Magnetotelluric research, July 2018,

mission: Moon's Eclipse, "Bosnian Pyramid of the Sun", Visoko, Bosnia-Herzegovina,

(Partial, the most interesting findings[1])

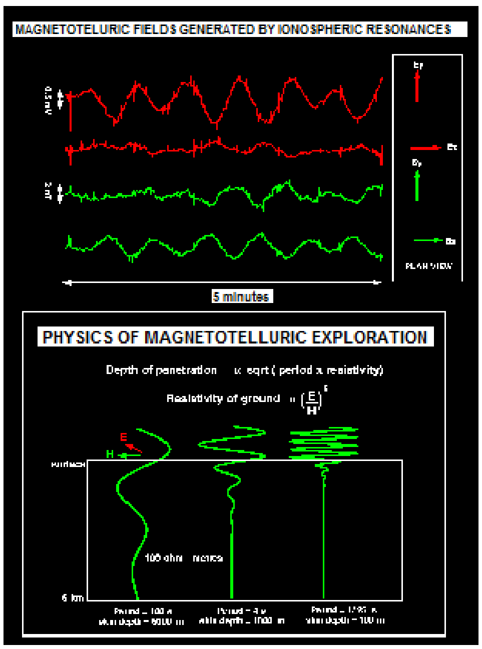
Equipment:

1. Teslameter TM 40 [$\mathbf{H_{50Hz}}$, nT]
2. Trifield meter, 100XE [**H**, mG; **E**, V/m]
3. Digital multimeter Mastech MS8229 [**T**, ^oC; **Hum**, %; **Noi**, dBrel]
4. VF-Broadband amplifier, IB Mraz, **"E"**-sensor: rod antenna, l = 30 cm; **"H"**- sensor: open coil antenna; **„EM"** – sensor: closed coil antenna; **"M"**-sound sensor: "Knowles" Piezo Ceramic ST Microphone (BL series)
5. Digital storage oscilloscope with FFT, 3202A, 200 MHz, 1GSa/sec
6. S-meter, Bedini version of Dea/Faretto detector, IB Mraz, [$\mathbf{S_c}$, Ampl., % deflection]
7. Experimental life energy meter, Heliognosis model LM3, [$\mathbf{O_r}$, Range, Fine, Coarse, % deflection]

Note 1: EM spectrum varies slightly, the signals are changeable in amplitude and frequency, except ordinary signals generated by measuring equipment (Inverter/ Oscilloscope switch + sampling rate, etc).

Measurement Method:

Magneto Telluric (MT) and Audio Magnet Telluric (AMT) methods /ref. 1/ are electromagnetic methods that measures variations in the earth's surface electromagnetic fields at different frequencies, combined with unconventional energy phenomena measurement [Eq. 7,8]



It samples the electric and magnetic fields in the low (IF-Audio-UF) frequency range. Sources of the MT/AMT signals may be either artificial or natural.

Solar energy and lightning cause natural variations in the earth's magnetic field, inducing electric currents (known as telluric currents) under the Earth's surface. Earth currents arise from both natural and man-made sources, including the magma in the earth's core and the normal distribution and use of electricity. Combined, these phenomena create strong magneto telluric source signals over the ULF/LF frequency spectrum.

MT measurements can investigate depths down to hundreds of kilometers. Greater depth requires measuring lower frequencies, which in turn requires longer recording times. Very deep, very long-period measurements (mid-crust through upper mantle depths), may require recordings of several days to weeks or

[1] Complete measurements data as well as 176 recordings of Fast Fourier Transform analysis of the Energetic field frequency spectrums - taken on 8 locations and 21 partial measurement analysis are stored in the G.Marjanovic database.

more to obtain satisfactory data quality. AMT is a higher-frequency magneto telluric technique for shallower investigations. While AMT has less depth penetration than MT, AMT measurements often take only about one hour to perform (but deep AMT measurements during low-signal strength periods may take up to 24 hours) and use smaller and lighter magnetic sensors.

Magnetic fields in the frequency range of 1 Hz to approximately 20 kHz are part of the audio-magneto telluric (AMT) range. These are parallel to the Earth surface and move towards the Earth's centre. This large frequency band allows for a range of depth penetration from several meters to several kilometers below the Earth's surface. Due to the nature of magneto telluric source, the waves generally fluctuate in amplitude height. Long recording times are needed to ascertain usable reading due to the fluctuations and the low signal strength.

