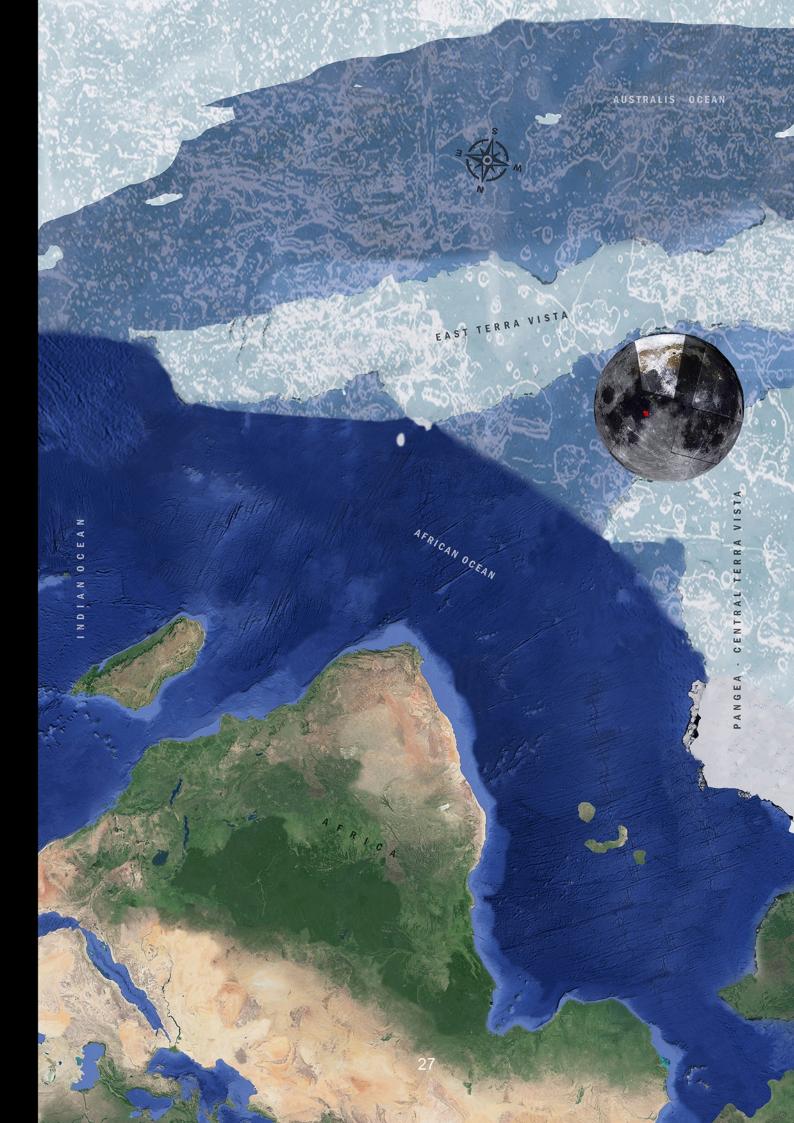
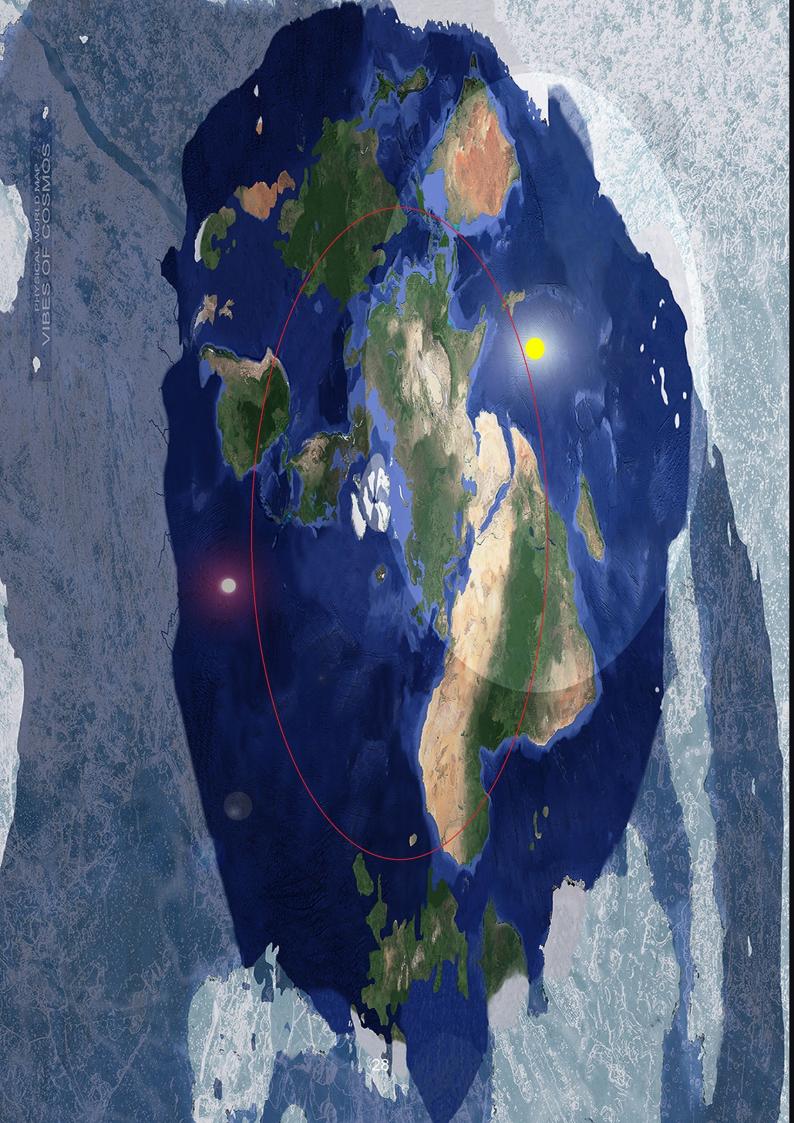
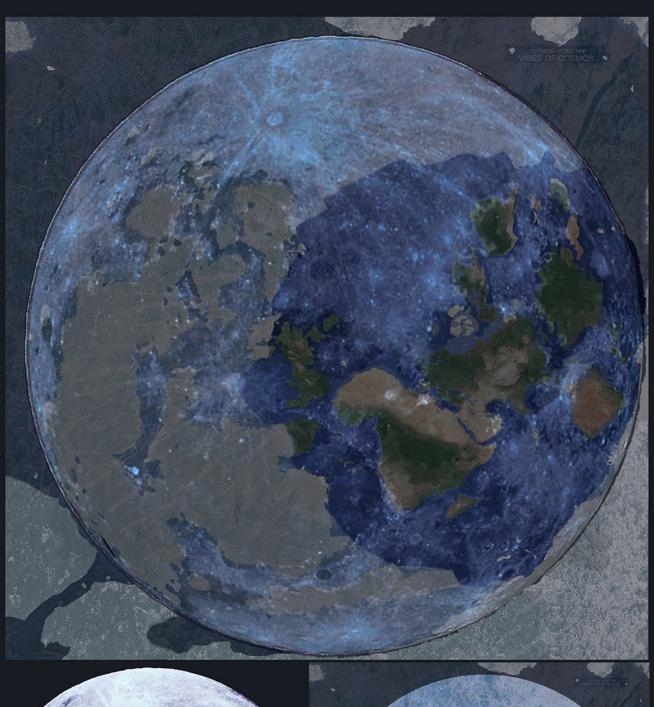


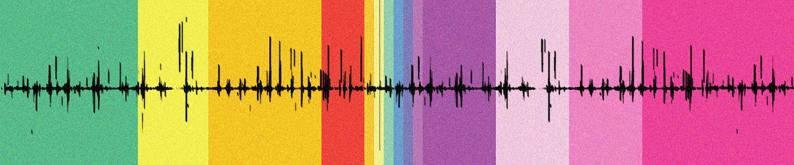
AUSTRALIS OCEAN EAST TERRA VISTA AFRICAN OCEAN PANGEA - CENTRAL TERRA VISTA WEST AFRICA CRONOS OCEAN











--Ionised Radiations ---------Non Ionised Radiations -



STATIC ELECTRIC AND MAGNETIC FIELDS (DC)

ALTERNATING ELECTRIC AND MAGNETIC FIELDS (AC)



EARTH AND SUBWAYS



RADIOFREQUENCY RADIATION



INFRARED RADIATION



VISIBLE LIGHT



ULTRAVIOLET RADIATION



MOON CREATION

X - RAYS



SUN CREATION

Y-RAYS



AC POWER





HEAT



SUN RAYS



MEDICAL XRAYS



RADIOACTIVE SOURCES

0 Hz

60Hz 30KHz

3GHz

300GHz

430GHz

750THz

30PHz

30EHz

30ZHz

# **ELECTROMAGNETIC COSMIC SPECTRUM AND FREQUENCIES**

In this section we will break down all about frequencies and the electromagnetic cosmic frequency spectrum, looking at the physical quantities and separating the spectrum into individual categories.

In this way we will come closer to cosmological understanding.

Humans can hear a small spectrum of frequencies where it belongs to the generally low frequencies, while they can see an equally small spectrum where it belongs to the high frequencies.

Frequencies can be transformed, transmitted, decoded and stored in diamagnetic materials (solid, liquid and gas), as long as they are electromagnetic in nature.

Our world, nature, is permeated by almost every frequency – from visible light to very high frequency radioactivity.

## We have these types of frequencies:

- Low Frequencies of AC and DC
- Radio AM, FM, TV, mobile phones and Internet frequencies
- Infrared, Heat, Visible light, Ultraviolet frequencies
- Ionizing radiations X and γ rays
- Cosmic radiation.

By the term electromagnetic radiation we mean the transfer of energy in the form of an electromagnetic wave.

By electromagnetic wave we mean the local and temporal variation of the electric and magnetic field.

## An electromagnetic wave is characterized by 3 physical quantities:

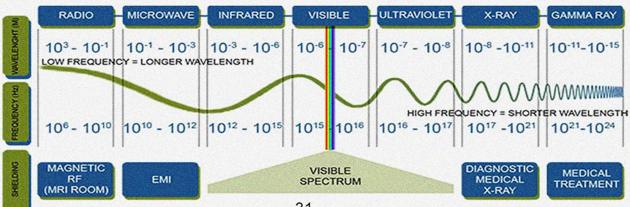
- The Wavelength  $(\lambda)$ : Which is equal to the distance between 2 successive peaks of the wave and has units of length.
- The frequency of the wave (v): Which expresses the number of repetitions of the wave per unit of time. Its measurement units are Hertz (1 Hz = 1 cycle / second). It is related to the wavelength and the propagation speed of the wave with the relation  $U = \lambda v$ .
- The Wave energy (E)

The electromagnetic spectrum is a continuous spectrum.

In figure bellow, all the electromagnetic radiation known to date is presented.

This consists of γ-rays which have the highest frequency-energy, X-rays, ultraviolet, the human-visible spectrum, infrared, microwaves, radio waves and low frequencies.

### ELECTROMAGNETIC SPECTRUM



## MAIN CATEGORIES

The electromagnetic spectrum can be divided into 2 large categories depending on the energy carried by each wave with its frequencies.

#### **IONIZING AND NON IONIZING RADIATIONS**

**Non-ionizing radiations**, i.e. radiations that do not have the energy to cause ionization. We meet these widely in our everyday life.

Ultraviolet radiation has the highest energy of the non-ionizing radiations with a frequency range of 1014 -1017 Hz and energies from 3-1000 eV.

Immediately after, at lower energy is visible light.

It consists of a narrow frequency range of order 1014. Characteristic wavelengths for visible light are red at 700nm (10-9 m), yellow at 580 nm and violet at 400 nm.

Non-ionizing radiation also includes radio waves corresponding to a frequency range of less than 109 Hz.

They are commonly used in telecommunications and the dissemination of information over long distances.

**lonizing radiation**, such as  $-\gamma$  rays and -X rays are rays capable of causing ionization of matter.

The - $\gamma$  rays have the highest energy, a few MeV (1eV = 1.602 x 10-16 J ) and have a characteristic frequency spectrum greater than 1019 Hz.

They are characterized by their penetration into most materials.

X-rays have a frequency range of 1017-1019 Hz and an energy of a few keV.

They have extensive use for medical purposes in x-rays and 3D imaging, airport screening, and many other uses.

As we will see  $\gamma$  and cosmic rays create the sun, while X rays create the moon, by aether ionisation.

## RADIO FREQUENCIES CATEGORIES



The Radio Spectrum consists of several individual subsets.

There are the extremely low frequencies (ELF) 3-30Hz used in submarine telecommunications.

The super low frequencies (super low frequency – SLF) from 30-300 Hz that we find in electricity distribution networks, the ultra-low frequencies (ultra-low frequency – ULF) 300-3000Hz.

Also another subset is the very low frequencies (very low frequency - VLF) with a spectrum of 3-30 kHz, which find applications in navigation systems and in wireless communications.

Low frequencies (LF) correspond to frequencies of 30-300 kHz and their applications extend to navigation and radio stations.

Medium frequencies (MF) are in the 300-3000 kHz range and are mainly used in radios. High frequencies (HF) at 3-30 MHz, very high frequencies (VHF) at 30-300 MHz and ultra-high frequencies (UHF) at 300-3000 MHz find applications in television stations, radar, in mobile telephone networks, wireless networks and in aircraft telecommunications.

An important subset is microwaves which are the highest frequencies of radio waves. They consist of the super high frequencies (super high frequency – SHF) at 3-30 GHz and the extremely high frequencies (extremely high frequency – EHF) at 30-300 GHz. Microwaves are found in radar, and in household microwave ovens.

The **origin of electromagnetic radiation** is divided into two categories. Natural sources and artificial sources.

In **natural sources** we can classify cosmic radiation that comes from below, creating the electromagnetic field that we are inside.

Various birds and fish, thanks to their internal organs, can perceive this cosmic electromagnetic field and act as small compasses so they know where to head during periods of migration to other continents.

Another natural source of electromagnetic waves is weather phenomena.

Electrical discharges that occur in lightning storms create strong magnetic fields in their vicinity.

**Artificial sources** of electromagnetic radiation are mainly human-made.

Electric current plays a catalytic role in the creation of electromagnetic waves as it correlates with low frequency (ELF) waves.

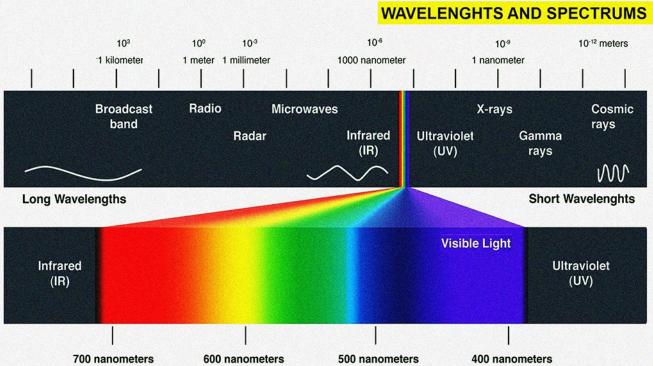
Our daily life is full of artificial sources of electromagnetic radiation.

For example, all household electrical appliances, (computer, mobile phone, TV, etc.) which are included in the low ELF frequencies.

Also, other artificial sources as previously mentioned are various types of antennas for telecommunications purposes, radio-television stations and radars on military bases.

As you can see, in the age we live in, electromagnetic radiation is constantly in front of us. With every step we take, our body is bombarded with different frequencies.

We cannot see and hear all this radiation because our eyes can only detect a small spectrum, while our ears another spectrum also small.



## GENERATION OF ELECTROMAGNETIC RADIATION

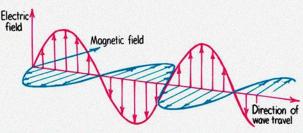
Electromagnetic radiation consists of an electromagnetic wave that temporally and locally changes the electric and magnetic field.

This wave consists of two separate elements.

The electric field (E) and the magnetic field (B).

These two fields are perpendicular to the propagation of the wave, perpendicular to each other and are constantly in phase.

They have a maximum and a minimum at the same time, as can be seen in the figure.



An electric field (E) exists wherever there are electric charges, either positive or negative. Electric field strength is measured in volts per meter (V/m).

Electric charges exert forces on each other that are proportional to their distance and the magnitude of the two charges.

The intensity of the electric field is calculated from the force exerted on a charge which is in this field by the studied charge.

Electric fields can easily be cut off by various conductive and non-conductive materials such as metals, walls, tree trunks, etc., even the shirt we wear.

For this reason in most cases inside the house we are shielded from these fields as they have been reduced several orders of magnitude by obstacles they encounter during their passage.

Magnetic Field results from the movement of electrical charges in space.

Its intensity (H) has units of ampere per meter (A/m)

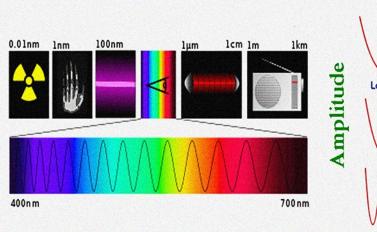
The magnetic flux density (B), i.e. the product of the field strength times the magnetic permeability of the medium in which they propagate and has units of tesla (T).

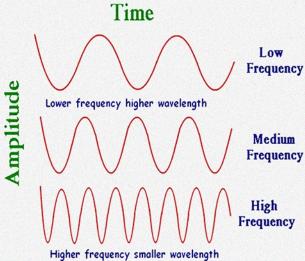
A moving electric charge with velocity U in a magnetic field experiences a force equal to the product of the charge times its velocity and equal to the product of the charge times the magnetic flux.

If we combine the force received by an electric current in a magnetic field and the force received in an electric field, we create the famous Lorentz force.

However, unlike electric fields, magnetic fields do not weaken during their passage through various materials, which is why shielding them is a bigger problem.

For this reason, in most of the measurements we are concerned with the intensity of the magnetic field rather than the intensity of the electric field.

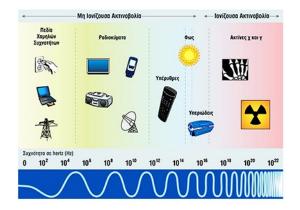


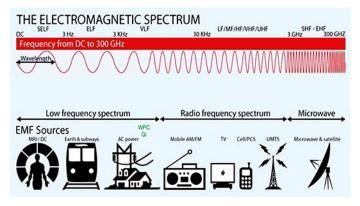


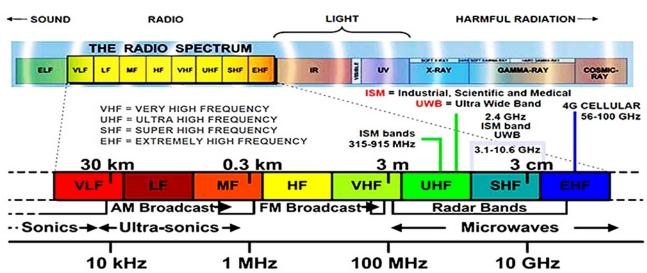
For the study of electromagnetic radiation, it is necessary to define some physical quantities which are used on a wide scale and facilitate us both in terms of understanding and simplifying the problem.

- Current density J: defined as the current passing through a unit cross-section of a three-dimensional conductor, perpendicular to its direction and expressed in amperes per square meter (A/m2).
- Electric Field Intensity E: is the vector quantity corresponding to the force exerted on a charged particle, regardless of its movement in space. Expressed in volts per meter (V/m)
- Magnetic Field Intensity H: is a vector quantity, which, in combination with the magnetic flux density, defines a magnetic field at every point in space. Expressed in amperes per meter (A/m)
- Magnetic flux density B: is a vector quantity on which the force exerted on moving loads depends. It is expressed in tesla (T).
- Power density (S): is the quantity used for very high frequencies. It is the radiant power incident perpendicular to a surface, divided by the surface area. It is expressed in watts per square meter (W/m2).
- Specific Energy Absorption (SA): defined as the energy absorbed per unit weight of biological tissue. It is expressed in joules per kilogram (J/kg). In these recommendations it is used to limit non-thermal effects from pulsed microwave radiation.
- Specific energy absorption rate (SAR): calculated as an average for the whole body or for parts of it, it defines the rate at which energy is absorbed per unit weight by body tissues. It is expressed in watts per kilogram (W/kg).

Whole body SAR is a widely accepted measure of the effects of exposure to RF fields.







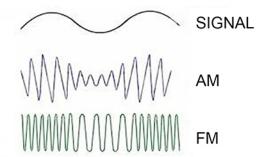
## RADIO WAVES

Here it will be realized how frequencies can be transformed and transferred. As the spectrum of frequencies, like nature itself, is continuous, what happens with radio frequencies can be done with other frequencies as long as there are the right transformers, decoders, transmitters and receivers.

Listening to a program on the radio, we cannot easily imagine the route it takes until it reaches us. The signal reaches our radios through the radio transmission system.

## A radio transmission system consists of:

- a) the transmitter
- b) the transponder
- c) the receiver
- d) the microphone
- e) the loudspeaker
- g) the headphones



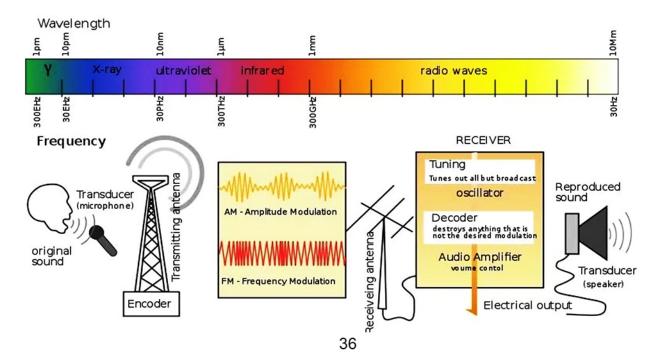
The radio program is transmitted through a special class of waves called radio waves Electromagnetic waves with wavelengths from 1 cm to 10 m and frequencies from 10 Khz to 100,000 MHz. They are also used in radars.

