilja (Finland), Svalbard (Norway).

SURA- (1981), located near the city of Vasilursk, Russia is one of the world's first research centers with an "ionosphere heater." It has a capacity of 190 MW. Other such facilities owned by the Russian Federation are near Dushanbe (the Horizon system) and Zmiyov (URAN-1).

1993 - HAARP (High Frequency Active Auroral Research Program) was created - 3.9 MW power, near Geikona, Alaska. In 2014, HAARP's military operations were terminated and the facility was officially transferred to Fairbanks University headquarters.

All these facilities are mainly financed by military programs, and only EISCAT publishes its experiments, which have mainly civilian tasks (scientific and practical value), they monitor falling objects from space "garbage", the result of the many satellites that go beyond the control of the launching countries.

### Can science answer unequivocally the question - are the haarp, sura, eiskat - weapons or scientific experiments?

The "conspiracy theorists" grasping the military programs, of course, expand the possible applications of these devices. There are claiming that all the disasters on the planet are due to the action of the emitters. The earthquakes in 2004 in Indonesia (M9.1), Japan (2011, M9.0) and the giant tsunami waves that followed them are mentioned. Then Fukushima accident appeared. Then - Turkey (February 6th, 2023). In general, a wide field for manipulations is created in the widest range. The "psychotronic weapon" and climate change have not been forgotten [5].

### What does science say to all ionosphere influence?

About earthquakes and tsunamis. All scientific studies of these truly spectacular and powerful earth cataclysms have shown that they are caused by intra-terrestrial reasons and the "energization" of the ionosphere not matter for their activation.

### It is true that impacts on the ionosphere can cause changes in the behavior of the atmosphere along several lines:

- change in electrical conductivity, and hence changes in the Earth's electromagnetic field (and especially the permanent magnetic field)
- a change in the thickness of the layer, and from there influences on the troposphere (a fact is the scattering of rain clouds over Moscow, for the parade of the Soviet Army in 1986 - whether with the help of SURA or in another way (so far it is not known). In any case there are capabilities and systems to combat hail.
- In 2017, it was established (through his research, Dr. Deyan Gochev from the Institute for Space Research at the Bulgarian Academy of Sciences) that the mentioned devices affect the very special mechanism of "freezing melting" of ice "soup" (mixture of water + ice) in arctic regions. Dr. Gochev studied these processes using a completely different method - the so-called SAR interferometry. It essentially represents radar imaging of the mentioned soup, looking for a correlation between the freezmelting process and changes in the dielectric constant of water.

And a surprise appeared: Whether by chance or purposefully (I believe in a pre-planned experiment) Dr. Gochev found a correlation between the operation of the mentioned devices and the "freeze-melting" processes.

It turns out that the "freeze-melting" processes are influenced by the radiations of the devices - HAARP, SURA, EISCAT. The connection was established solely thanks to the publicly announced emissions' time intervals of EISCAT. Yes! but similar effects are also observed during operation of SURA and HAARP. This is how the delusion that HAARP does not work shines. It works. So - what comes next?

An important question, the answer to which could spark more conspiracies, or reveal the scientific underpinnings of climate change. The "freeze-melting" processes are related to the release (absorption) of huge amounts of heat energy. If we are talking about areas of several square kilometers, there seems to be no particular problem. But if the areas are several hundred (or several thousand) square kilometers, the released (absorbed) heat can drastically change the weather - moreover, at great distances from the "ice mess". The statement about climate change can hardly be explained by the operation of ionosphere devices. There is a possible hypothesis that such influences ARE NOT TO BE NEGLECTED!

Every meteorologist knows that processes in the atmosphere are highly non-linear. In more basic language, this means a pronounced "butterfly effect". It was formulated in the 1930s by the Dutchman Hendricks Lorenz, a Nobel laureate and genius mathematician. His short description (by memory) is that "if a butterfly flaps its wings in the Bay of Biscay, it can cause a hurricane over the Gulf of Mexico". Such highly sensitive nonlinear systems (often called "attractors") have strange and unpredictable behavior, and this provides wide filed for conspirators.

## Finally

- There are devices for active impact on the Earth's ionosphere layer.
- Their direct and/or indirect impact on disaster processes in the solid Earth is not possible -earthquakes, landslides, collapses, volcanic eruptions.
- There is a significant probability that such emitters could influence (on the "butterfly" principle) highly non-linear atmospheric processes at the global level
- Military applications are beyond doubt, but with the development of space technology, their effectiveness on military communications is severely limited.

## Acknowledgement

None.

## Conflicts of Interest

No conflict of interest.

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