The multidirectional MT sounding, performed on different locations can clearly indicate a different ratio of the electric to magnetic field and theirs phase shifting caused by the different speeds of propagation, pointing in that way to different subsurface areas mechanical, magnetic and electric conductivity, i.e. its anisotropy and in fact - its structure.

Measuring values:

The research include the recording of electromagnetic and mechanical energy spectra, are performed on magnetotelluric method in the frequency range from extremely low to medium frequencies (25 mHz – 50 kHz) for electric and/or magnetic phenomena.

Measuring of mechanical vibrations covers an area of infrasound, audio and ultrasound range. For these measurements we used the conventional devices numbered as 1. to 5. in the list of measuring equipment.

In addition to these measurements the detection of the presence of scalar fields was performed by "S-meter" (6). Investigations of unconventional energy fields, as “Orgone energy” is e.g., was carried out by special alternate energy device (Eq. 7.) that is intended for scientific research into life processes.

Furthermore, at each measuring point control parameters were measured: a) presence and intensity of the "EM smog" caused by power network (50 Hz); strength of the dynamic magnetic (b), dynamic electric (c) fields and radio waves strength (d); temperature (e), humidity (f) and noise (g).

Complete measurement recordings are stored in my database but in this paper we introduce only the most interesting findings just as a illustration of ours conclusions.

Measurements:

Measurement 1, Location 1: **Bosnian Pyramid of the Sun, 27.07.2018, 17.04 h.**

Measured values:

H_{50Hz} = 5 nT, H = 0.7 mG, E = 10 V/m, T = 22 ^{o}C, Hum = 55 %, Noi = - 15 dBrel, S_c = 10,100; O_r = 100,3,8.1,100+

Measurement 2, Location 1: **Bosnian Pyramid of the Sun, 27.07.2018, 21.15 h (Mon Eclipse).**

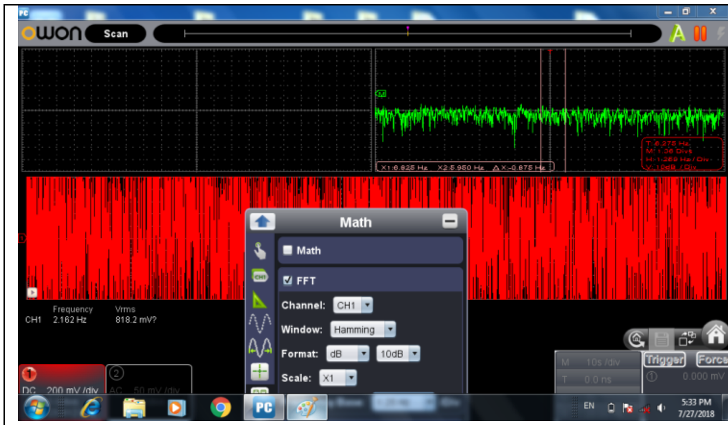
Measured values:

H_{50Hz} = 4 nT, H = 0.6 mG, E = 20 V/m, T = 16 ^{o}C, Hum = 60 %, Noi = 0 dBrel, S_c = 0,100; O_r = 100,3,8.1,100+

Note 2: There are about ten people present at the site. During the measurement, they were asked for silence. During the second measurement on this location, music was heard (Noi = 0 dBrel) from Visoko.

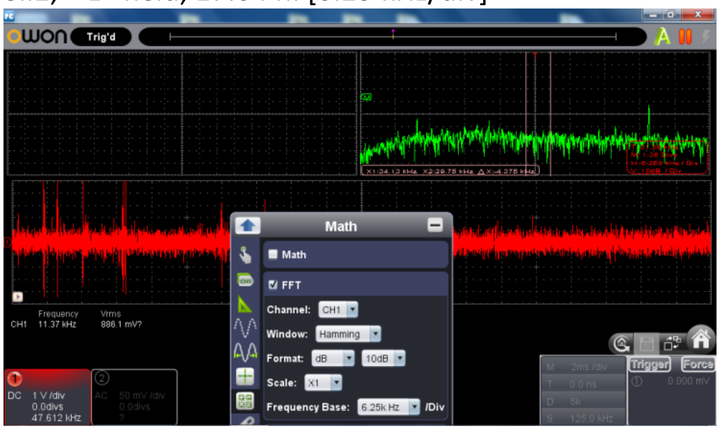
Characteristic spectrums:

Sl.1, “E” field, 17.04 h [1.25 Hz/div]	



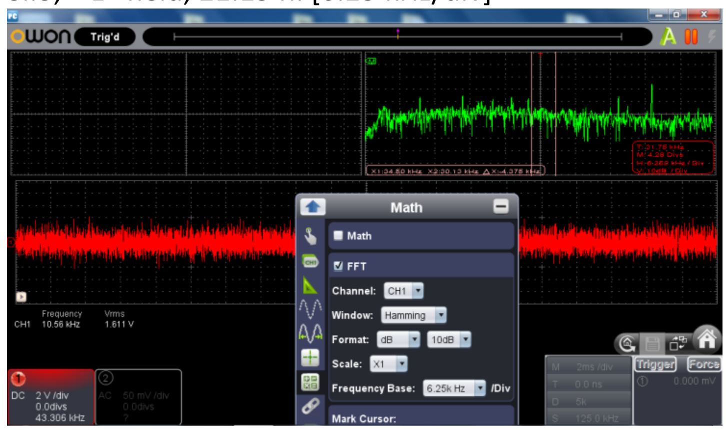
0.25, 1.87, **5**, 7.4, 10.3, 11.8 [Hz]

Sl.2, "E" field, 17.04 h. [6.25 kHz/div]



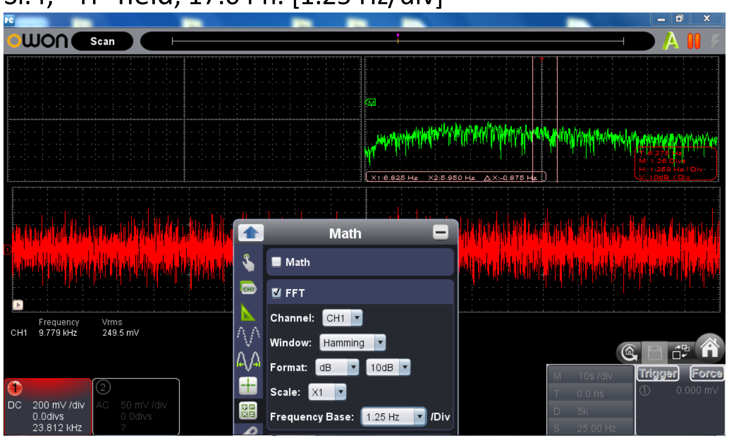
10, 23.1, 31.25, 51.3 [kHz] //.886mV/1.6V=1.8//

Sl.3, "E" field, 21.15 h. [6.25 kHz/div]



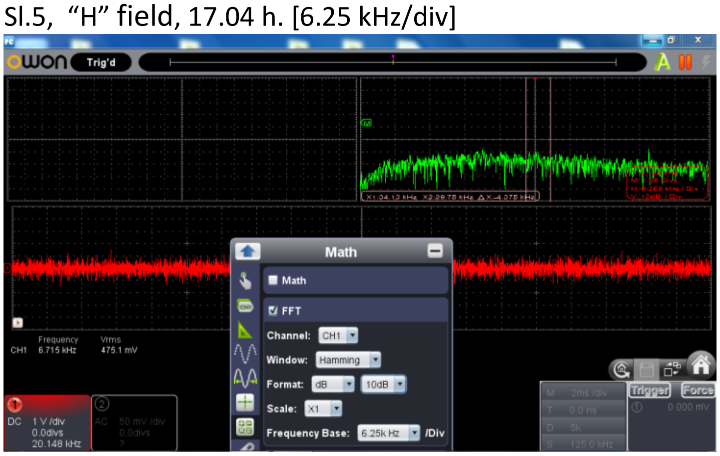
3.75, 10, 17.5, 23.4, 28.8, 32.5, 39.3, 45, 51.2 [kHz]

Sl.4, "H" field, 17.04 h. [1.25 Hz/div]