The radio is the device that works as a receiver of electromagnetic emissions at a certain frequency with an antenna and a converter into sound.

The electromagnetic waves are received by the antenna, decoded, converted into electrical current and then into sound by the speaker. Radio broadcasting is also considered the whole process of broadcasting and receiving radio waves.

#### Analogue or conventional radio.

Here the way the signal is modulated results in the separation of frequencies for use by AM and FM, while specific frequency ranges are defined depending on the purpose. (e.g. radios in Europe and America they broadcast on the frequencies FM 87.5-108). Other frequency ranges are used for specific purposes such as from the Fire Department.



Here we will see how the image is created through frequencies and their transfer and transformation.

The operation of the television is based on the photoelectric effect, in which the luminous fluxemitted from various points of an image is converted into alternating electric currents. Essentially, during the formation of a black-and-white image on a screen, a distribution of the brightness (different for each one) of the points of the image occurs.

The movement of the object shown in the image is caused by a change in the brightness of each point as a function of time.

In summary, the brightness values of an image are analyzed point by point and this is done dozens of times every second, and the changes in brightness are reproduced on the screen of a player located at a distance.

Analyzing this image brightness point by point is called "scanning the image".

However, the above development of the operating principle of t. is schematic and theoretical; in practice it is impossible to do a point-by-point analysis of the brightness.

That is why the analysis is done not by points, but by areas of the image, of course as small as possible.

Thus, the whole screen is divided into several horizontal lines, so the analysis and reconstruction of the image is done by reading and reproducing the light intensity of the squares that are in the first line, then in the second, etc.

But this whole process should not take more time than the time that an image remains on the retina of the eye.

In this way, the image is perceived by the eye as a whole.

That is why screens are made so that the squares and lines corresponding to a visual perception does not disappear immediately, but remains for a short time.

The impression of the movement of the image is given in a manner similar to that of the cinema.

The various images are "scanned" on the screen in a very short period of time, thus causing a superposition of images that differ little in time from each other.

The superimposition and rapid alternation of images, as well as the fact that they remain for a minimum time on the retina, creating the impression of image movement.

The TV consists of the electric cannon, the system beam deflection, the metal grid and the screen.

The television receiver receives the television signal either wirelessly or wired.

The way is to receive it with an antenna pointed at some terrestrial broadcasting station (located on top of some mountain).

In wired reception we have cable TV and Internet reception (IPTV).

The whole system works by converting the luminous flux emitted by the various points of an image into alternating electrical currents.

These currents feed the antenna of the transmitter which with its turn will create an electromagnetic field to be received by the receiver.

Because the broadcast is double, that is, except for the image there is also the sound, a television receiver consists of various stages that separates these two.

In order for the TV to show an image, the electric currents pass through various phases and with the help of components they perform tasks for its operation.

The TV signal transmits in the VHF and UHF frequency bands, in the microwave category, where the former correspond to the 30-300 Hz range and the latter to 300-1000 MHz respectively.

In recent years we have been broadcasting a television program via the Internet and via a mobile network (Mobile TV).

# MAGNETOPHONE - CASETOPHONE

Here we will understand how the frequencies, once transformed, can be stored. Because of the continuity of frequencies, what is done with the spectrum of sound that can be recorded on a magnetic tape, can be done with the rest of the spectrum of frequencies, as long as there are suitable transformers and suitable storage media. The cassette player plays or records the sound through the tape using one magnetic read and one write head.

The tape's thin magnetic tape, coated with iron oxides and wound on spools, is placed in a slot on the tape deck and rests on its head. It moves at a constant speed and the cassette player converts the analog recorded magnetic information into a suitably electrically varying signal which is fed to an internal or external amplifier to reproduce the sound through the built-in or (depending on) external speakers.

The exact opposite happens in recording, as the cassette player has an electric motor that turns the lugs that snap onto the cassette reels.

The rotation speed can be normal forward for listening to music, fast forward or reverse for track search and is selected with the corresponding keys.

The role of media is played by materials with suitable magnetic properties: magnetic tape, disk, magnetic drum and other similar elements.

Let's take a closer look at the most important ingredients and find out how they make this work.

Tape drive mechanism

Also called tape transport mechanism. The characteristics of this mechanism have a direct impact on the sound quality of the device. All the distortions that the tape mechanism introduces into the signal are unrealistic to remove or correct in some way. The main characteristic of this spare part in the tape recorder is the burst factor and the long-term stability of the tape advance speed.

This mechanism should provide:

- uniform advance of the magnetic medium during recording and during playback at a specified speed (called operating path).
- optimal voltage of the magnetic carrier with a specific force.
- high quality and reliable contact between the carrier and the magnetic heads.
- changes in belt speed (on models where multiple speeds are provided).
- Fast forwarding of media in both directions.

Auxiliary features based on the category and purpose of the tape recorder. Magnetic heads

One of the most important components of a tape recorder.

The characteristics of these components have a direct impact on the quality of the device. The magnetic head is designed to work both with one track (mono format) and with many

- from 2 to 24 (stereo - they could be in stereo recorders).

These parts are subdivided according to their purpose to:

- TB chief responsible for reproduction.
- · GZ elements responsible for reproduction;
- HS heads responsible for deletion.

The tape recorders were also equipped with an electronic component, which must include the following components:

- 1 or more amplifiers for playback and recording.
- 1 or more low frequency power amplifiers.
- a generator responsible for erasing and magnetization (in the simplest tape recorders, this part may be absent).
- noise reduction device (will not necessarily be present in the design of the tape recorder).
- electronic mode control system.



#### Sound

Sound is the cause of stimulation of the sense of hearing, due to the change in atmospheric air pressure. It is the change in the pressure or the speed of the particles of an elastic medium, which propagates in waves within this medium. It only propagates through matter (solid, liquid, gasses). The vibrating sound-producing body is called a sound source.

# Types of waves

In Longitudinal waves the propagating disturbance causes the particles of the elastic medium to move along the direction of wave propagation.

In Transverse waves the propagating disturbance causes the particles of the elastic medium to move in a direction perpendicular to the direction of wave propagation.

#### Sound Source

The sound source causes a disturbance in the air particles causing them to move back and forth. This movement of particles propagating through a longitudinal wave causes thickening and thinning, i.e. changes in air density and pressure along the direction of propagation.

# **Acoustic Frequency Spectrum**

Extends from 20 Hz to 20,000 Hz (20 kHz)

In sounds below 100 Hz and above 10 kHz, the energy is very low.

Infrasounds are frequencies below 20 Hz where they are not heard by the human ear. Frequencies above 20 Hz are ultrasonic, where they are also not perceived by humans.

#### **Natural Sound Characteristics**

Each simple sound is characterized by its frequency and by the amplitude of the pressure change. Complex sound is characterized by the frequency and amplitude of each of its harmonic components.

**Sound Pitch** is a feature that distinguishes a sound if it is sharp or heavy - Treble - Bass. **The Timbre** of sound depends on the amplitude of sound oscillations, as if the amplitude of oscillations increases, then we feel that the sound has become louder. It depends on the form of the generated wave. It also depends on the frequency because, for example, the power of a sound with a frequency of 80 Hz must be 10,000 times stronger than the power of the frequency sound in order to cause the same feeling of intensity.

Loudness is a subjective feeling of perception of two sounds, from two different sound sources, which have the same frequency and the same intensity.

# Categories of sounds

- -Simple tones (a quiet, harmonic oscillation as a function of time, intervals)
- -Complex sounds or tones (sound signal from many frequencies)
- -Large number of simple sounds, harmonics
- -Noises (irregular pressure variation)
- -Beats (minimum number of high-intensity oscillations, sharp deceleration)

**Echo** is produced when the sound is reflected off an obstacle, which is more than 17 meters away from the sound source.

**Diakrotima** is the phenomenon caused by the interaction of two sounds of different frequencies.

The speed of sound in atmospheric dry air at 20 °C is 343 m/sec or 1235 km/h.

It is generally not constant, but depends on the state variables of the system (pressure, temperature).

It is an important parameter for fluid-compressor hydromechanical systems in which the flow velocity approaches or exceeds Mach 0.8 (practically gas turbines and supersonic aircraft), at which point the fluid ceases to behave as incompressible and in this case is compressible.

#### **Volume Units**

Intensity is measured in S.I. in W/m2 (Watts per square meter). The minimum intensity perceived by the human ear corresponds to 10-12 W/m2. This intensity corresponds to a sound pressure of 20  $\mu$ Pa (which is also referred to as the threshold of audibility). Sound intensity level is measured in decibels. The Decibel unit expresses the level difference of a sound of intensity I to the intensity of the audibility threshold (10-12 W/m2). Loudness level in dB is defined as ten times the decimal logarithm of sound loudness to the loudness threshold. The pain threshold of the human ear due to sound intensity is 120dB. Exposure to sounds above 120dB is dangerous and can lead to hearing problems. Also prolonged and continuous exposure to sounds above 90dB creates hearing problems.

It would be useful to list at this point, in order to better understand the concept of the acoustic frequency spectrum, some musical instruments and their placement in the acoustic spectrum.

Piano 27Hz-4186Hz Electric bass 41Hz-311Hz Boot-drum 20Hz-500Hz Cymbals 400Hz-20000Hz Human voice 32Hz-4500Hz

decline is observed with age.

The **Audible Spectrum** describes the interval between the lowest and highest sound frequencies that a human or an animal can hear. In humans the audible spectrum spans approximately from 20 Hz to 20 KHz. However, there are significant differences in the spectrum between individuals, especially in the high frequency region, where the greatest

Human can hear 20 Hz - 20.000 Hz

Dolphins can hear 1000 Hz - 130.000 Hz

Bats can hear 3000 Hz - 120.000 Hz

Rats can hear 200 Hz - 76.000 Hz

Dogs can hear 15 Hz - 50.000 Hz

Cats can hear 60 Hz - 65.000 Hz

Elephants hears 16 Hz - 12.000 Hz

Some infrasound in the 4 to 16 Hz spectrum is felt by humans through body vibrations. Also, there is a gender difference in sound sensitivity, with women having more sensitivity to high frequencies.

A dog's hearing range depends on its breed and age, but roughly ranges from 40 Hz to 60,000 Hz, and cat's from 50Hz to 65,000 Hz, which is much larger than a human's. Bats have very sensitive hearing, which they use to find food and for orientation. Their audible spectrum is from 20 Hz to 120,000 Hz. They locate their food by emitting sounds of very short duration and of very high intensity, and evaluate the echoes reflected from objects around them, inferring from this the size and type of objects. They emit two types of sounds, constant frequency (CF), and frequency modulated (FM). Each type returns different information about the bat, CFs are used to locate an object, while FMs are used to determine its nature and distance. The pulses of sound produced last only a few milliseconds, and the pauses between them act as echo evaluation periods. There is also evidence that bats use the frequency difference caused by the Doppler effect in reflected sound to estimate their own flight speed.

Information about size, shape, and texture is combined to form a picture of the location and environment.

Mice have large ears in relation to their bodies, and they hear higher frequencies, from 1 kHz to 70 kHz or 90 kHz, which they use for communication.

They do not hear the lower frequencies that humans hear, just as humans do not hear most of the sounds of mice Finally, in addition to high-frequency sounds, mice also produce some sounds within the human audible spectrum when they want to communicate over a greater distance, as lower-frequency sounds travel farther.

Optical spectrum, F(f) or  $F(\lambda)$  is the distribution of radiation in energy space usually expressed as frequency f or wavelength  $\lambda$ .

The spectrum is obtained by analyzing the light coming from a light source into all its wavelengths (or colors).

This analysis, also called color dispersion of light, is achieved with prisms and in general with light refraction systems, and is due to the fact that the refracting body (medium) presents a different index of refraction at the various wavelengths of light.

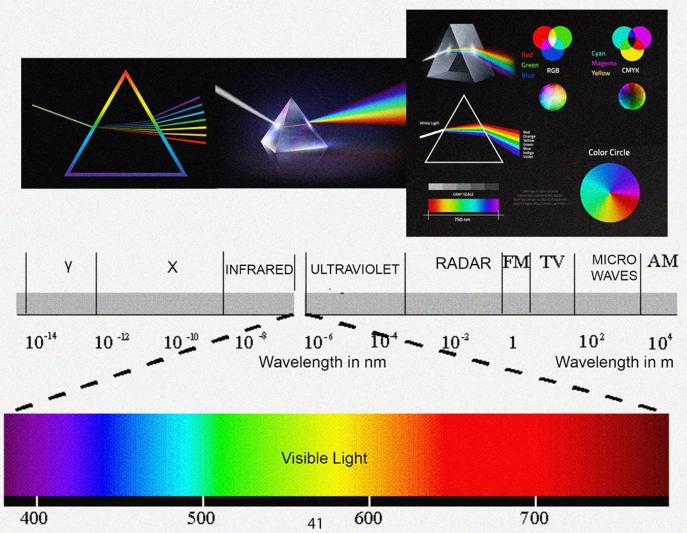
Thus light rays that have a long wavelength are also the least deflected.

The visible spectrum is defined as that part of the electromagnetic radiation that can be perceived by humans with the sensor of vision. This spectrum extends to radiations with frequencies from 7.5·1014 Hz, (Violet color with a vacuum wavelength of 4000 Å or 400 nm) to approximately a frequency of 4.3·1014 Hz, (Red color with a vacuum wavelength of 7000 Å or 700 nm).

In this spectrum, one can distinguish the changes in color shades, starting with the shades of purple, blue, light blue, green, yellow, orange, as well as shades of red

The radiations with frequencies slightly higher than 7.5·1014 Hz (that is, with a wavelength in vacuum slightly shorter than 4000 Å) constitute the invisible ultraviolet radiation (Ultra Violet or UV).

On the contrary, the radiations with frequencies slightly lower than 4.3·1014 Hz (that is, with a wavelength in vacuum slightly longer than 7000 Å) constitute the invisible infrared radiation (Infrared).



# CONVERT TRANSFER SAVE

The **conversion** of audio frequencies into radio waves through electromagnetism and a transmitter, allows the receiver with the corresponding electromagnetic decoder - receiver to receive the radio waves and convert them back into sound waves and through the speakers to listen.

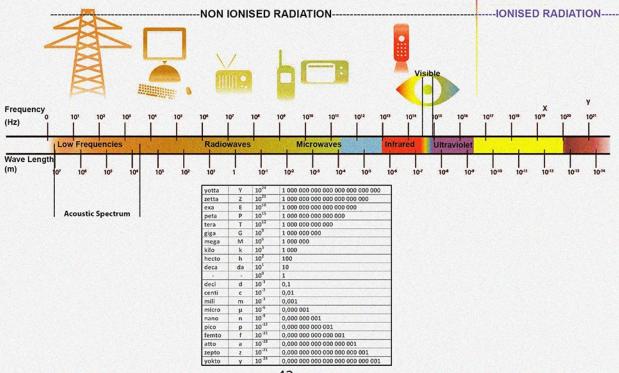
The mode of operation of the television, the telephone and the Internet is similar.

So we see that all of this is based on the fact that frequencies can be **transformed**, **propagated** or **stored**, decoded and transformed back into their original form. What is needed are the corresponding electromagnetic decoders and transformers. For transporting transmitters and receivers, while for storing electromagnetic material.

After all this study of the electromagnetic spectrum and all the individual smaller spectrums with similar properties, we have reached the point of seeing and understanding better what the ionizing frequencies cause.

**Summarizing**, we see in the table below the entire electromagnetic spectrum with the corresponding frequencies per region.

	Electromag	netic Spectrum Zones	
Spectrum Area	Wave Length	Frequencies	Energy
Radiowaves	100.000km - 1m	0-300 MHz	0 - 1,24 · 10 <sup>-6</sup> eV
Microwaves	1m - 1mm	300 MHz - 300GHz	1,24 · 10 <sup>-6</sup> eV - 1,24meV
Infrared Radiation	1mm - 740nm	300GHz - 400THz	1,24meV - 1,6eV
Visible Phasma	740nm - 380nm	400THz-800THz	1,6 - 3,2eV
Ultraviolet Radiation	380nm - 10nm	800THz - 3 · 10 <sup>16</sup> Hz	3,2eV - 124eV
X Rays	10nm - 0,01nm	3 · 10 <sup>17</sup> Hz - 3 · 10 <sup>19</sup> Hz	124eV - 124keV
γ Rays	0,01nm - 0,001nm	3 · 10 <sup>19</sup> Hz - 3 · 10 <sup>20</sup> Hz	124keV - 1,24MeV
High Cosmic Rays	0,001nm - 0	3 · 10 <sup>20</sup> Hz -	1,24MeV -



As we have seen in cassette technology, sound frequencies are converted into a pulsating electrical current, which is recorded through the cassette head onto the magnetic tape of the cassette. In this way we have the storage of sound frequencies and with the analog decoder - where the cassette player itself is, we can listen to the recorded sounds from the magnetic tape.

The fact of frequency storage finds application in storage Internet data technology, as through high frequency waves and similar transmitters - receivers - decoders, there is access to a huge layer of the ionosphere, where it is ionized providing storage space and fast communication with short system feedback times to the decoders.



IONOSPHERE

Just as there are solid and liquid diamagnetic materials, so there are corresponding gases that are susceptible to react to electromagnetism.

As we have seen in previous issues, the ionosphere contains the noble gases, monoatomic oxygen and hydrogen.

These gases are all diamagnetic and so can store very high ionizing frequencies.



All this information and data is stored in ionizing frequency bands found in the air of the ionosphere, in a so-called dynamically electromagnetically charged cloud of infinite capacity, where a ground-based central transmitter-receiver connects to this "cloud" by transmitting data with laser technology.



# MOON CREATION

2. The total spectrum reaches the ceiling of the electromagnetic field and is reflected downwards, having been refracted.

1.The entire spectrum of cosmic electromagnetic frequencies coming from below to above.

3. The spectrum of x-rays from the total spectrum of cosmic frequencies, as it has been separated from other spectra due to the cosmic prismatic refraction of radiation, is now concentrated, and is imprinted at the boundaries of the ionosphere with the etheric field, imprinting the base of the earth, where it penetrated vertically.

Cosmic energy emanates from below - Black Sun - creating an electromagnetic field. This cosmic energy contains all frequencies from the entire electromagnetic spectrum. Let us recall here the refraction of white light in the spectrum of optical frequencies where it allows us to see colors with the analog decoder, our eyes. It is a transformation of the cosmic radiation into a field, the field of vision.

In the same way we have the x-ray spectrum image of the total cosmic energy coming from below at the level of the ionosphere, a phenomenon that creates our familiar moon making it have the property of an x-ray of the base of the earth.

So the spectrum of very high ionizing frequencies - x,  $\gamma$  and cosmic rays - as they bounce upwards, penetrate the surface of the earth, are formed focused, and in the same way that we have the prismatic refraction of white light in colors, we have the refraction of ionizing frequencies and cosmic radiation in  $\gamma$ -rays and x-rays, creating the sun and the moon respectively.

It is again a conversion of frequencies, where by converting them into the visible spectrum of frequencies we are given the possibility to see the highest frequencies of cosmic energy in the sun, and in the moon the x-ray of the earth.

\*The moon is the concetrated focused inprint of the spectrum of X Rays of High Frequencies, from the total Cosmic Electromagnetic spectrum of frequencies.

\* Aether and the gases of lonosphere accept and react to electricity by ionization.

2. The total spectrum reaches the ceiling of the electromagnetic field and is reflected downwards, having been refracted.

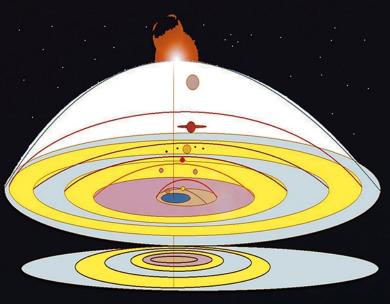
1.The entire spectrum of cosmic electromagnetic frequencies coming from below to above.

3. The refracted spectrum of  $\gamma$  and cosmic rays from the total spectrum of cosmic frequencies, concentrated, is imprinted at the boundaries of the ionosphere with the etheric field, imprinting the cosmic energy, shaping the Sun.

\*The sun is the concetrated focused inprint of the spectrum of γ and cosmic Rays of High Frequencies, from the total Cosmic Electromagnetic spectrum of frequencies. \* Aether and the gases of lonosphere accept and react to electricity by ionization.

All the stars that move in the electromagnetic field as well as the planetary stars, are ionization phenomena of the corresponding etheric field, and occur in the corresponding etheric layer.

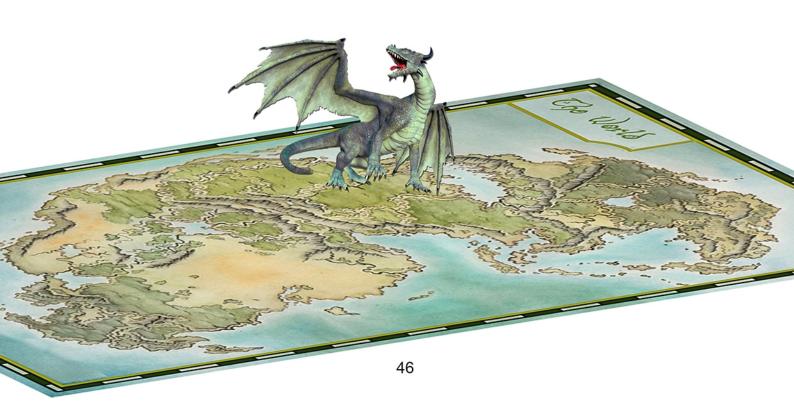
What causes all this, the source of excitation of all this cosmic electromagnetic field, the black sun, is a multi-layered and multi-form source, creating all these layers of fields.



# TERRA VISTA = PANCEA







## **BACK IN TIME**

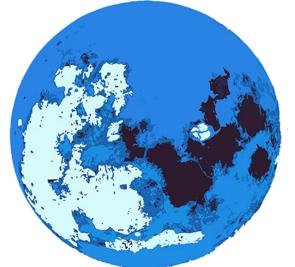
As we will see in detail in the chapter on cosmic ages, the Magnetic North moves every 2100 years or so, causing the earth's climate to change periodically.

As this movement follows a circle, the so-called great circle, we see going back in time,

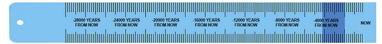
where was before the indicated years per image.

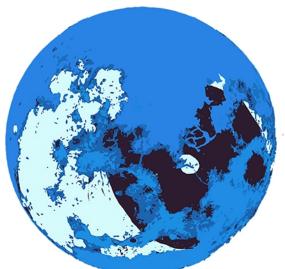
# THIS IS THE EARTH FROM 2000 YEARS BEFORE TILL NOW

					mimimimi			шиш
	-28000 YEARS FROM NOW	-24000 YEARS FROM NOW	-20000 YEARS FROM NOW	-16000 YEARS FROM NOW	-12000 YEARS FROM NOW	-8000 YEARS FROM NOW	-4000 YEARS FROM NOW	NOW
	hatadadad	mindonion	mindonimi	mimbolod	mindodod	ndonlantaal	mindodod	untun 💮

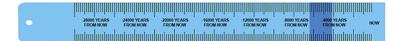


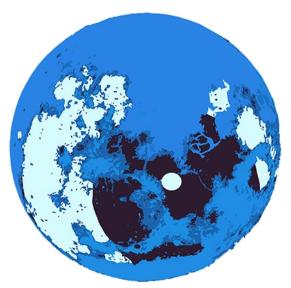
# THIS IS THE EARTH FROM 2000 TILL 4200 YEARS BEFORE NOW





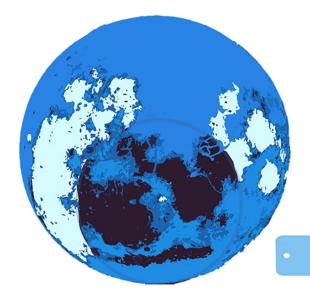
# THIS IS THE EARTH FROM 4200 TILL 6400 YEARS BEFORE NOW





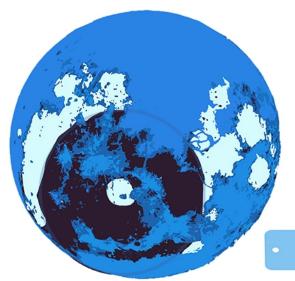
This fact explains the **Ice Age** on the continents known to us. From what we see 11000 years ago almost all the land known to us was in a glacial period.





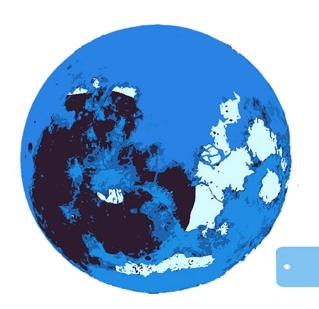
# THIS IS THE EARTH FROM 6400 TILL 8600 YEARS BEFORE NOW

luntunluntun	minimini	minimini	minimini	minimi	minimini	udualualualu	ujuu
-28000 YEARS FROM NOW	-24000 YEARS FROM NOW	-20000 YEARS FROM NOW	-16000 YEARS FROM NOW	-12000 YEARS FROM NOW	-8000 YEARS FROM NOW	-4000 YEARS FROM NOW	NOW
laataalaataal	nataalaataal	onton london	anton lantani	landara karatara	antanlantanla	mbadaalaala	uluu



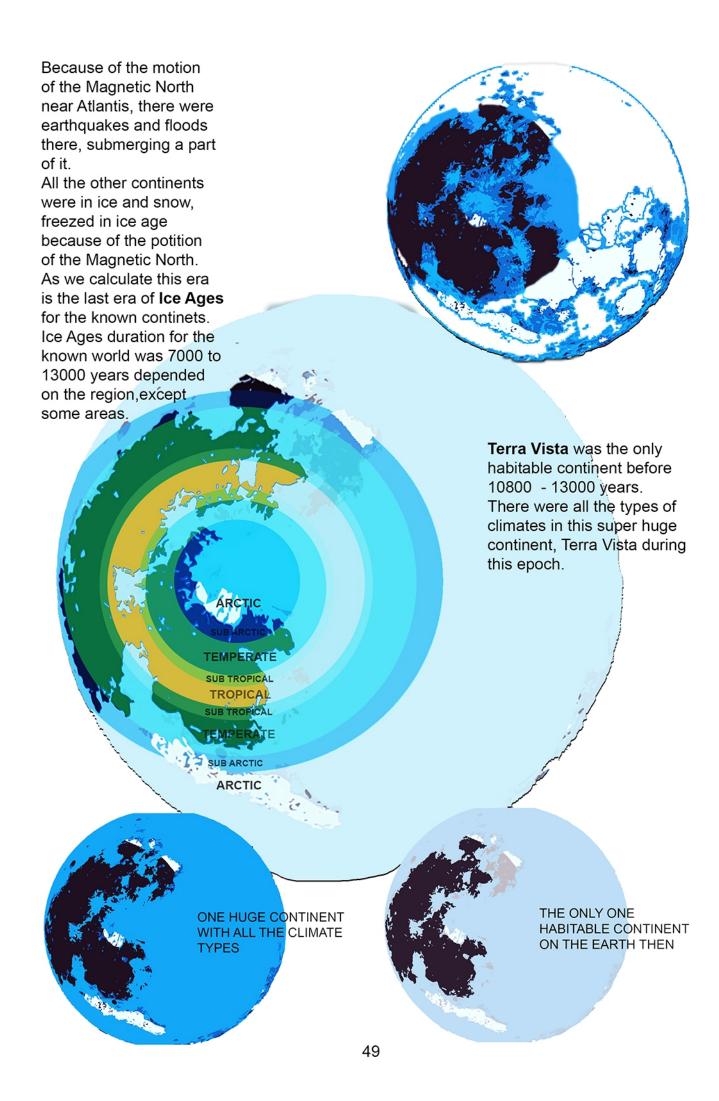
# THIS IS THE EARTH FROM 8600 TILL 10800 YEARS BEFORE NOW

2000 YEARS 24000 YEARS 2000 YEARS 1000 YEARS 2000 YEARS 4000 YEARS 4000 YEARS NOW FROM NOW FR



# THIS IS THE EARTH FROM 10800 TILL 13000 YEARS BEFORE NOW

							III IIII
-20000 YEARS FROM NOW	-24000 YEARS FROM NOW	-20000 YEARS FROM NOW	-16000 YEARS FROM NOW	-12000 YEARS FROM NOW	-8000 YEARS FROM NOW	-4000 YEARS FROM NOW	NOW
hatadaatad		mbodada			mbolodod	uludadad	mlm



# TERRA VISTA IS PANGEA 11.000 - 13.000 YEARS BEFORE

**Pangea** (that means all the earth) was **Terra Vista**, but not million years before. Named Pangea because at that epoch, the epoch of Leo, this continent was all the habitable world. Pangea is still there that it was, we call it Terra Vista, but nowadays is freezed in its **Ice Age**.

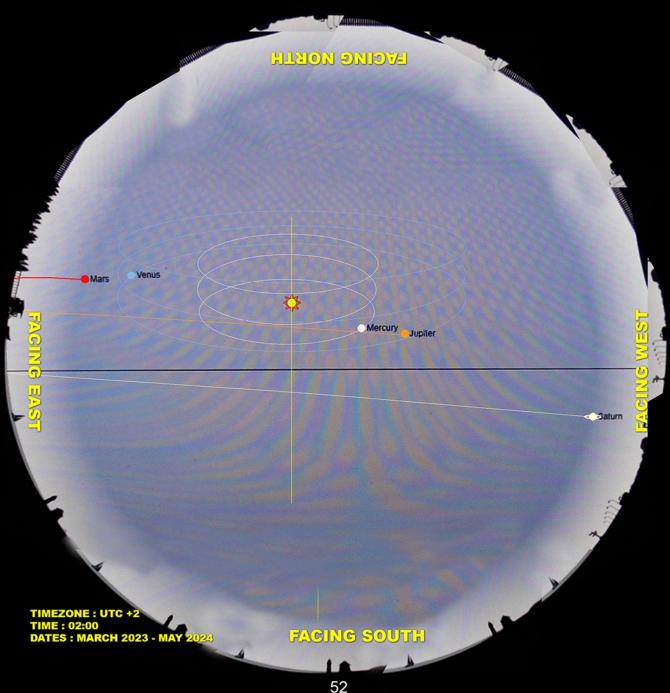




# THE MOTION OF THE **PLANETS**

The so-called planets, when not visible at night, are on the side of the electromagnetic dome where the sun is and creates the day.

By taking a picture every day at the same time for more than 1 year, we notice that Mercury and Venus always follow the sun in the constellations and always appear close. Mars, Jupiter and Saturn appear themselves in all the constellations, without the sun, tracing a geocentric course of complex spiral motion..



#### FREQUENCY AND PERIOD OF THE MOTIONS

#### Moon

The Moon, as we have seen, makes a complete revolution in the constellations within a lunar month, i.e. within approximately 29.4 solar days.

# Mercury

Mercury revolves around the sun following it through the constellations, with an oscillation around it in a small radius.

It appears only in the constellation in which the sun is located and in its neighbors.

It performs a complex spiral motion and does not revolve around the constellations but around the sun.

There are periods when Mercury is retrograde, that is, every day it goes against the constellations.

In one solar year it rotates 4.14 times around the sun while making a complete rotation in 88 days.

It is the one satellite of the sun phenomenon and has phases like the moon.

#### **Venus**

Venus revolves around the sun following it in constellations with one oscillation around it over a large radius.

There are periods when Venus is retrograde, that is, every day it goes against the constellations

In a solar year it rotates 1.536 times around the sun while making a complete revolution in 224.7 days.

It is the other satellite of the sun and has phases like the moon.

## Mars

Mars follows the course of the constellations and behaves geocentrically making a complex spiral movement.

Its rotation speed is less than that of the constellations.

In one solar year it makes 0.5319 revolutions of the constellations and thus makes one full revolution of the constellations in 696.98 solar days.

Its two satellites move in opposite directions.

#### **Jupiter**

Jupiter moves almost along with the constellations in a geocentric course in a complex spiral motion

Its path through the constellations repeats every 4334 days, since its rotation speed is equal to that of the constellations.

Thus in one solar year Jupiter makes 0.0843 revolutions in the constellations.

Its four satellites move in the same direction.

#### Saturn

Saturn follows the course of the constellations, making a complex spiral motion, while behaving geocentrically.

Its speed is even closer to that of the constellations so that it makes a complete circle through the constellations in 10822 solar days.

Consequently, in one solar year it makes 0.0338 rotations through the constellations.

#### MIDDLE ROTATION SPEED

First we find the relative speed with the constellations and then the actual rotation speed for an observer in the earth.

#### Mars:

In 1 day = 24 Hours, makes 0.00147 Cycles in the constellations In 1 Hour makes 0.0000614 Cycles 1 Cycle is 360 degrees 0.0000614 cycles are 0.0221 degrees So Vmars = 14.95 + 0.0221 = 14.9721 Degrees / Hour



# Jupiter:

In 4334 days makes 1 cycle in constellations
In 1 Year = 365.25 days makes 0.0349 cycles in the constellations
In 1 day = 24 hours ,makes cycles
In 1 Hour makes 0.000000398 cycles

In 365.25 solar days makes 0.5319 cycles in the constellations.

1 cycle is 360 degrees 0.000000398 cycles are

So Vjupiter = 14.95 + 0.001492 degrees = 14.951492 Degrees / Hour

#### Saturn:

In 10822 solar days it makes 1 cycle in the constellations In 365.25 solar days makes 0.0337 cycles in the constellations In 1 day = 24 Hours , makes 0.00000923 cycles In 1 Hour makes 0.0000003844 Cycles 1 cycle is 360 degrees 0.0000003844 Cycles are 0.001383 degrees

So Vsaturn = 14.95 + 0.001383 = 14.951383 Degrees / Hour

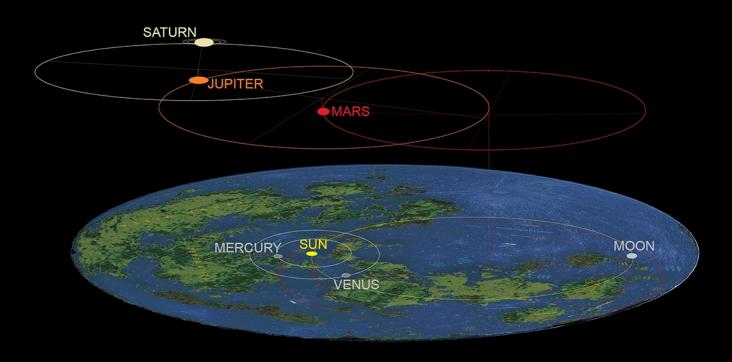
In Speed Order / Midle rotations speed in Degrees per Hour, in relation with the North, or the Polaris, for an observer on the earth:

Sun: 15

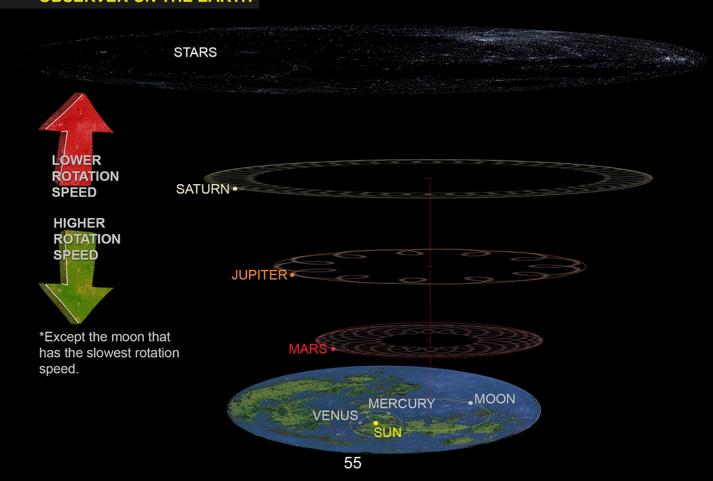
Mercury: 15(+-) Venus: 15 (+-) Mars: 14.95231 Jupiter: 14.951492 Saturn: 14.951383 Constellations: 14.95

Moon: 14.46

# MULTI SPIRAL MOTIONS OF THE DYNAMIC ELECTROMAGNETIC FIELDS

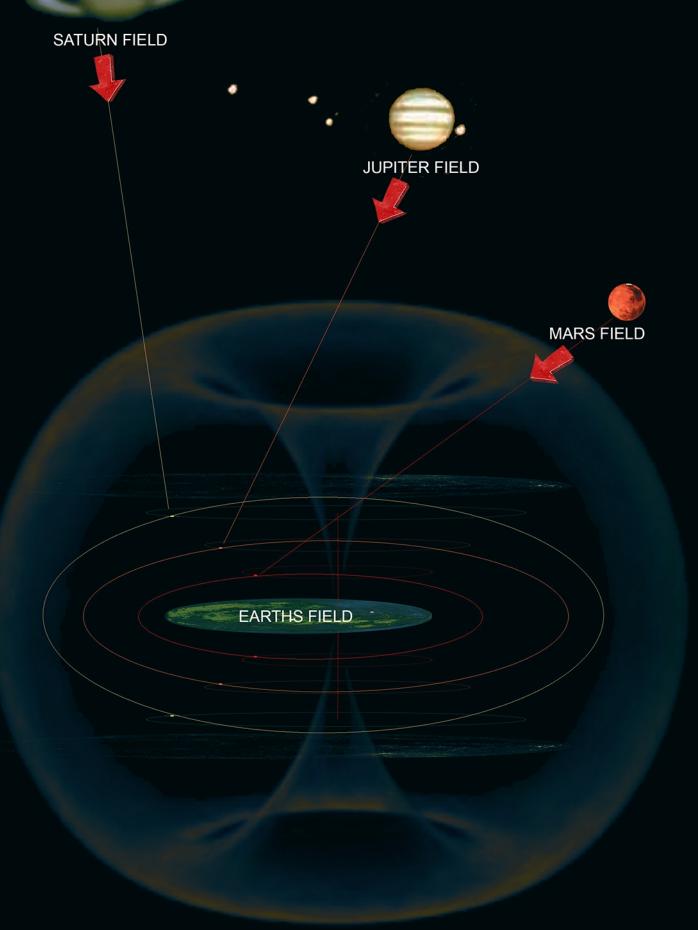


# LAYERS OF FIELDS IN ROTATION SPEED ORDER FOR A CONSTANT OBSERVER ON THE EARTH





# ONE FIELD INSIDE THE OTHER





The moon is the hologramic inprint of the material field, the base of the earth that we live on.



To make the image of the moon like earths map we can add contrast on the image...



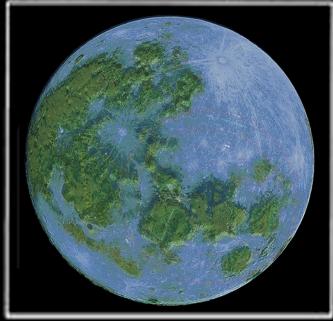
...and to flip the image because the moon works like a mirror.

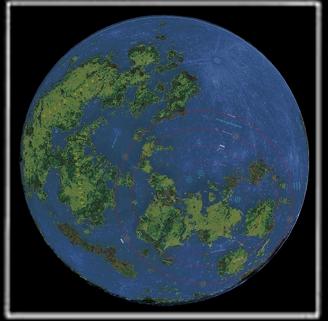


White parts are sea areas and transparent (black at night - blue at day) are land areas.

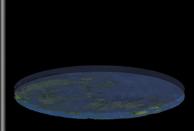


Changing the colors like a map and making the transition.

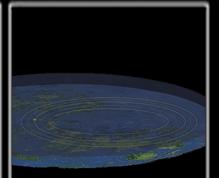




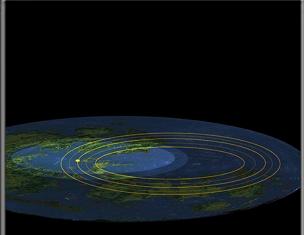




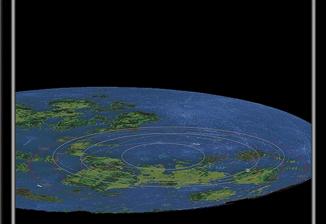
On the 1st electromagnetic dome - ceilling there are the inprints of the Sun and the Moon.



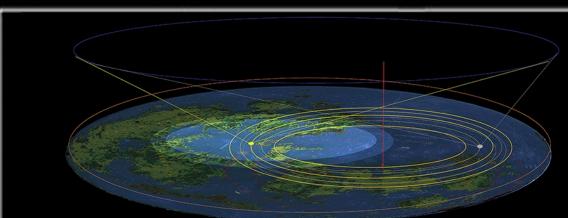
We call these spaces Submoon and Supermoon spaces, above and below this limit. Below is the ionosphere and above etheric fields.



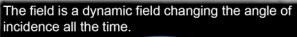
The Sun moves in its own spiral motion, creating day - night, and the seasons. Sun represent the reflected focused refraction of  $\gamma$  Rays of the high cosmic frequencies, of the electromagnetic energy that comes from below inside that field.

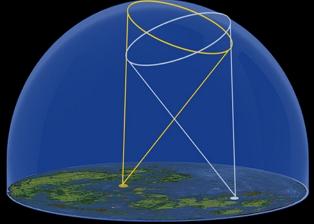


The Moon moves in its own spiral motion. representing the X Ray of the base of the earth because it is the reflected focused refraction of X Rays of the high frequencies, of the electromagnetic energy that comes from below inside that field.

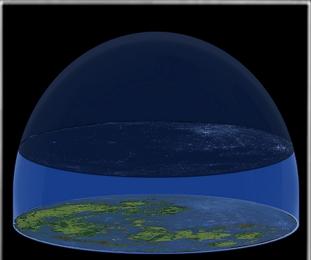


Depenting on the angle of incidence from the electromagnetic energy that comes from below, the Sun and the Moon are inprinting in different positions with an upside down conical way. The angle distance of the moon with the sun is creating the phases of the moon, because the conical refraction that creates the sun neutrilises that one of the moon when are close.



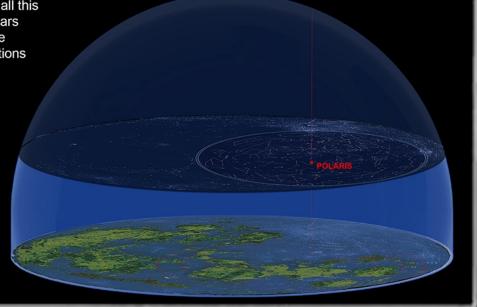


All these reflections and refractions are happening in a larger toroid electromagnetic field, the 2nd ceiling.



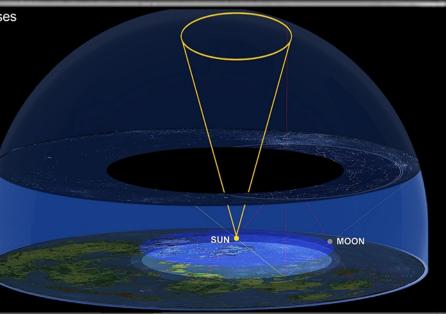
All the holes of superdeep places of the seas and all the energy spots of the land of all the earth are inprining on the starprint layer - stars.