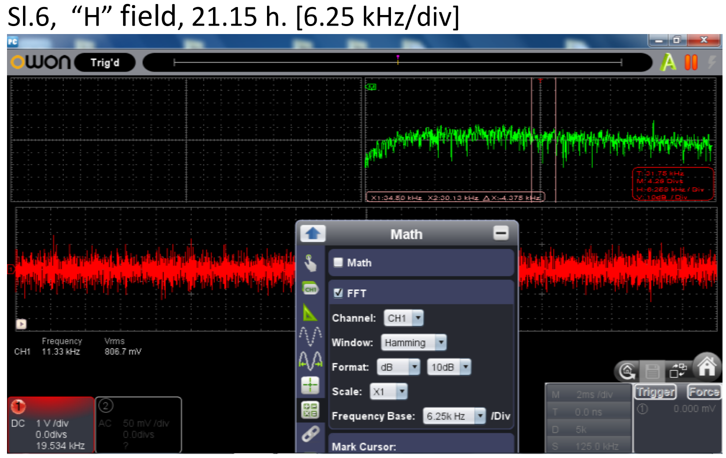
4.7, 5.6, 8, 9.3. 11, 12.2 [Hz]

Sl.5, "H" field, 17.04 h. [6.25 kHz/div]



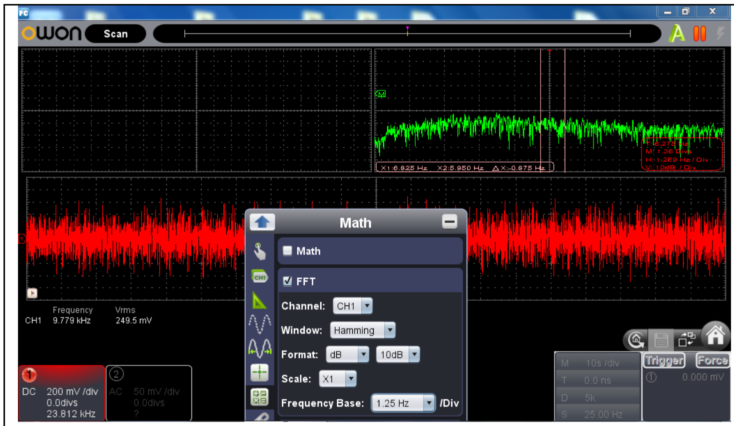
12.5, 26.1, 32.1, 37.5, 51.5 [kHz]

Sl.6, "H" field, 21.15 h. [6.25 kHz/div]



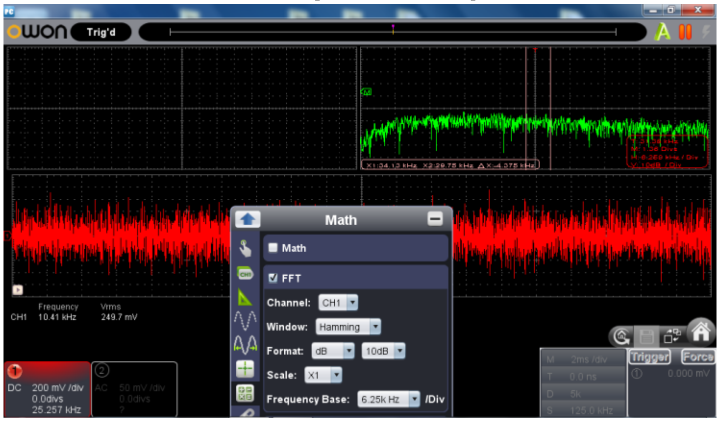
-"- **31.5,** 35.6 -"- [kHz]

Sl.7, "EM" field, 17.04 h. [1.25 Hz/div]