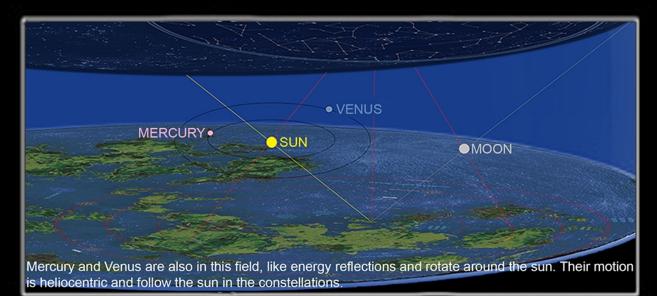
The motion of the source of all this cosmic energy makes the stars rotate around the unmovable polaris. Stars and Constellations are formed.

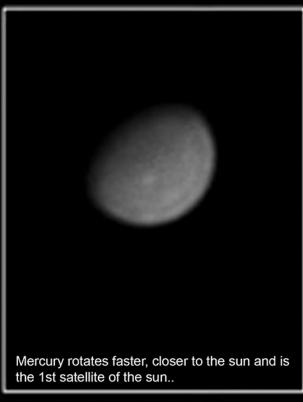


The existance of the sun neutrilises the starprint layer in a big radius on this level.

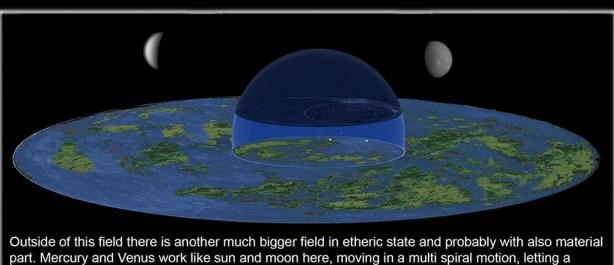
The noble gasses of the ionosphere are geting ionised with the existance of the pilot electromagnetic source, the sun, and create the daylight.







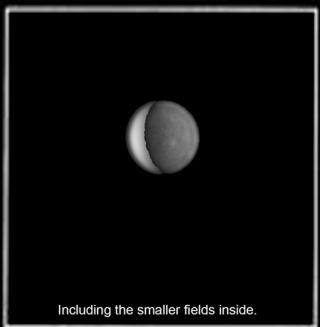
Venus is the 2nd and rotates in a biger radius slower. Both Venus and Saurn have phases like the moon because of the angle of incidence of the electromagnetic energy that comes from below.

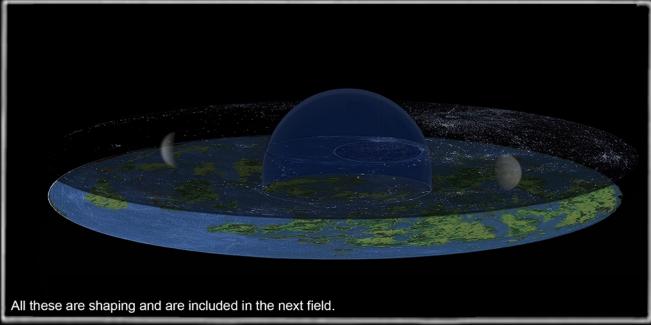


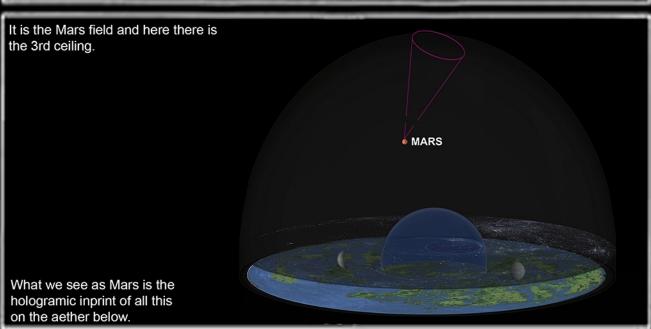
reflection inprint inside the smaller field, that is what we observe when we look at them.



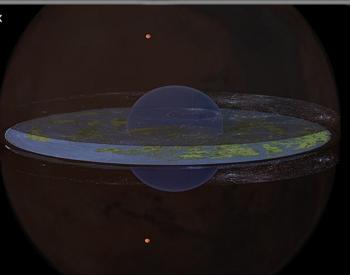
Mercury and Venus are also etheric inprints from the total cosmic energy that comes from below.







The Black Sun below is actually a complex source of energy with many layers where the corresponding fields are created.

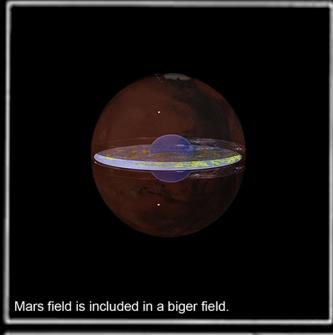






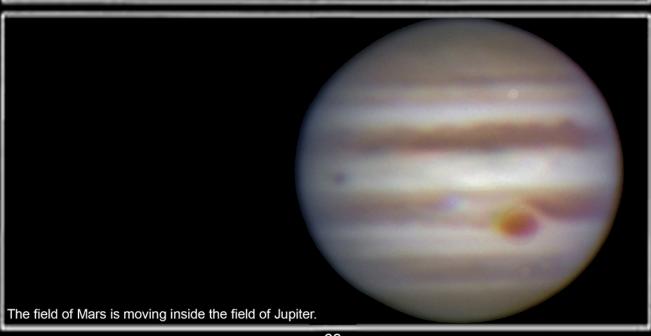
Mars has 2 satellites Phobos (P) and Deimos (D) that rotate anticlockwards.

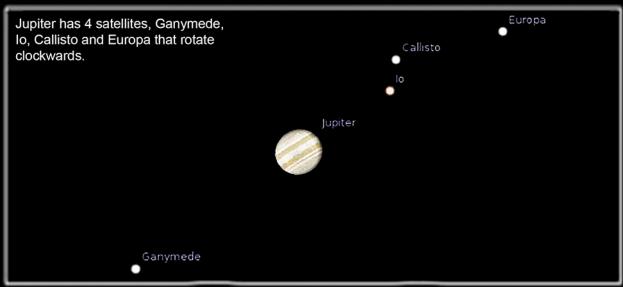








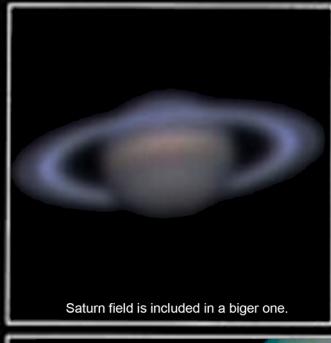








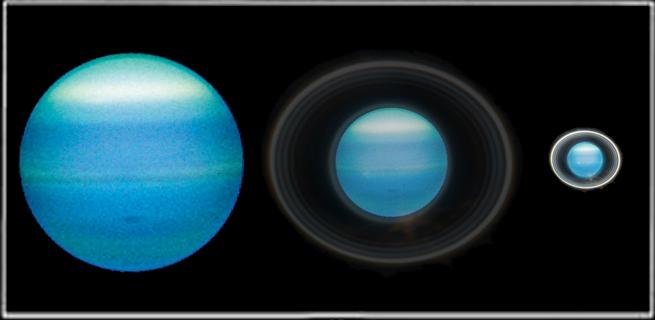






It is the field of Uranos that contains all the previous smaller fields inside.

There is a limit of this field, with the 7th ceiling to seperate this huge field from the outside total cosmic field.



# **ELEMENTS, SPACE AND MOTIONS**

**AETHER** 

For the study of seismic activity it is necessary to do some repetition of basic principles, which have been developed in book 3.

The space is divided into subselenium and superselenium place.

The 4 bodies that are in the sublunar field where we live are fire, air, water and land.











Fire occupies the highest position and land the lowest. Air is close to fire while water is close to land.

All the elements of the sublunar place potentially contain the other elements within them.

The sublunar field is the atmosphere and consists of 2 kinds of basic layers. The lower region which is the homosphere associated with water and the upper the heterosphere, where ionization occurs, which is a type of fire. The nature of the world is continuous and is affected by the dynamics of the direction of motion of the superlunar place.

The superlunar field consists of aether, performs a circular motion and surrounds the sublunar field creating all the necessary electromagnetic conditions.

This movement also affects the upper layers of the ionosphere, which also moves with currents in the same direction, rotating with magnetic north as its center, creating currents of ionized air at these levels.

Movement in the sublunar region in the atmosphere is according to density, with the thinner going up and the dense going down.

In the ionosphere the gases are in layers, while from the stratosphere and below the heavier gases are mixed.

10NOSPHERE 800 - 5500 Km

THERMOSPHERE 80 - 800 Km 1200 C > T > 1000 C

MOTION BASED ON DENSITY

-87 C < T < 1000 C

MESOSPHERE 50 - 80 Km -3 C > T > - 87 C

STRATOSPHERE 15 - 50 Km -3 C < T < -57 C

TROPOSPHERE 0 - 15 Km 15 C > T > -57 C





WATER AND LAND

-40 C < T < 50 C

#### WINDS

After the elements of nature and the separation of the atmosphere, for a complete understanding of earthquakes we will also refer to the winds. In the air there are 2 types of vapors caused by the earth, the dry and the wet where they are interconnected as there is no dry without the wet and vice versa.

Wet evaporation is the principle and responsible for rains and the rainwater cycle, while dry evaporation is the cause and natural element for all winds.

So the air, having a dry and moist phase, is sometimes moist and sometimes dry. As these fumes are continuously produced, clouds and winds are manifested according to the seasons.

Sometimes wet-steamy vaporization prevails and sometimes dry and sometimes smoky vaporization.

So we have years that are rainy and wet but also dry years with winds, either locally or on a larger scale.

It is possible that wet evaporation prevails in one area and dry evaporation prevails in an adjacent area, which causes locality in the phenomena.

So when the rain forms the wind stops, while after the rain it starts again more strongly.

These phenomena cause the winds to be mainly North or South due to the movement of the sun from East to West.

When the sun approaches, evaporation of moisture is caused, while when it leaves, rains and storms occur.

Wind movement is caused from top to bottom.

As mentioned, the superlunar place moves in the direction of the etheric field in a circle. The lonosphere in the sublunar locus, specifically its upper limit, touches the superlunar area and takes a component of this motion.

In combination with the position of the moon and the sun at any moment, concentrations and currents of the noble gases and hydrogen that exist there are created.

This creates the so-called atmospheric pressure from the ionosphere in the lower layers, and is the basic principle of the winds in the lower layer of the atmosphere, in the troposphere and occurs before the winds are felt or manifested.

At the same time, vapors from the earth, whether dry or wet, also make their upper cycle in phases.

All of the above contribute to the fact that the winds are in a mostly oblique direction and not from North to South or the opposite.

In the same way that a river is formed, a wind is formed by the combination of many dry phase vapors.

That is why where they start they are weak, while when they advance they blow stronger.

The sun sometimes stops and sometimes stirs up the winds and the rains.

When the fumes are few, with its heat it neutralizes them and breaks them up. It also causes a new vaporization by drying the earth first accumulated great secretion.

So with the speed of drying the sun prevents their formation.

Depending on the geographical location of each place and the season, in combination with the atmospheric pressure there caused from above, corresponding percentages of wet and dry vapors are created.

These cause rains and winds respectively in individual areas, while neighboring ones can come into contact causing the corresponding weather phenomena.



#### PULSATING ELECTROMAGNETIC FIELD

The pulsating electromagnetic field that creates the sun and moon affects the waters of the seas as we have seen in the tides.

It affects the air in the same way.
We observe this particularly in caves.
Sometimes the wind comes from under the earth to the outside and sometimes from the outside to the inside making the cave in a sense whistle.
Where does this wind come from and where does it go?

The truth is that the earth has many internal cavities in the soil and subsoil which contain enormous amounts of air, both in the dry and in the wet evaporation phase.

Depending on the atmospheric pressure conditions which change periodically, vertical currents are created, sometimes from below upwards - as we are used to thinking of vapors -and sometimes from the surface of the earth towards the subsoil, as in the case of low tide. So these vapors that circulate like vertical currents and alternate direction can be dry as well as wet.

When dry vapors all the way up create winds due to atmospheric pressure. These dry ones which are from elements of fire rise into the ionosphere and create celestial phenomena. When liquid vapors all rise, clouds are created and we have the rain water cycle.

When dry fumes pan downwards collect and accumulate in underground cavities with the risk of their saturation and their ignition.

When liquid vapors all descend, they accumulate in pits in the subsoil with the risk of explosion due to their compression and friction with the dry vapors, the possible underground water and the relief of the soil cavity. Also as we have seen in book 4 it affects plants, fish and animals in general.

The moon from new to full favors the upper course, while from full to new the lower.

The passage of the sun from the meridian of each part favors the upper course, while the passage of the moon from the meridian favors the lower one. So we see that there is an inextricable relationship between the pulsating cosmic electromagnetic field and atmospheric pressure and the creation of winds.





## **Dry and Wet Fumes**

In the lower part of the sublunar place, in the homosphere, where all the components of the air are homogeneously mixed, the air is moist and cold and has an inseparable relationship with the element of water as all weather phenomena occur there. The air in the troposphere has a percentage of dry and moist evaporation in it. The atmospheric pressure known to us from the weather reports is defined in this layer by the upper layer of the ionosphere, which sometimes compresses it a little and sometimes much more.

In the upper part of the heterosphere, where the noble gases, together with atomic oxygen and hydrogen are stacked in layers according to the density of each gas, the air is hot and dry, having the element of fire in it. There we have the celestial phenomena. So in one area we have the cycle of water with the weather phenomena while in the higher one the cycle of vapors where we have the celestial phenomena such as comets, meteors, explosions, blinds, shooting stars, black explosions, the band of the galaxy at the galactic equator and the north auroras, all of which occur in the high layers of the ionosphere, in the upper part of the sublunar region, as we have said in detail in the 3rd issue.

So these fumes are emitted from the earth either by natural or man-made factors. They are divided into wet ones, when it comes to water and the water cycle, while dry ones, when it comes to fumes of flammable materials, gasoline, oil, etc., which make a larger cycle, the cycle of (dry) fumes as they reach the limits of the subselenium place with the ether. But they don't just make this cycle, nor do they evaporate all the time.

#### The Breath of the Earth

The winds that blow below, and the vapors brought to the surface of the earth by the ground, are directly affected by changes in the electromagnetic field that affect the atmospheric pressure and temperature, just as water is in the case of the tides, which we discussed at length in book 4.

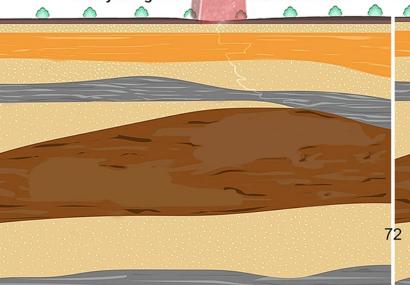
They change direction and sometimes go up and sometimes down, since the porous earth has cavities below and creates negative pressure by phases in the air of the earth's surface, just as it happens in the tide phenomenon with the waters.

#### Exhalation Phase.

We have low atmospheric pressure and evaporation of water vapor and fumes upwards, towards the troposphere if it is vapor water or towards the ionosphere if they are gases from flammable materials.

#### Inhalation Phase.

We have high atmospheric pressure and evaporation of dry and wet fumes - water vapor and fumes from flammable materials downward, towards the subsoil.



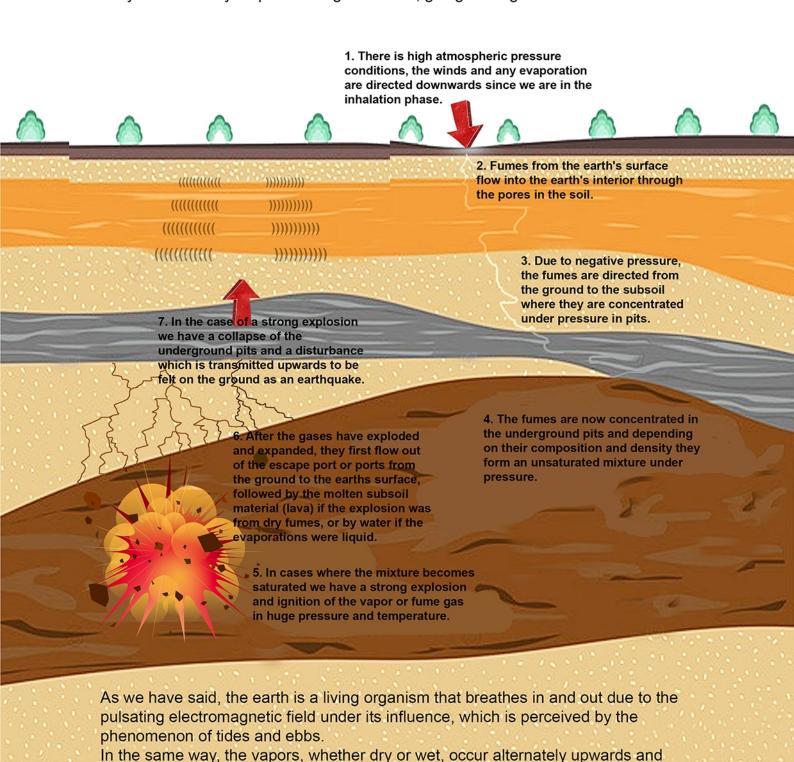
# **Underground Cycle of Fumes**

downwards periodically.

As we saw in the 3rd issue, there is also the underground water cycle in addition to the well-known one that we all know.

This is also the case with fumes, dry or wet, which also make an underground cycle. Fumes generally occur when we have solar radiation and generally heat, while at night and in a cold environment they seem to stop.

They don't actually stop but change direction, going underground.



# Earthquakes – Seismic activity Fumes (dry and wet ones) directed downwards, i.e. towards the subsoil, are responsible for earthquakes and seismic activity. As the subsoil is spongy and depending on the area there are small as larger assistice.

the area, there are small or larger cavities, which can accumulate large masses of dry as well as wet fumes. As conditions at the surface of the earth favor inhalation of fumes from the surface or the ground to the subsoil, there is a possibility that more fumes will enter into a cavity causing the unsaturated mixture of gasses there to become saturated. In this case there is explosion and ignition with the presence of monoatomic oxygen, just as is done with celestial phenomena in the ionosphere. These explosions change the shape of the pit in the subsoil, as a result of which the ground transfers vibrations and shakes and we feel

the earthquake on the surface of the earth.

Earthquakes are also caused by wet fumes but

mainly by dry ones.

If water gushes out after the earthquake then it caused from liquid fumes. Saturated trapped moisture with air in the subsoil that has exploded. Earthquakes that combined with heat emission and volcanic activity have occurred due to entrapment of saturated dry vapors in the subsoil, flammable gases under pressure that ignited, released, created high temperatures, melted other elements of the subsoil and soil making all this material lava, changed the form of the subsoil, making the soil on the surface to tremble. The land – the soil, by its nature is dry in itself. Because of the rains, a lot of moisture is stored inside it, and then due to the heating from the sun, we have the production of many gases both outside on the surface and inside the ground. These gases sometimes flow outward from the ground, and sometimes inward towards the subsoil periodically, which depends on the temperature and the radiation or not of the sun and the moon, and on the atmospheric pressure defined by the ionosphere in the lower layer of troposphere. The influx of vapors from the surface and from the ground to the subsoil is the cause of earthquakes. Saturated dry fumes cause ignition and fire.

Fire when accompanied by gas becomes a flame and moves quickly. So we have an extensive explosion in a large part of the underground, which causes the ground above to shake and move or even give way, as a resault we feel the earthquake on the surface of the earth.

### **Seismic Areas and Favorable Conditions**

Areas with sea currents, with spongy soils and narrow cavernous places in their subsoil, with underground grooves, have a higher probability of a larger earthquake. Spots with spongy subsoils know many earthquakes, in seasons of no rain or a lot of rain spring and autumn as summer due to heat and drought and winter due to ice are periods of calm.

During periods of heavy rain there is a lot of compressive force in a small space inside the subsoil, the water takes up a lot of space and does not leave the necessary space for the incoming air, which eventually exhale from the subsoil violently, either under ignition when it comes to dry fumigation, or with moisture if it is liquid.

When warm vapors flow into the soil, the outflow of air due to the moisture creates condensation and cold.

Depending on the size of the cloud of fumes quantitatively, on its qualitative composition, and on the relief and shape of the subsoil and cavities, we have strong or milder ignitions - explosions of this cloud underground, and therefore strong or mild earthquakes.

# **Types of Vibrations**

Depending on the way we have the accumulation of fumes underground, we have different types of vibrations during their combustion.

When this gaseous stream is large and wide, when it ignites there is a horizontal vibration which is more frequent, while in areas where we had storage of the fumes in depth we have a vertical vibration.

In areas where the incoming wind with the fumes has difficulty passing and does not find a way out, we have greater vibrations.

# **Duration of Seismic Activity**

An earthquake does not stop immediately but the phenomenon is prolonged with aftershocks for about 40 days and up to 2 years.

This is because the source that gave the vapors (dry or wet) and gave the impetus to the wind there could not consume all its matter at once.

Until all the remains of this matter are consumed, the vibrations continue to decrease. The locality of the earthquakes depends on the subsoil space available for the burning gas to escape.

# **Summary**

In other words, the cause of earthquakes is the same that causes comets and meteorites.

The dry vapors, with low atmospheric pressure and when the wind helps them, rise to the ionosphere and after being compressed, descend and ignite in a diagonally downward direction, as a composite of the straight motion due to density and rarefaction (up - down) and its tangent circular orbit of ionospheric gas currents, which currents are created due to the contact of the upper layer of the ionosphere with the superlunar locus that rotates creating the electromagnetic field below.

When the wind does not help the vapors to rise and combined with high atmospheric pressure, it pushes them through the porous soil downwards, towards the subsoil.

There they sometimes condense and ignite.

We would finally say that all these phenomena, comets, shooting stars, meteors, celestial colored flares, black or blue flares like gaps on the sky, the intensity and undulations of the light of the aurora borealis, seismic vibrations, landslides and volcanoes, are purely meteorological phenomena.

These phenomena depend on the atmospheric pressure, the temperature, the direction and temperature of the winds, the percentages of wet and dry vapors in the air and the morphology of the ground relief and the subsoil. Their prediction is possible especially with the modern means of collecting the above data.

Also the study of geology with the study of the moon is possible and offers us a lot of information in relation to the soils and their morphology as well as the qualitative composition of the subsoil by region.

The atmospheric pressure exerted by the ionosphere on the lower layers of the atmosphere acts as a lever for the presence of all the above phenomena. It depends on the intensity of the electromagnetic field in relation to the position of the sun and the moon on the upper level, which we saw how it works analytically in the tides chapter. As we saw in the 4th book the tides, where we have the natural respiration of the earth in relation to the water, so here we have the natural respiration of the earth in relation to the gases. The phenomena we saw are therefore the results of this operation and are inevitable.





# Volcanoes - Volcanic Activity

The temperatures that develop mainly in the dry fumes when they are trapped and ignited in the subsoil are very high. Any form of fire or lava from the subsoil is due to this phenomenon as the flame of vaporization burns materials from the subsoil according to its composition and alters its texture.

If conditions permit, this entire mass of gases is released first, followed by a mixture with molten subsoil materials, which were melted by the explosion of the trapped dry fumigation gas under pressure in the subsoil in the space it occupied.

In other words, lava does not exist everywhere under the subsoil, it is simply created in places and at times in candidate parts of the subsoil that meet the conditions of accumulation, compression and saturation of dry vapors from the ground or from the surface of the earth.

Air is a thin fluid element and escapes more easily.

After the initial expansion of the compressed flammable gas passing through anode passages to the surface, the decompression of the molten solid elements that due to heat turned into a liquid, what we call lava, follows. The composition of the lava has to do with the elements of the subsoil in question.

Some places accumulate for a very long time, many more chances for the conditions for the concentration of flammable gases to occur in their subsoil due to its geological form, its composition, the geographical position of the point, gas currents and atmospheric pressures in the area, etc. Those are places where volcanoes were created and are still being creating.

## No Lithospheric Plates

According to what we saw in the chapter on Pangea and also in the chapter on earthquakes and volcanoes, tectonic plates do not exist. Pangea did not moved and is Terra Vista. About 12.000 years ago it was a single huge continent with all kinds of climates. The ground of the earth is stable and uniform without lava from underground except the places that the lava created as we saw. The changes that occur are from floods and earthquakes, landslides and the rise or fall of the sea level and all that these phenomena bring with them. Earthquakes, as we said, are caused by the underground cycle of dry or wet

The points where they are marked as boundaries of the lithospheric plates and are candidate places for earthquakes, are nothing more than subterranean zones of the subsoil where there are large cavities and also their climate and geographical position readily permit the inflow and great accumulation of dry and moist vapors inside them.

Moon and Weather Predictions

vapors.

Let us mention here that these changes in atmospheric pressure each time cause a different predisposition of the vapors inside the earth, which is recorded in the image of the moon each time, as we observe it.

On the one hand, it is the temperature and the dryness or humidity of the atmosphere that affects this event, but it is also the predisposition of the subterranean vapors, dry or wet, that contribute to the final image of the moon in terms of color shade.

We have observed summer full moons to be more reddish and yellowish, while winter ones are whiter or towards blue. The background of the earth as seen on the moon. It looks solid with holes. The different colors indicate the different composition of fumes, dry or wet inside the soils and rocks of the



\*The subject of dry and wet fumes continues on page 122, where the rest of the phenomena they cause are analyzed.



The spectrum of visible frequencies goes towards the red when dry vapors predominate, causing winds, drought and heat. When wet prevails, blues and purples prevail, which are combined with precipitation and humidity with lower temperatures. When we have frost, none prevails and so the moon appears brighter and whiter. So we understand that by looking at this thing, we can make weather prediction for the upcoming weather by predicting rainy weather, humidity, winds, drought, cold, heat.





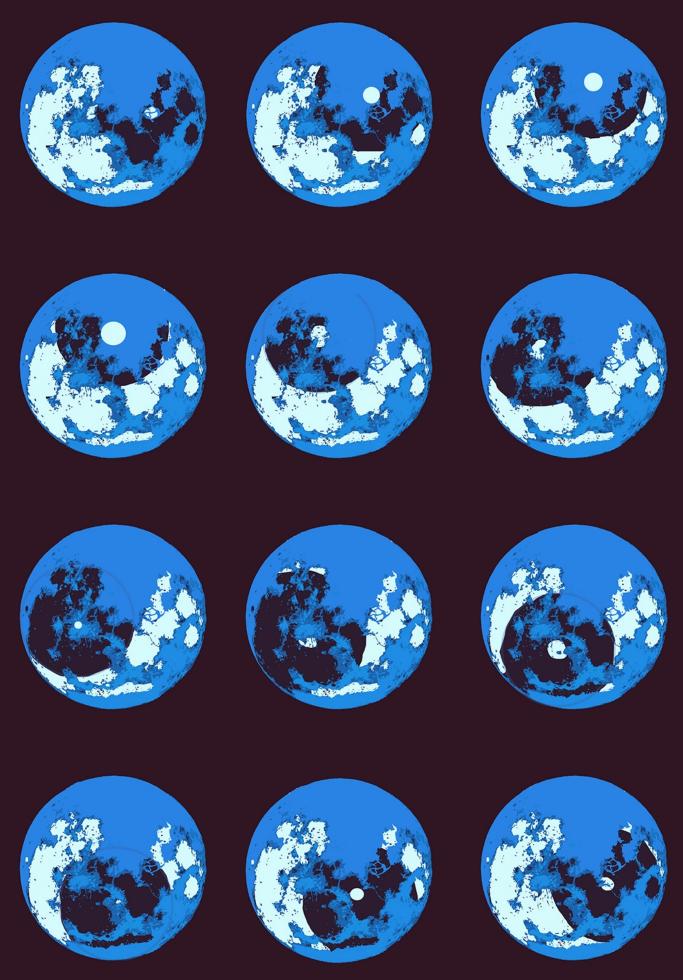
# EPOCHS EVENTS AND TIMELINE



# THE GREAT CYCLE

The position of Magnetic North changes and makes a complete cycle within 26,000 years. This is how the 12 cosmic ages are created, each of which lasts 2166.7 years. In every season we have the movement of the Magnetic North and the climatic zones. Thus, for each season we have another part of the earth thawed, with a different arctic zone. Correspondingly, we also have a movement of the equinox. Thus, there is aging but also regeneration of all regions, seas and lands. The center of the big circle, maybe it will also make another bigger circle, in a bigger unknown, making the whole movement of the magnetic north, spiral.





# Configuration of Geophysical Relief

The earth, as we have said, is a living organism, with areas geologically new and others older, which change from time to time.

Thus there are all seasons for all soils in all regions.

The movement of the sun in each cosmic age makes a proportional radial movement in relation to its respective center and besides creating day and night, it creates the seasons and climatic zones each time in other places.

In each season due to the different position of the Magnetic North the climatic zones cover different areas.

In the areas near the new location of Magnetic North, we have floods during its transfer there.

Areas that were frozen around, when the ice melts springs and rivers are created which flood the nearby areas.

In each season, the relief and the sea level change.

In each season there are areas with a temperate, semi-tropical, tropical or semi-arctic and arctic climate.

The climate changes periodically and in phases when we have the transition from season to season.

Some seas have some elevation difference between them due to the changing electromagnetic field, river embankments, topography and undersea currents. (For example the Mediterranean is lower than the Indian)

The sea level depending on the season rises or falls which depends on the amount of total sea water as a liquid element.

# The amount of total water contained within as a liquid element rather than frozen depends on:

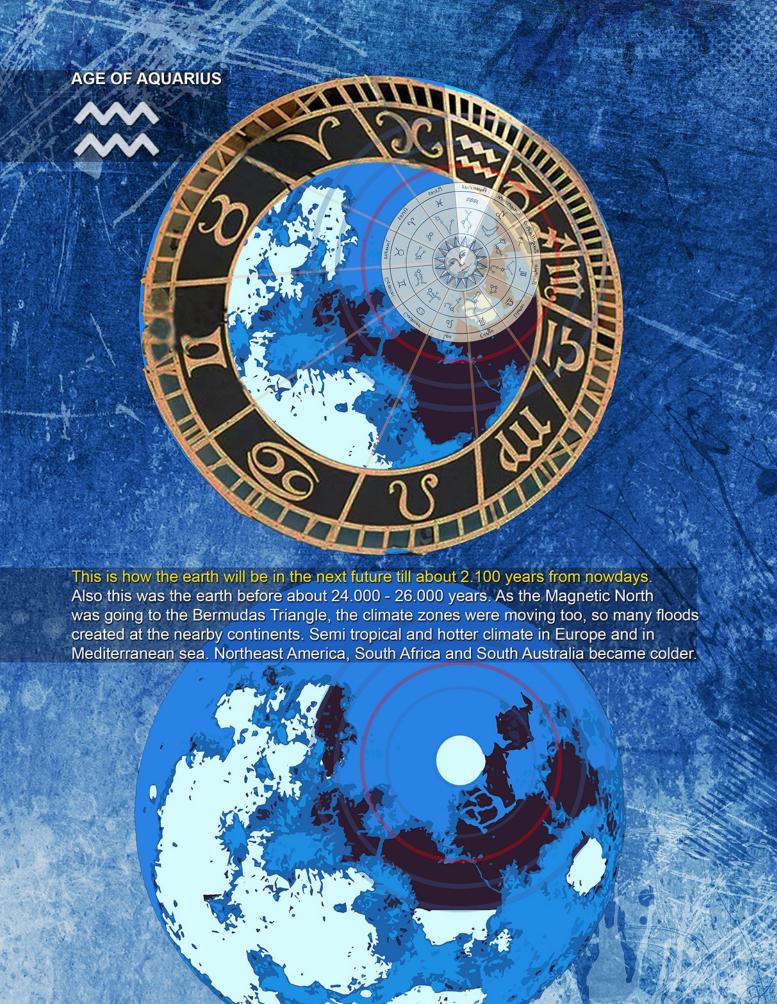
A) The waters of surface rivers.

These depend on the change that the place has undergone from time to time. When an area goes into the spring season, the ice when it melts massively causes the rivers to have a lot of water, while when an area goes into the summer season, these waters decrease.

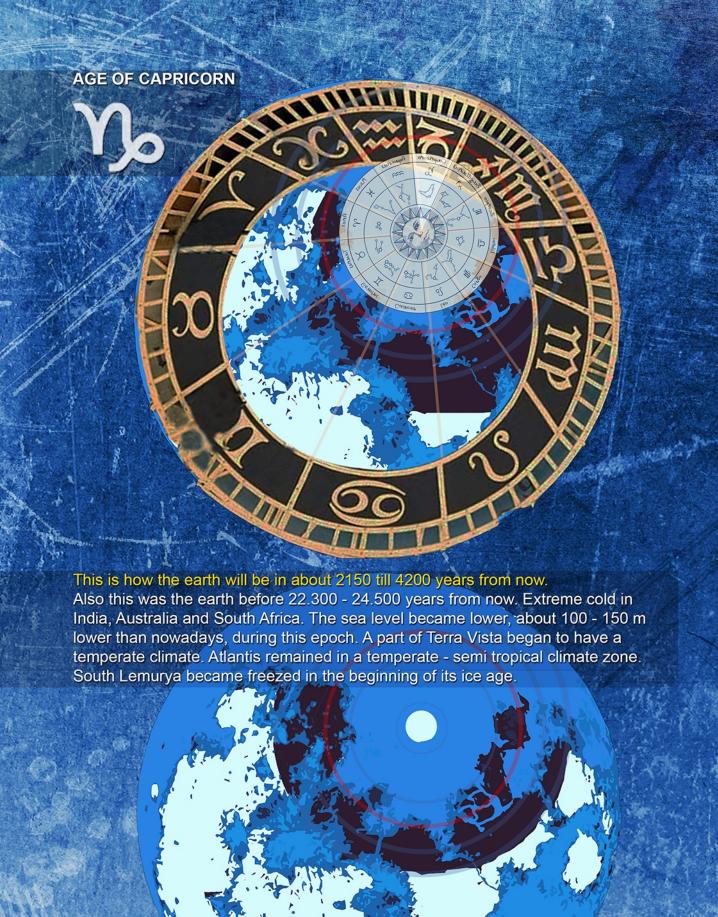
In an area's winter terrane, the landscape turns into an ice age.

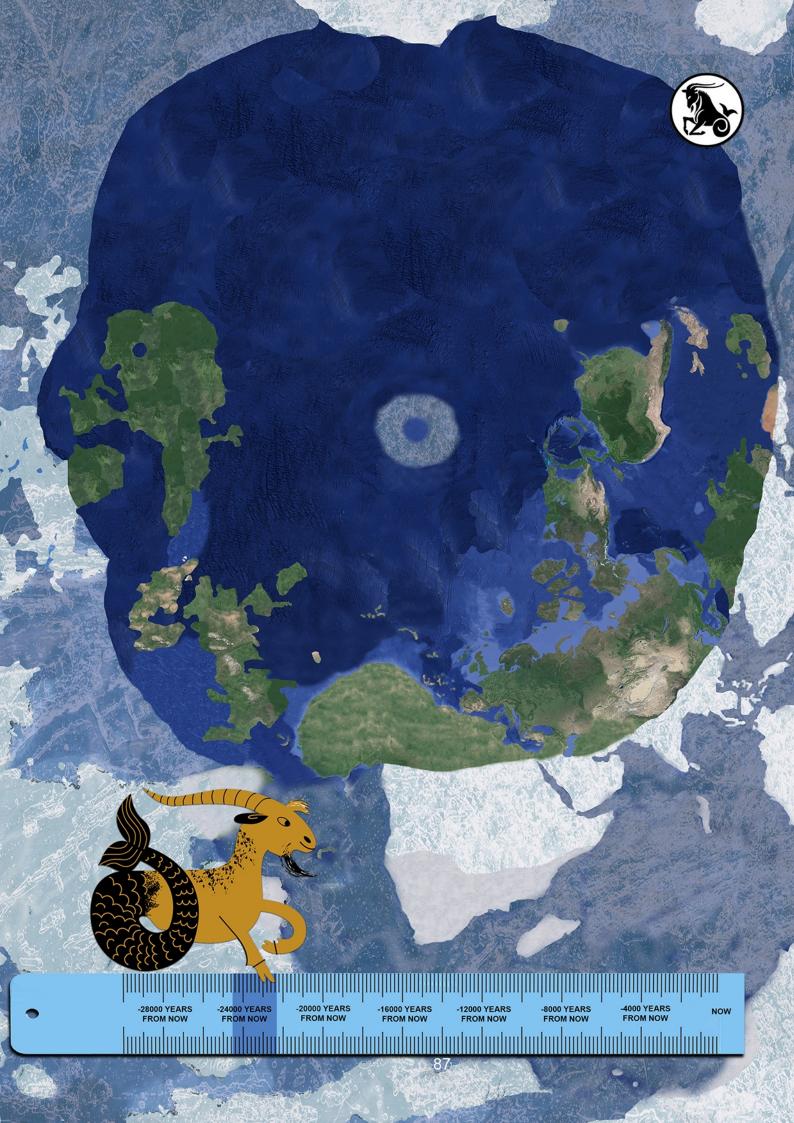
- B) The waters of the underground rivers that flow into the sea which are also affected by the above.
- C) The position of the wider area where the Magnetic North is located each season.
- D) The location of the surrounding ice wall delimiting the sea area.
- E) The change of the above positions in relation to the ratio of land and sea in area and the difference of the present era, in relation to the previous one.

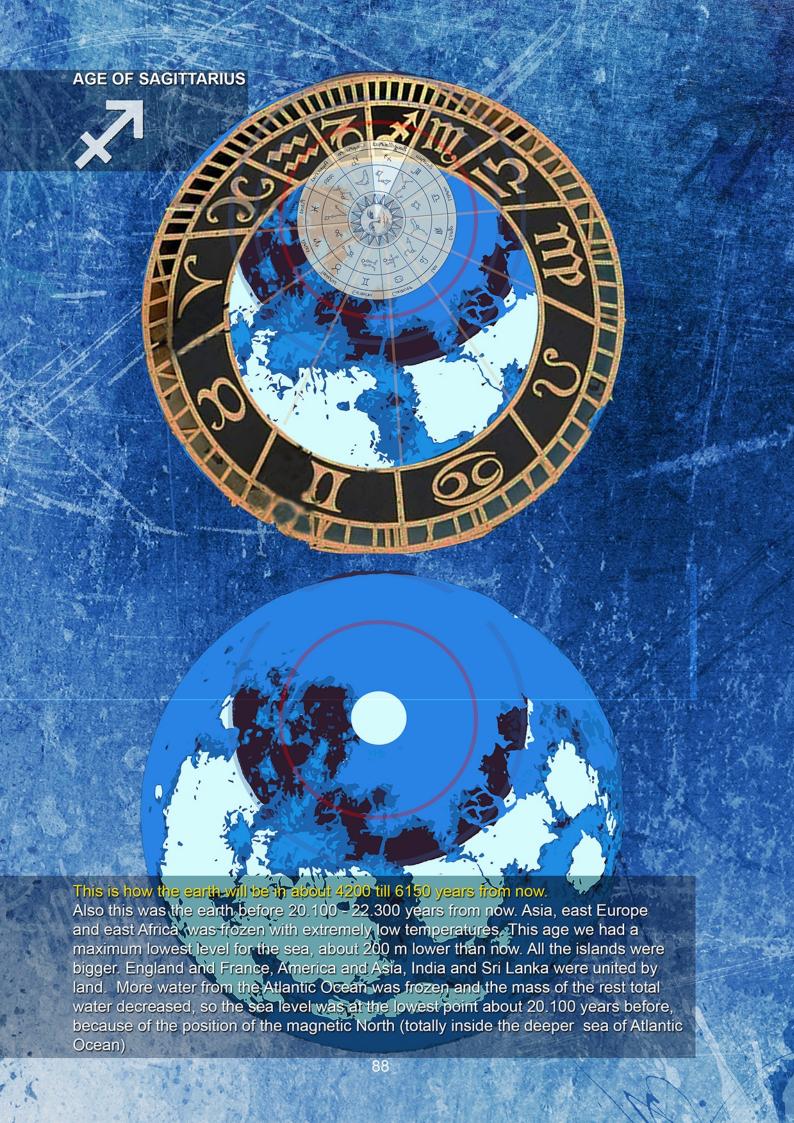
# Aquarius TIMELINE AND ERAS X 18 Ù -28000 YEARS FROM NOW **Epoch of Aquarius** -24000 YEARS FROM NOW **Epoch of Capricorn Epoch of Sagittarius** -20000 YEARS FROM NOW **Epoch of Scorpio** -16000 YEARS **Epoch of Libra FROM NOW Epoch of Virgo** -12000 YEARS **Epoch of Leo FROM NOW Epoch of Cancer** -8000 YEARS **Epoch of Gemini FROM NOW Epoch of Taurus** -4000 YEARS **FROM NOW Epoch of Aries Epoch of Pisces**



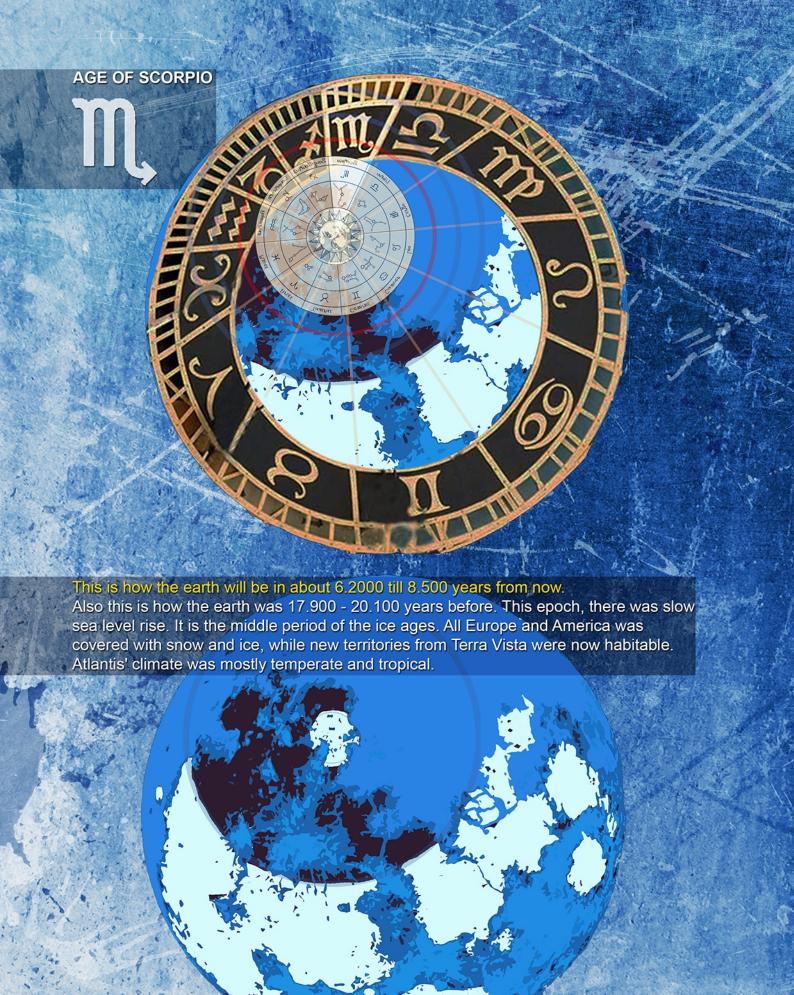




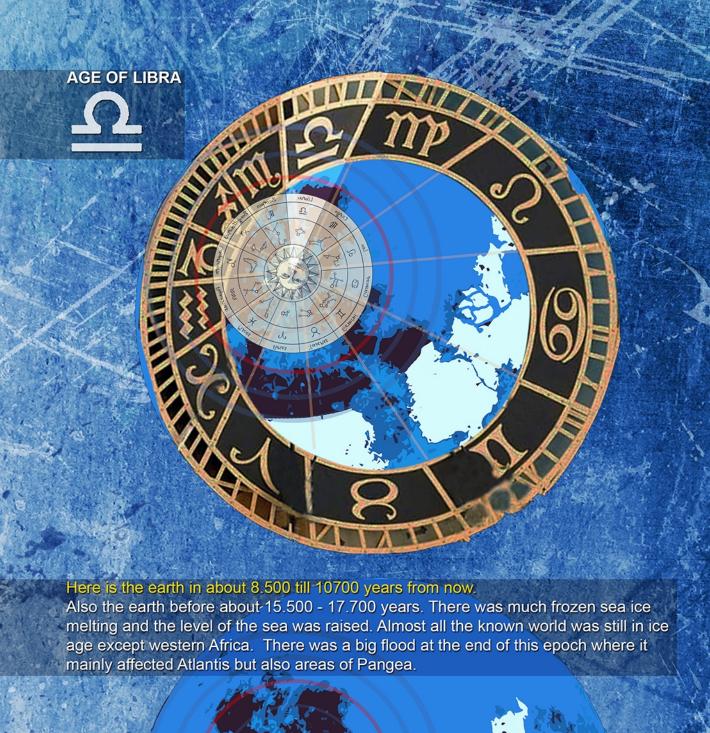




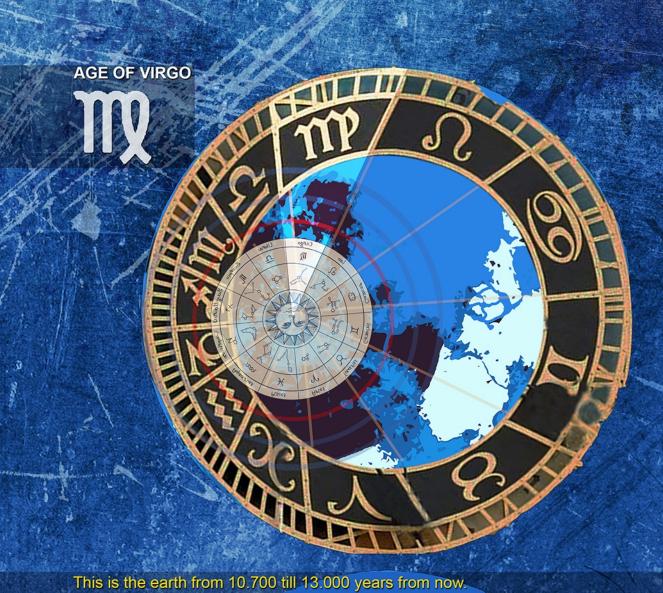




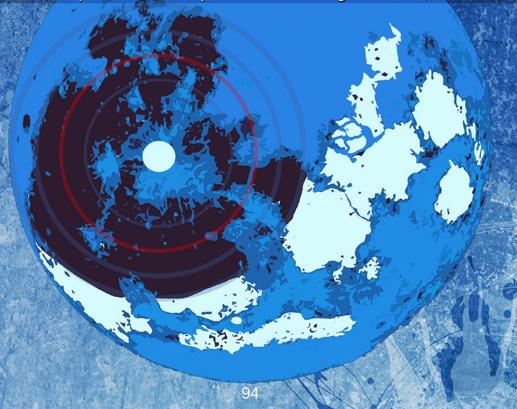


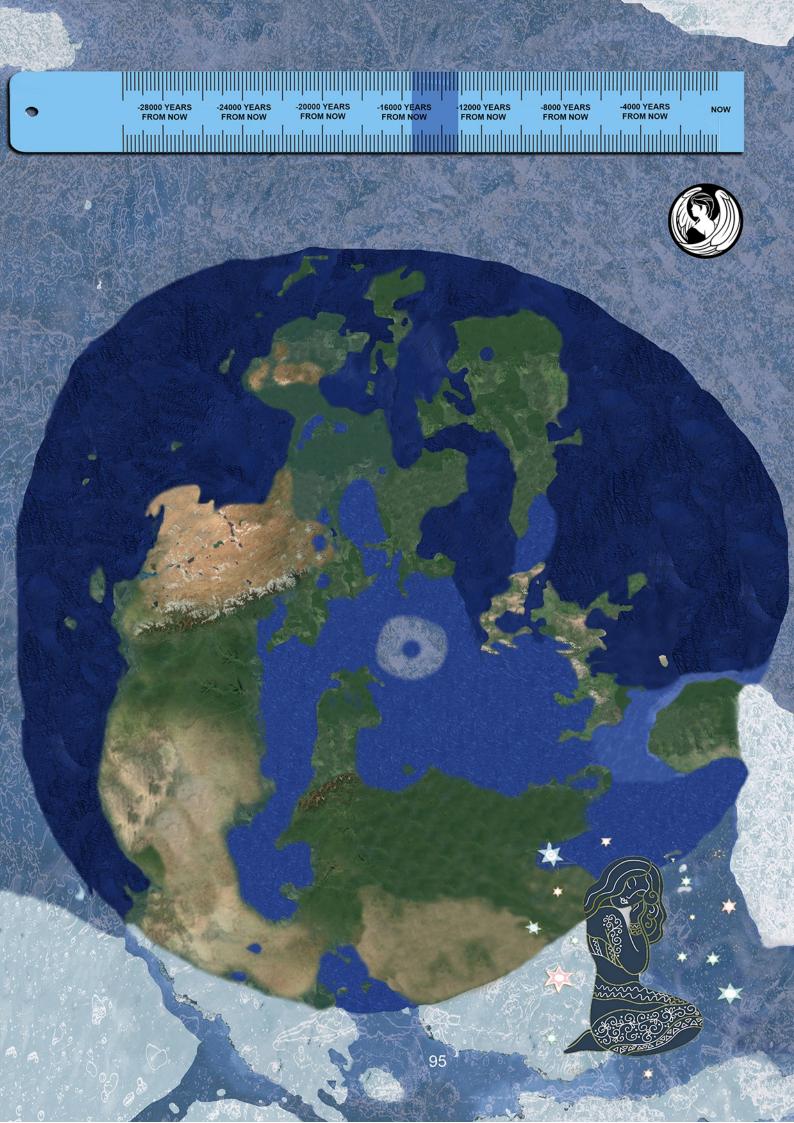


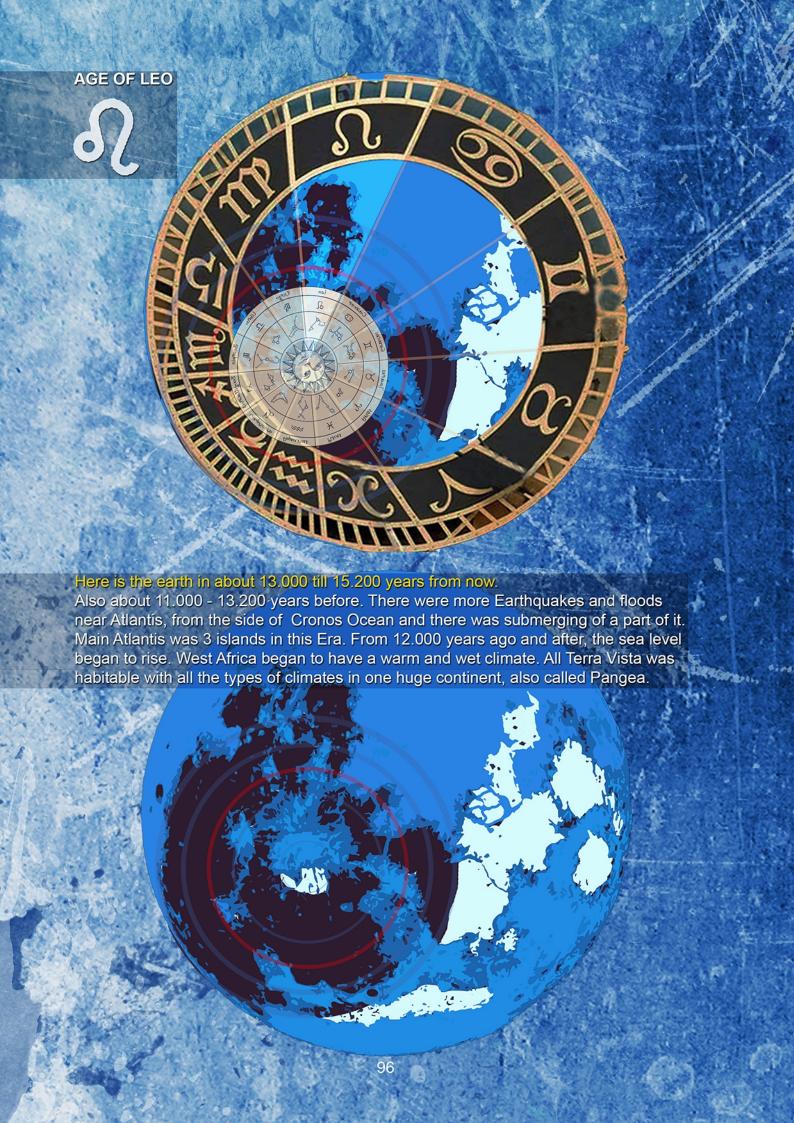




Also the earth, about 13.200 - 15.500 years ago. At the start of that period there was the peak of the flood. This was the Pangea and pro - Atlantis period. It was ice age for theknown continents that were covered by ice and snow in dark. At the end of that period earthquakes started at places near the Magnetic North, like Atlantis.





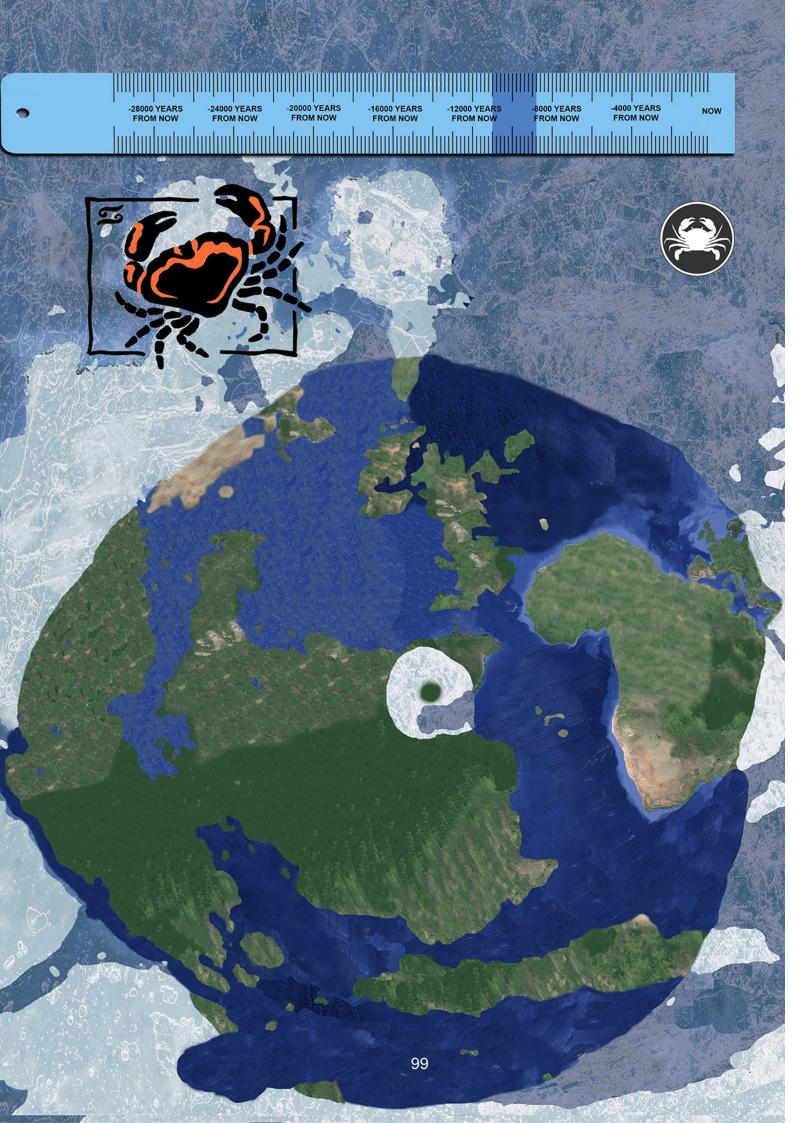






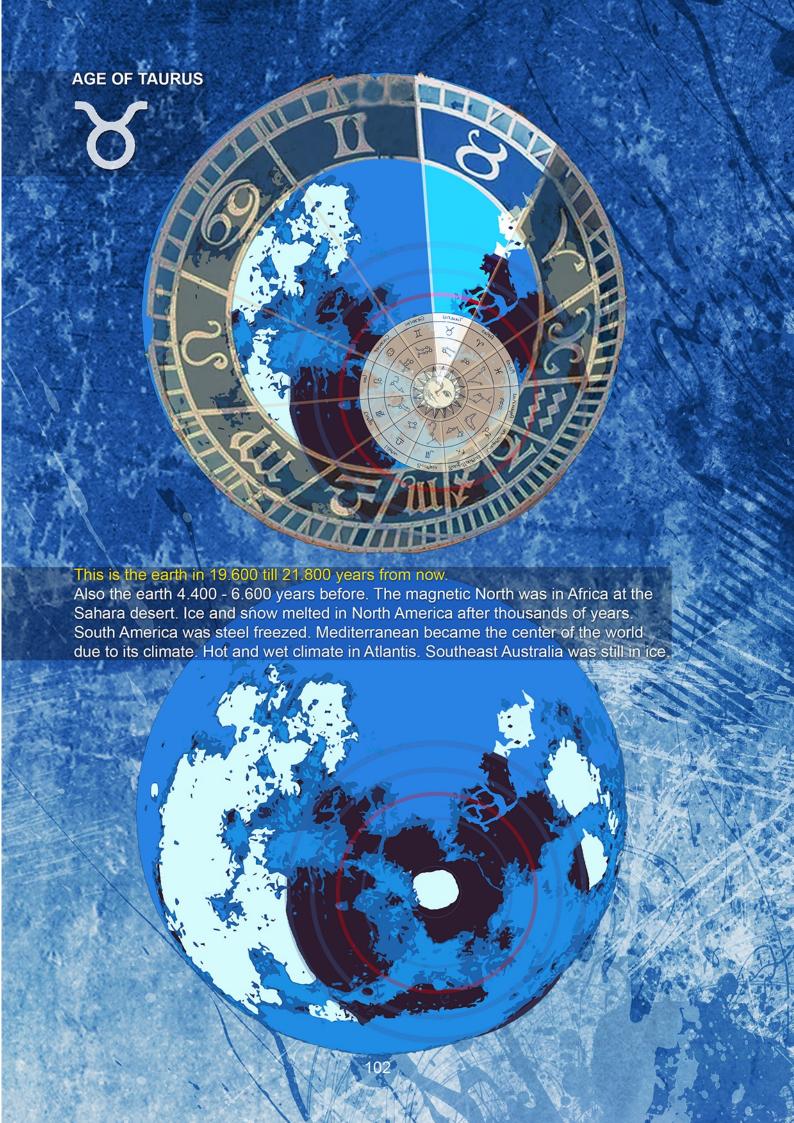
# Here is the earth in about 15.200 till 17.400 years from nowdays.

Also the earth 8.800 - 11.000 years before. Warm and wet climate again in Africa. Mediterranean sea was frozen before, with very low level of frozen water surface, and this period melted and became sea again. Atlantis was habitable again after the period of earthquakes. Ice and very cold climate in Saudi Arabia and Asia. In 9000 years before today, the Mediterranean begins to have a temperate climate and crops begin in North Africa and then in Greece and Asia Minor. The Mediterranean at this time is a closed system and does not communicate with the Atlantic. There was still ice in Scandinavia. The migration of biosystems took place from South to North in the Mediterranean region.







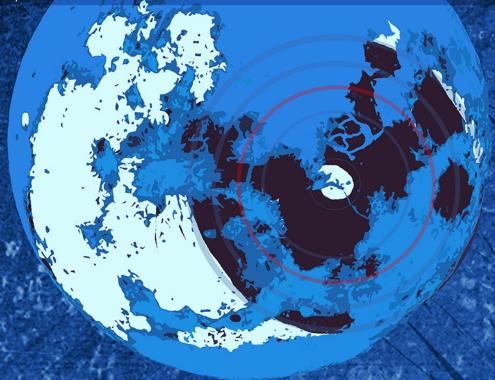






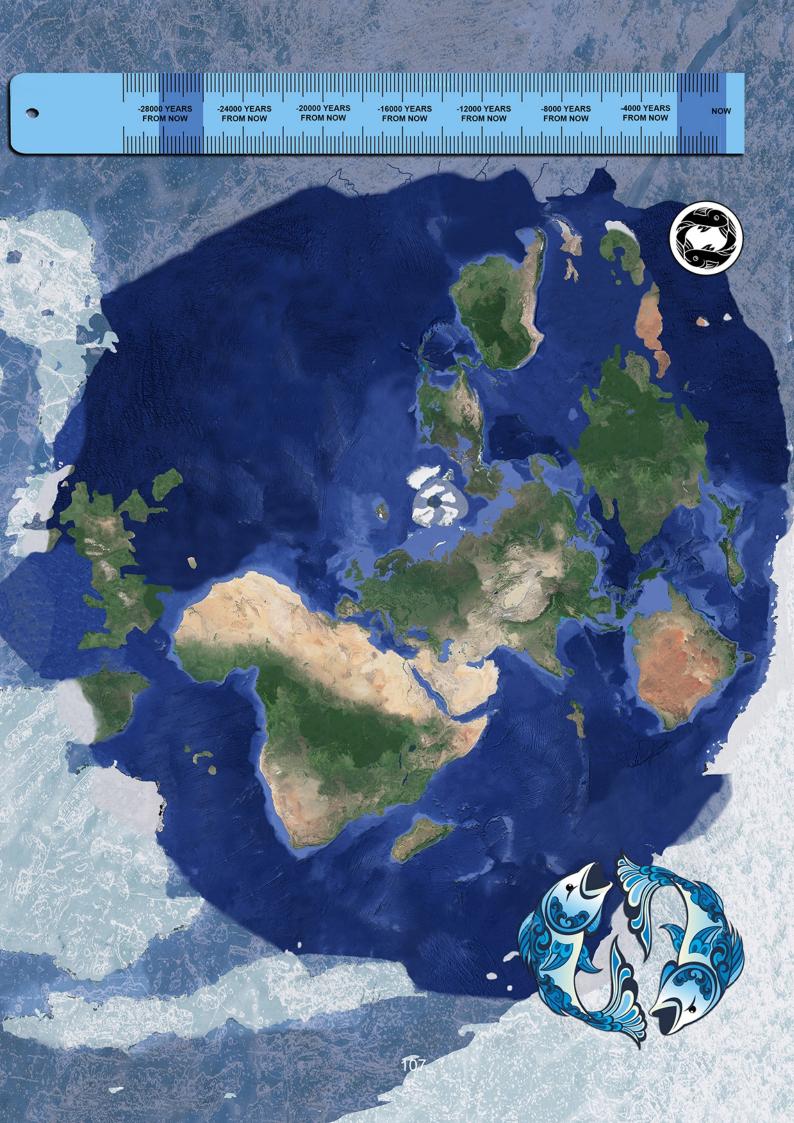
# This is the earth from 21.800 till 24.000 years from now.

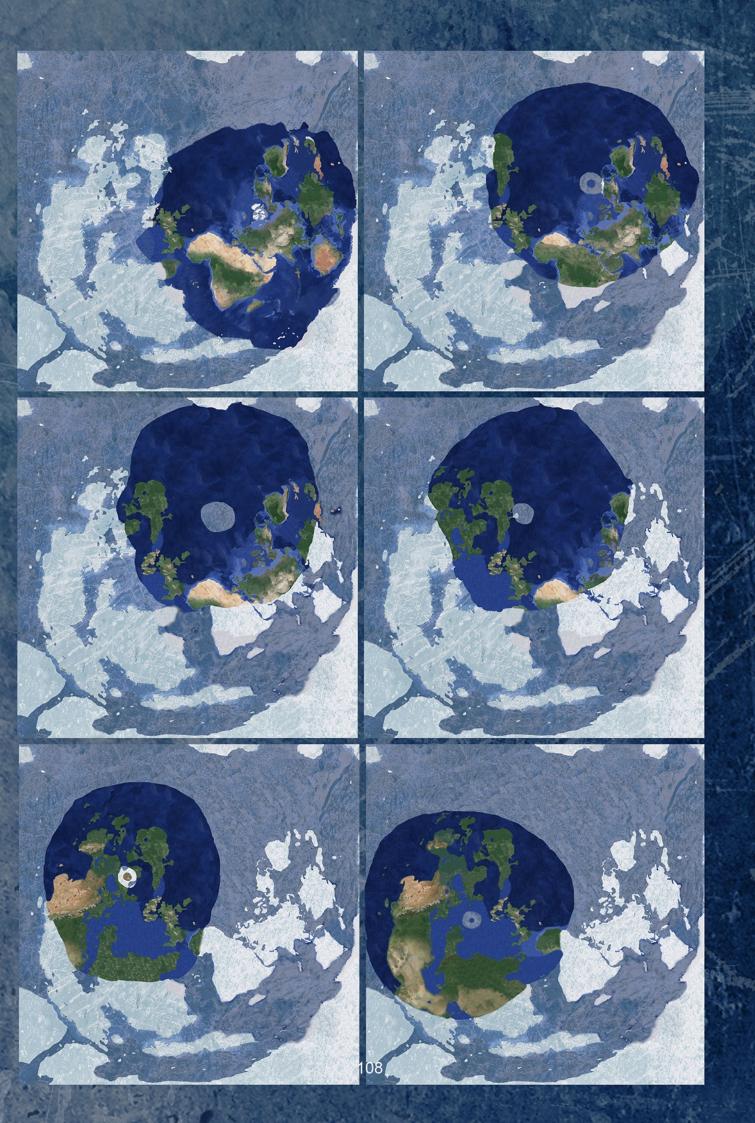
Also the earth before 2.200 till 4.400 years before nowdays. The Magnetic North was at the and the southeastern part of Europe and of Mediterranean Sea, that was with low level frozen water. Half of South America was still very cold and in snow. There was a lot of underground water storage in the mountains of South Argentina, Patagonia, and Greece all this time.

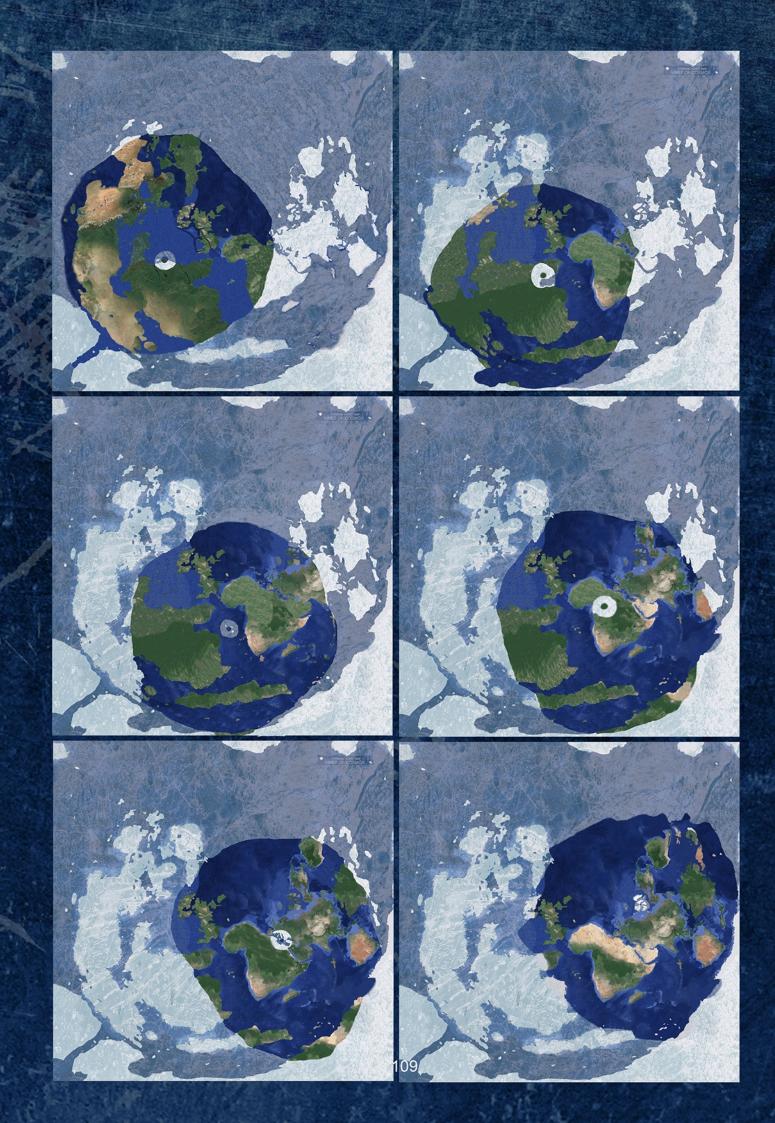


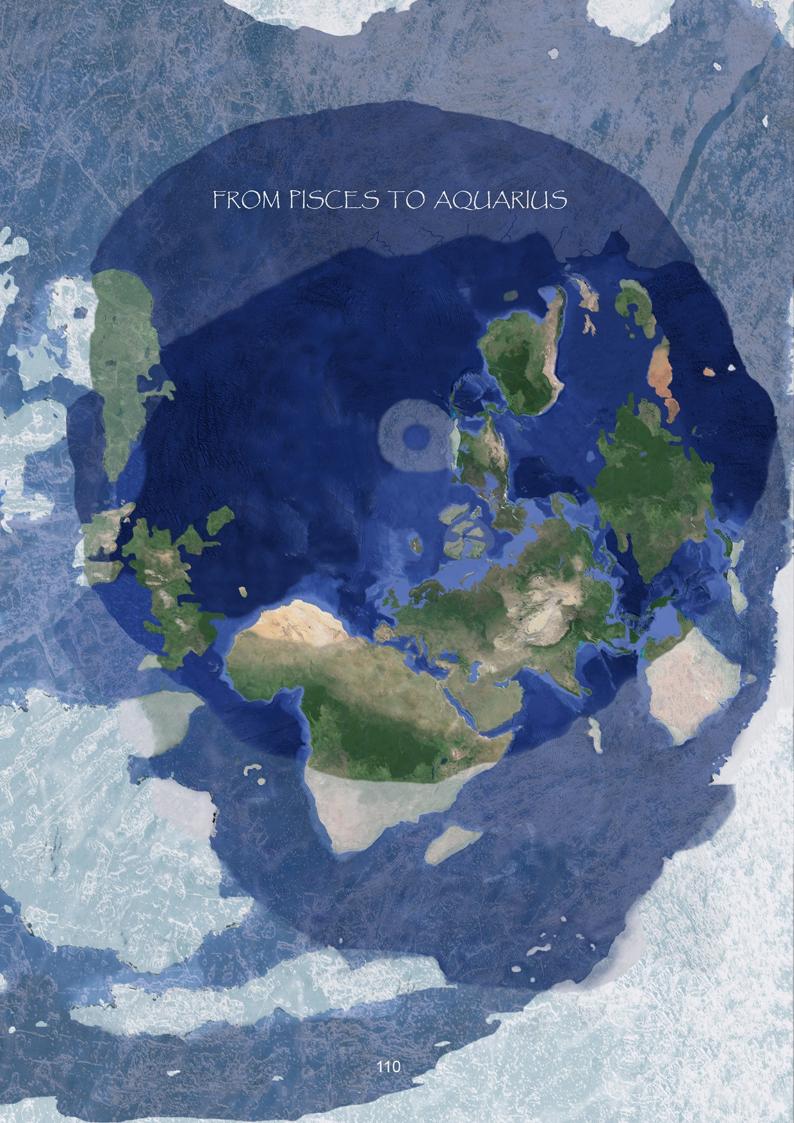




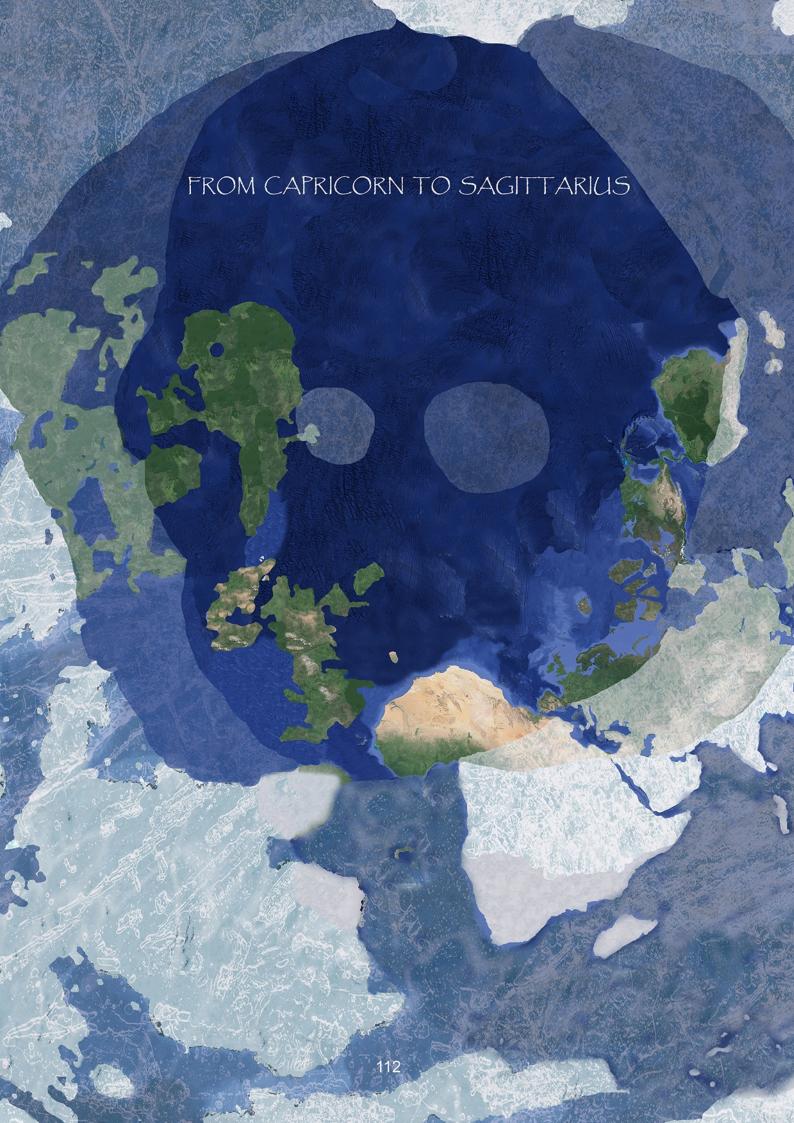








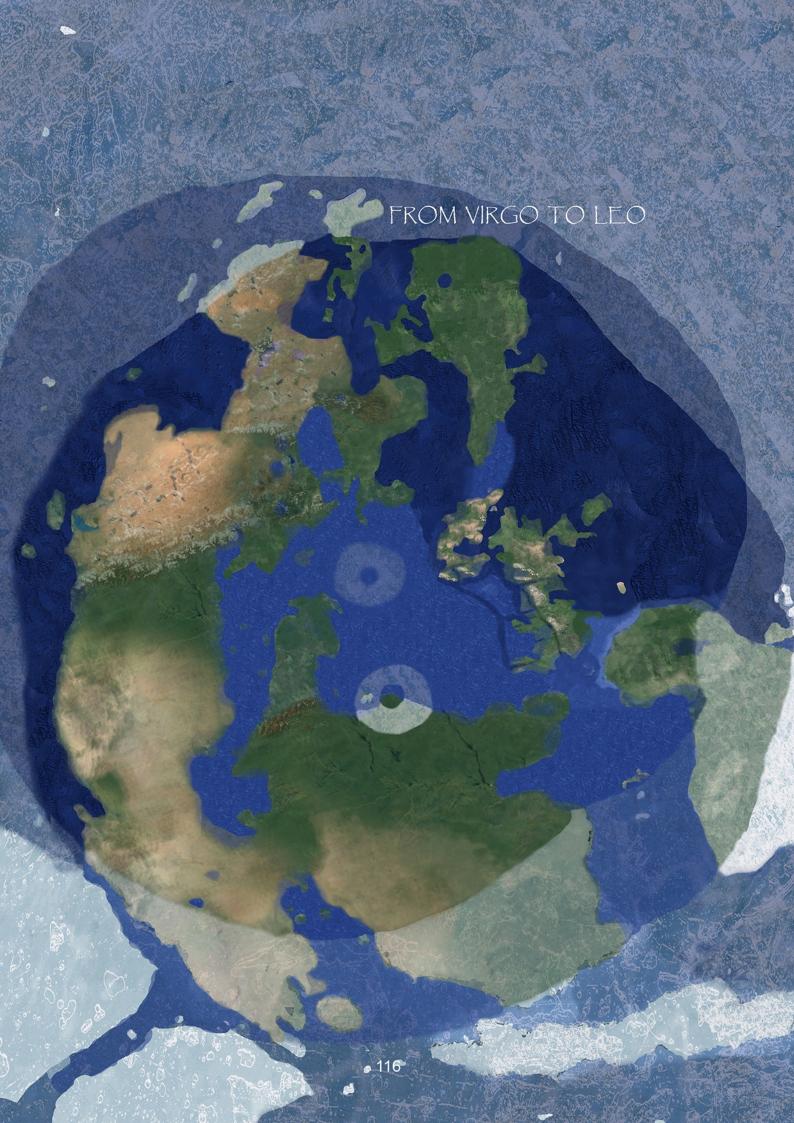


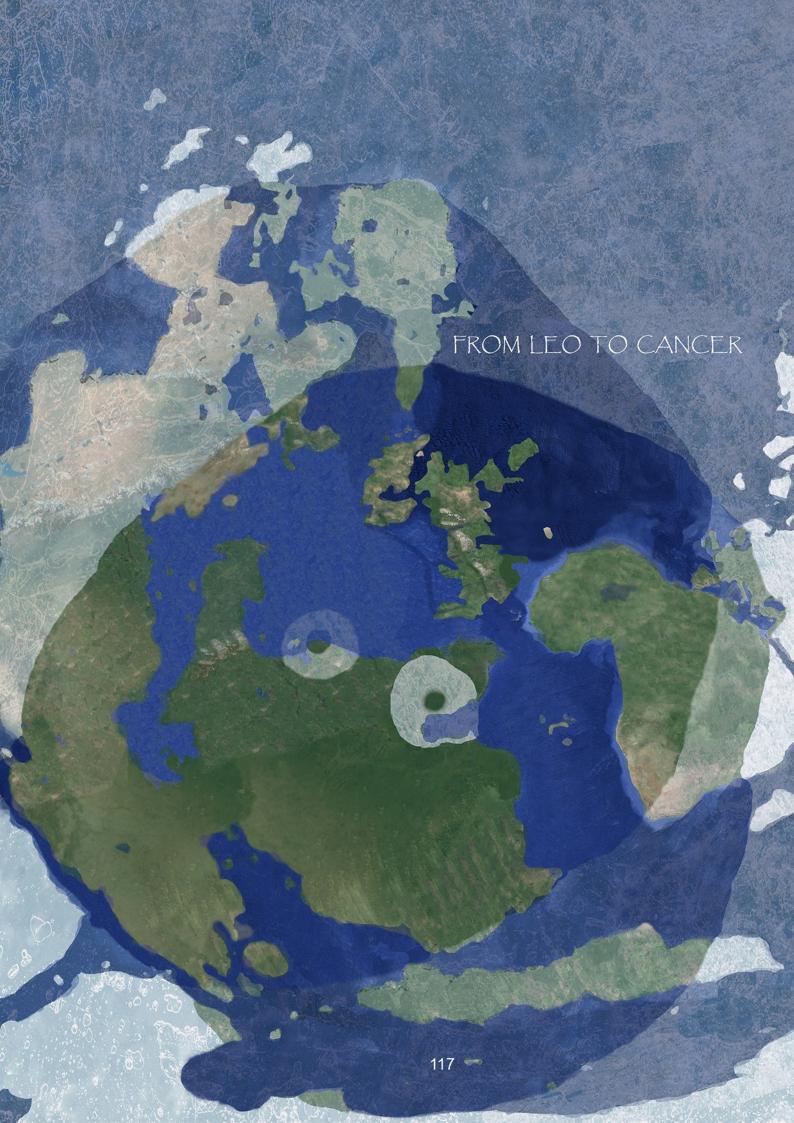








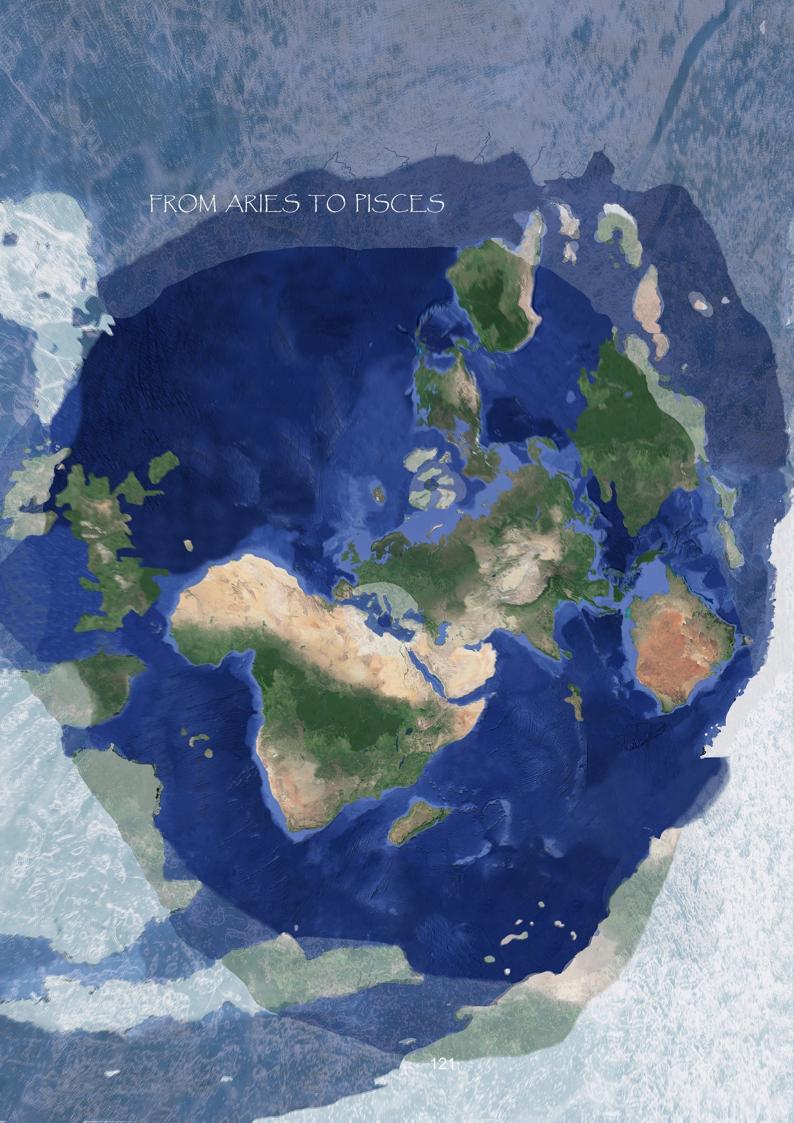












#### THUNDERS AND LIGHTNINGS

These phenomena have the same origin. The vapors, as we said in the chapter on winds and earthquakes, have a dual nature, the wet and the dry phase where they exist in combination.

Condensation of these causes a cloud. As the heat rises upward, there is an amount of dry vapor that is trapped as the air cools and is expelled when it meets the clouds.

As these dry vapors are released they fall violently into neighboring clouds and thunder is produced.

This sound is produced just like the sound of a flame, where the vapor after being compressed is brought to the flame and the wood crackles or dries.

There is a wide variety of thunder sounds due to the varying size of the clouds and the gaps between the clouds.

The wind of dry vapors expelled in this way undergoes incandescence, a phenomenon we call lightning! It occurs after the crash and after the thunder, but appears first as the thunder comes more slowly to our ears traveling at the speed of sound. In other words, we see that it is the same natural substance, the dry vapors, which when they are on the surface of the ground and flow in a certain way are wind, when they are on the ground and in the subsoil in another way they cause earthquakes, and finally when they are in the clouds, as these clouds gather and condense into water, the dry vapor changes and breaks up as it is ejected, causing thunder and eventually lightning.

## WINDSTORMS, TURBINES, HURRICANES

When we have a secretion of the dry vapor in small quantities it diffuses here and there, and when it spreads rapidly it is thin and causes thunder and lightning. If it is solid and dense, a stormy wind is caused which is violent with the speed of emission of the dry vapors creating the force of this wind.

Since both phases are present in the air, when either of them starts to activate, the one in redundancy is emitted by it. If the wet phase prevails, we have rain, while if the dry phase prevails, we have a windstorm. When the outflowing wind from vaporization falls onto another cloud, the front of the stream, is pushed back due to drag and narrowing of the passage. Thus a cyclone or vortex is formed, with the gas stream moving diagonally in directions that do not encounter this resistance. The same happens for the rest of the stream and thus eddies are created. As the wind cannot escape from the cloud, due to the density of the cloud, the gaseous stream of dry vapors – the air – moves in circles in places creating a greater density and therefore a drop in temperature.

In the phenomena of hurricanes we have stormy wind that is produced and cannot be released from the cloud.

This is due to the resistance of the vortex forces and is manifested when the propeller descends to the ground and drags with it the cloud from which it cannot get rid.

This creates a circular motion that when it hits the ground creates a negative pressure and overturns and violently lifts up everything it hits.

If a large amount of thin air is compressed inside this cloud then lightning occurs. Objects that have a high density and resist take damage, while those that have a lower density do not have time to be penetrated by the wind and take no damage.

There is always wind before lightning. The place to be struck by lightning vibrates before the strike, because the wind which is the cause, falls upon it first. Thus we cover the phenomena of thunder, lightning, windstorm, whirlwind – whether of fire or water, and hurricane which are phenomena of the same nature.

#### RECAP

In book 3 we fully analyzed how fumes from flammable materials create celestial phenomena such as comets, meteors, shooting stars, etc.

In book 4 we saw how tides are created by the earth periodically pulling or pushing the waters of the seas.

Also in the same issue we saw how plant juices are affected and moved by the moon and its phases, rising and falling periodically according to the period of the moon cycle.

Apart from fumes from flammable materials which are highly volatile and are dry fumes by nature, air is also divided into dry and wet fumes having both phases potentially in it. Combined with the property of the earth to inhale and exhale due to the pulsating electromagnetic field within that createsthe atmospheric pressure, dry vapors are trapped either inside the earth or in the air. Thus we have earthquakes, volcanoes, lightnings and thunders. The flow of these in the air causes the wind.

Finally, we would say that all these phenomena are meteorological. Thus we have completed the study on the separation of fumes into wet and dry and also what they cause.

### DRY FUMES CYCLE EXAMPLE

Ascending Rays emerge from the Fuego Volcano of Antigua, Guatemala.



Here we will see how the dry fumes create windstorms, turn into thunder and lightning, enter due to low pressure and cyclonic effect into the volcano, where they find other underground fumes there.

A saturation of them is created inside the earth and we have an explosion and escape of the fumes again back on the sky, with these dry fumes becoming lightning again, this time upwards.

During the eruption there is a seismic vibration, followed by the emission of combustion gases from the volcano, and then lava flow. So we will see in an example the continuity of nature and the elements recapitulating everything we have said about these subjects.



Here we have a composite example, where we can see all of this in total. We have a phenomenon where initially dry vapors of air are released from the cloud (1) and lightning is created (2), creating a cyclone effect and low pressure where it occurs (1,2,3).



The lightning that has been created in the air by the decompression of the dry vapors, due to this low pressure and the cyclonic effect in the air, finds a passage in the mouth of the volcano as it moves down (4,5,6).



The underground dry vapors of the subsoil within the volcano due to their saturation erupt, creating earthquake and due to the negative pressure created, they are released from the bowels of the earth on the air creating upward lightnings (7,8,9).



They create explosions due to saturation inside the volcano, reaching high temperatures, melting elements of the subsoil and soil, in the cavity where it was (10,11), while we have elimination of combustion gases on the air (12).



So after the explosions we have an appeal of these fumes. Then we have the flow of lava, i.e. the molten solid elements. In our example, due to the low pressure created by the cyclone (1,2,3), part of the dry vapors that escape from the volcano fall onto a denser cloud and erupt (8,9,10) causing earthquake, volcanic eruption, thunder and lightnings, which due to the low pressure but also the underground origin of these dry vapors have an upward course (7-14).

#### **MINERALS**

To complete the chapter on fumes - evaporations that we dealt with extensively in this book, we will also talk about the effects of evaporations inside the soil, when they are confined in the bowels of the earth.

There, therefore, two categories of bodies are produced, just as in the surface of the earth, since we have the steamy as well as the smoky fumes (wet and dry).

This is how mineral rocks and metallic ores are formed.

Dry evaporation, having the effect of the element of fire, produces the mineral rocks, such as various igneous rocks, red volcanic sulphur, minium, sulphur, and other similar substances.

Most of the minerals are colored dust - sand or stone, such as mercury sulphide.

The mineral rocks, as they have been formed, have spent all the dry vapors they had in them, and so they now only have the wet vapors in them.

That's why they break or crumble and don't bend, don't glow from fire, and aren't penetrated by low frequencies, making them bad current conductors.



All metallic ores are a product of steamliquid evaporation. They are cast or malleable such as iron, gold or copper. All these are produced by the wet vaporous vapor enclosed within the ground and within huge stones, where, owing to dryness, they condense into a single mass and coagulate. As it happens with the creation of dew on the surface of the earth in the atmosphere when they separate from the air, so it happens underground, only the metallic minerals are formed before this separation. Therefore the metallic ores were potentially water, but they are not anymore, nor do they come from a qualitative change of the water. Due to chemical reactions, with the condensation of the trapped vapor vapors inside a rock, we have a transformation of the rock into ore, before the vapor vapor can liquefy. The metallic ores, after they were created, now contain only the dry vapors that remained, which is why they glow, melt, and are penetrated by the low frequencies, being good current conductors.

The earth as we said breathes in and out periodically.

Also porous soils and even stones are permeable to air as well as water, as we saw in the underground water cycle and the creation of springs in book 3.

The air has both a moist and dry nature

The air has both a moist and dry nature, having dry and wet fumes.

The changes that occur due to pressure and temperature inside the earth in a rock, cause chemical reactions that change its crystal structure inside it.

Due to the different conditions of pressure and temperature, but also due to the different composition of the original rocks, we have a wide variety of metallic and stony minerals.

So here it becomes clear, how each evaporation affects the crystal structure, transforming either mineral rocks and crystals, or metallic minerals.



#### **CONNECTIONS AND CYCLES**

So we see what we initially mentioned, namely that materials - gases, liquids or solids - have in them two elements in pairs.

They are one element but another element is also potentially within them, while at the same time they came from a different one!

Like for example a mineral rock, in the past, before it became a mineral it had all the elements in it as a rock. It was earth - land, and contained both wet (water) and dry (fire) vapors - fumes.

As conditions prevailed over dry conditions, burning conditions and very high temperatures at high pressures were created.

This event caused the stone to melt and once the temperatures dropped it solidified again, but this time with a different crystal structure.

This new structure no longer has dry fumes inside.

Thus we see that mineral rocks are elements of earth land and water.



As the opposite is also true for mineral metals.

A rock, before it became a mineral had dry and wet fumes. As the liquid vapors at some point prevailed, and due to the pressure and temperature conditions we had their saturation.

Just before the liquefaction of water vapor in the rock, chemical reactions take place in the presence of oxygen at appropriate temperatures and pressures.

These reactions change the crystal structure of the rock turning it into a metal.

The new structure does not include the liquid vapors inside it since they were spent in these chemical reactions.

This is how metals of all kinds are created, which since they have only dry fumes in them are elements of earth - land and fire.













We see all this recycling but also the continuity of nature and materials, something that makes the world age but also regenerate.

A comet may have once been the cause of an earthquake, rocks on the surface of the earth may have been underground, a wind may have been lightning or caused the formation of mineral rocks, a rain may once have been moisture that created metals underground.

Points that were found under the sea and points of the sea that were thrown up and became land.

Places that had a tropical climate became frozen and frozen areas became warm. As any movement in the sublunar field is up and down, it appears that the changes occur in a circular motion.

Our world is full of circles, since the circle is the perfect shape. Let's not forget that the etheric field also moves in cycle. **SUPERLUNAR** 

AETHER

WET AND DRY FUMES CYCLE



**SUBLUNAR** 





AIR AND FIRE

Dry vapors of flammable materials originating from the earth's surface, with the right conditions, rise towards the ionosphere and the superlunar area, due to their very low density. There after reaching an upper limit, they condense, begin to fall and ignite creating the celestial phenomena.



The air in the atmosphere consists of two types of vapors. The dry and the wet.

In the troposphere, wet causes rain and the water cycle, while dry causes the wind.

#### AIR AND WATER

The liquid vapors, when they prevail, rain is caused.

1000

When dry vapors are trapped in liquids vapors and escape violently due to pressure, they create a glow and a noise we call lightning and thunder.

When dry vapors prevail in the atmosphere, wind is produced.

When we have a large amount of dry vapors with a flow that has to pass through narrow passages of liquid vapors we have cyclonic effects and wind turbulence due to fluid mechanics.



If the explosion was due to liquid vapors, we have the creation of water and a violent attempt to escape from the underground. So after such an earthquake we have a call of water to the surface from some chasm.

If the explosion was due to the dry fumes then we have a huge heat wave and melting of the ground in the places around the explosion.

Combustion gases are created which escape upwards first, followed by the molten materials. Everything comes out of a central outlet that is created, or that already existed, something we call a volcano and a volcanic eruption.

The earth inhales and exhales periodically causing the fumes either to rise from the soil and subsoil to the atmosphere, or to descend from the atmosphere to the soil and subsoil.

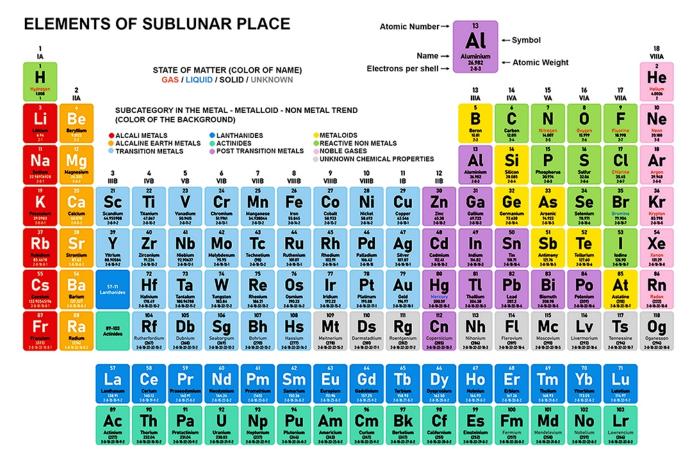


When the fumes go underground they gather in pits of the ground and also inside the rocks.

When the underground mixture of vapors, dry or wet, reaches a state of saturation, then it erupts and we have the creation of a seismic vibration.

Mineral rocks are created because the dry vapors acted there and created chemical reactions in the interior of the rock, making the mineral rock.

Metallic minerals are created because liquid vapors acted there and created other chemical reactions, turning the rock into a mineral metal.



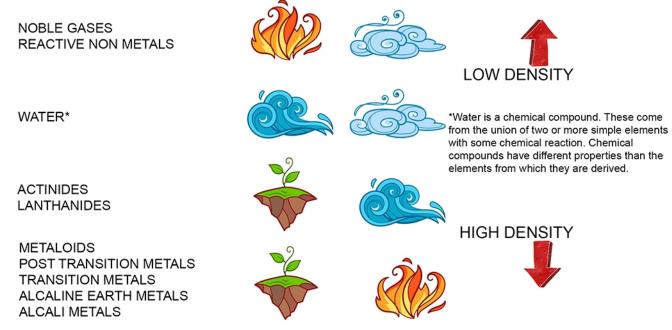
The Noble Gases due to their low density are found at the highest points of the ionosphere, being elements of fire and of course air.

The Reactive Nonmetals being heavier with biger density are found in the lower layers of the atmosphere, but because of their rection properties they are elements of fire and air as well.

The mineral rocks were created by the action of dry vapors, spending them completely as they were transformed from rock to mineral rock.

Thus they are now an element of land and water.

**Metals** of all kinds came from the action of liquid vapors, consuming them completely, as they were transformed from rock into mineral metal. So now they are an element of land and fire.



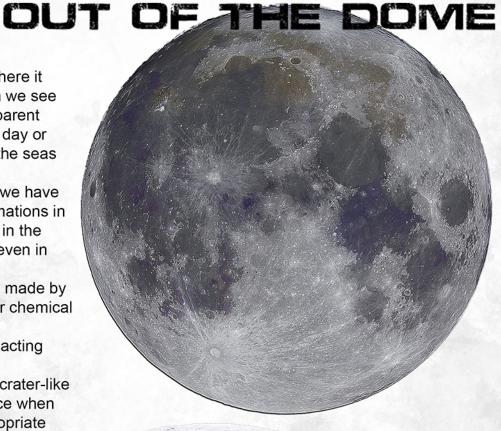
Observing the moon where it is the x-ray of the earth we see the continents in transparent color (either blue if it is day or

black if it is night) and the seas in white.

The craters we see as we have said are crater-like formations in the relief of the ground in the depths of the seas, or even in places where it is land.

These formations were made by thermal processes after chemical reactions.

The example of lime reacting with water to create an effervescent state and crater-like formations on its surface when water falls on it is appropriate to think about this process.

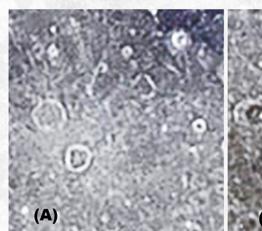


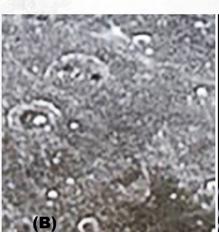


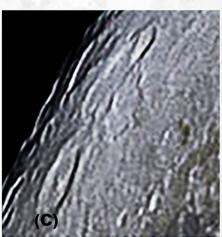


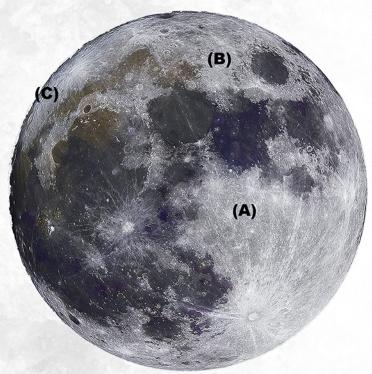
As we have said the moon is shaped like a slightly concave lens, which reminds us of the round road marking mirrors on sharp bends.

So observing the craters and considering the plane of the earth to be flat, we see some at the central points that appear perpendicular to their imprint on the moon (A), while some appear at some angle - either less, or more if they are very close to the edge of the circumference of the moon's circle (B) and (C).

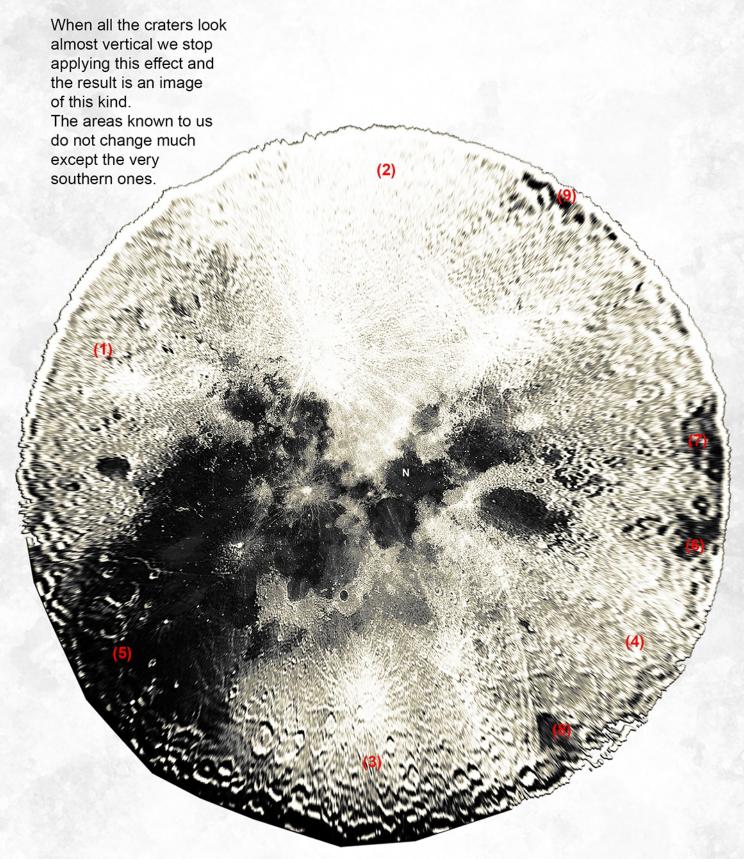




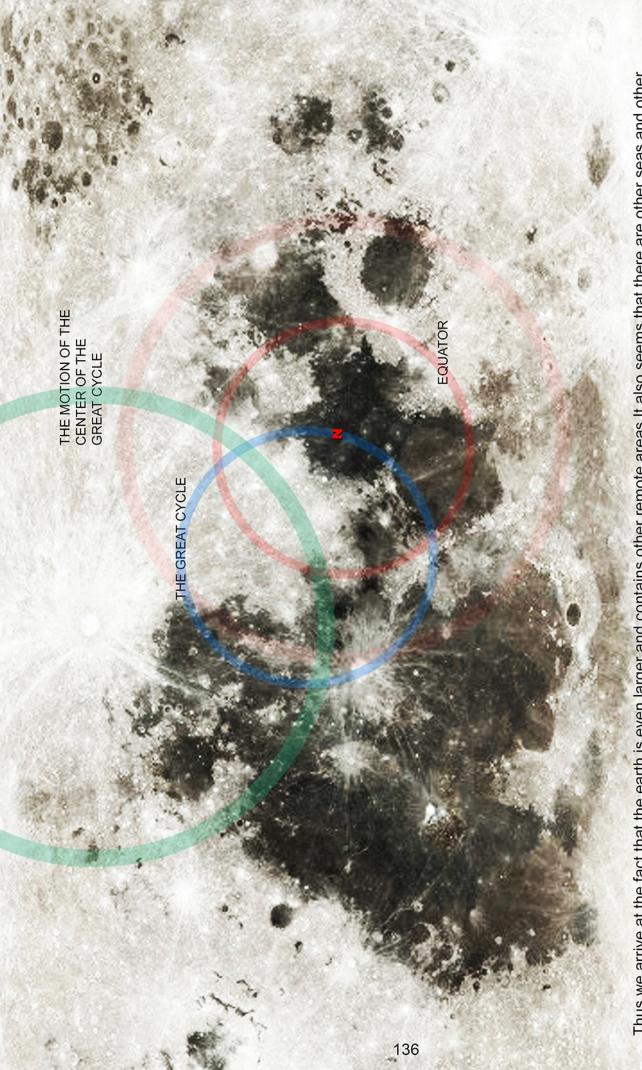




To get an image away from this kind of distortion, we would have to put a convexity effect to compensate for the concave shape of the moon's concentrated plasma phenomenon.



We notice that the size of the Southern Seas is greatly increasing (1), (2), (3), (4). The size of Southern Pangea is also increasing in one direction (5). Some new continents are also being revealed. South from Australia (6), (7), South from India (8), South from South America (9) All that is revealed seems compressed into the image of the moon. By removing the magnification distortions that occurred in the peripheral areas, we have an image on the next page.



Thus we arrive at the fact that the earth is even larger and contains other remote areas. It also seems that there are other seas and other continents outside the field where the moon shows us, as a continuation.

This fact lends credence to the claim that the center of the great circle that defines the cosmic ages also makes a circular course with another center, in a greater space, at an unknown time.

# VIBES OF COSMOS

- 1. PHYSICAL EARTHS MAP BY PLASMA MOON
- 2. TERRA VISTA
- 3. KNOWN WORLD
- 4. AFRICA
- 5. ASIA, AUSTRALIA AND LEMURYA
- 6. PACIFIC OCEAN, AMERICA AND HYPERBOREA
- 7. ATLANTIC OCEAN AND ATLANTIS
- 8. WEST AFRICA
- 9. CENTRAL AFRICA
- 10. EAST AFRICA
- 11. EUROPE, NORTH AFRICA AND WEST ASIA
- 12. CENTRAL ASIA
- 13. INDIAN OCEAN AND SUDARSANA
- 14. AUSTRALIA
- 15. OCEANIA AND WEST LEMURYA
- 16. EAST ASIA, NORTH LEMURYA AND ALASKA
- 17. LEMURYA
- 18. NORTH AND CENTRAL AMERICA

- 19. SOUTH AMERICA 20. FUEGO, GALECA, AND LACACH 21. HYPERBOREA, NORTH ASIA AND ALASKA
- 22. ATLANTIS
- 23. WEST PANGEA 24. CENTRAL PANGEA
- 25. SOUTH PANGEA, LIBERYA
- 26. SOUTH EAST PANGEA
- 27. EAST PANGEA
- 28. WORLD
- 29. MOON'S TRANSITION TO PHYSICAL WORLD MAP
- 30. FREQUENCIES AND SPECTRUMS
- 31. IN GENERAL
- 32. MAIN CATEGORIES
- 33. ORIGIN CATEGORIES
- 34. GENERATION OF ELECTROMAGNETIC RADIATION
- 35. PHYSICAL QUANTITIES
- 36. RADIO WAVES
- 37. TELEVISION WAVES
- 38. MAGNETOPHONE
- 39. SOUND SPECTRUM
- 41. OPTICAL SPECTRUM
- 42. CONVERT TRANSFER SAVE
- 43. I CLOUD
- 44. MOON CREATION
- 45. SUN CREATION
- 46. PANGEA IS TERRA VISTA
- 47. BACK IN TIME
- 49. TERRA VISTA IN THE EPOCH OF LEO
- 50. TERRA VISTA IS PANGAIA
- 51. PANGAIA MAP
- 52. THE MOTION OF THE PLANETS
  53. FREQUENCY AND PERIOD OF THE MOTIONS
- 54. MIDDLE ROTATION SPEED
- 56. ONE FIELD INSIDE THE OTHER
- 57. EARTH, MOON AND SUN
- 59. STARPRINT LAYER
- 60. VENUS AND MERCURY
- 62. MARS
- 63. JUPITER
- 64. SATURN
- 65. URANOS

- 66. ELEMENTS, SPACE AND ATMOSPHERE
- 67. WINDS
- 68. ATMOSPHERIC PRESSURE
- 69. PULSATING ELECTROMAGNETIC FIELD
- 70. EARTHQUAKES AND VOLCANOS 72. DRY AND WET FUMES BREATH OF THE EARTH
- 73. UNDRERGROUND FUMES CYCLE
- 74. EARTHQUAKES SEISMIC ACTIVITY
- 75. DURATION AND TYPES
- 76. SUMMARY
- 77. VOLCANOS
- 78. NO LITHOSPHERIC PLATES 79. COSMIC EPOCHS, TIMELINE AND EVENTS
- 80. THE GREAT CYCLE
- 82. GEOPHYSICAL RELIEF
- 83. TIMELINE AND ERAS
- 84. AGE OF AQUARIUS 86. AGE OF CAPRICORN
- 88. AGE OF SAGITTARIUS 90. AGE OF SCORPIO
- 92. AGE OF LIBRA
- 94. AGE OF VIRGO
- 96. AGE OF LEO 98. EGE OF CANCER
- 100. AGE OF GEMINY
- 102. AGE OF TAURUS 104. AGE OF ARIES
- 106. AGE OF PISCES
- 108. ALL THE EPOCHS
- 110. ERAS TRANSITIONS
- 122. THUNDERS AND LIGHTNINGS
- 123. WINDSTORMS, TURBINES, HURRICANES
- 124. RECAP
- 125. DRY FUMES CYCLE EXAMPLE
- 128. MINERALS
- 130. CONECTIONS AND CYCLES 131. WET AND DRY FUMES CYCLES
- 132. ELEMENTS OF SUBLUNAR PLACE
- 133. OUT OF THE DOME