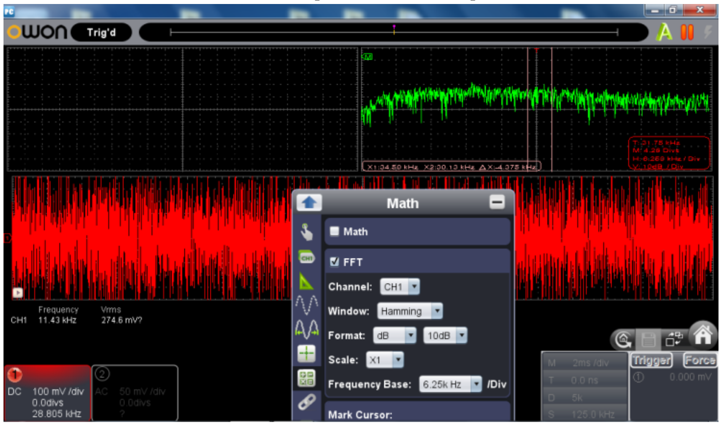
1.25, 4.7 5.8, 7.8, 11.12 [Hz]

Sl.8, “EM” field, 17.04 h. [6.25 kHz/div]



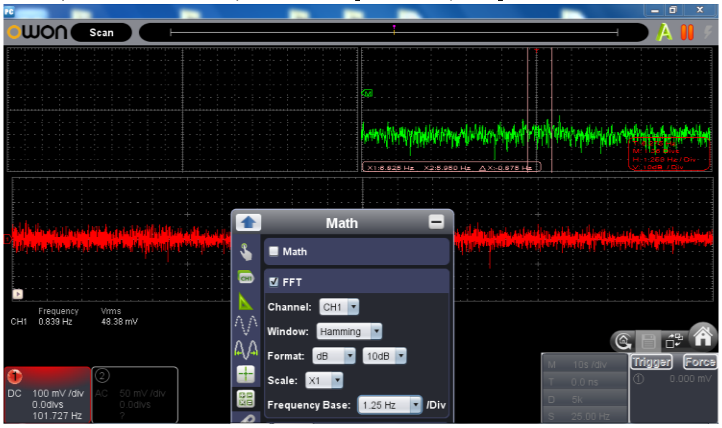
1.8, 7.3, 13.7, 41.2, 48.8, 51.3 [kHz]

Sl.9, “EM” field, 21.15 h. [6.25 kHz/div]



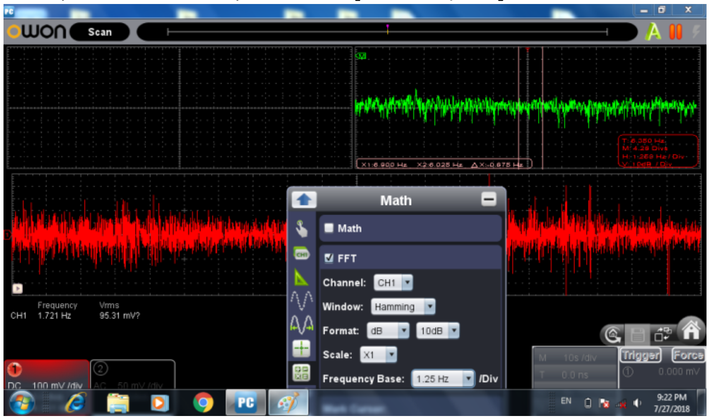
-“- [kHz] // 806mV/475mV=1.7 //

Sl.10, “Infrasound”, 17.04 h. [1.25 Hz/div]



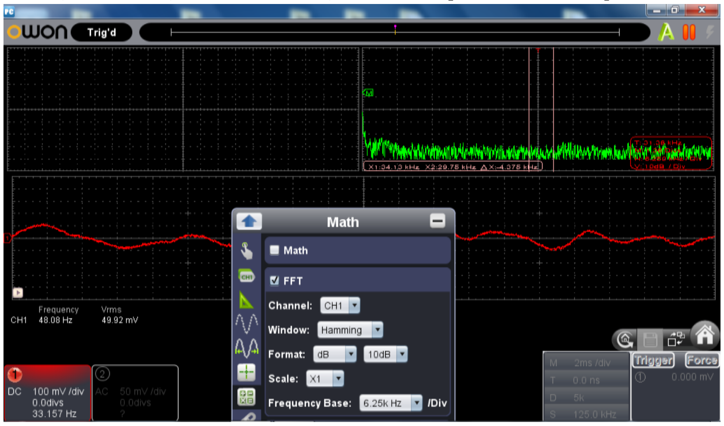
1.7, 4.7, 6, 6.7, 7.8, 10.2 [Hz]

Sl.11, “Infrasound”, 21.15 h. [1.25 Hz/div]



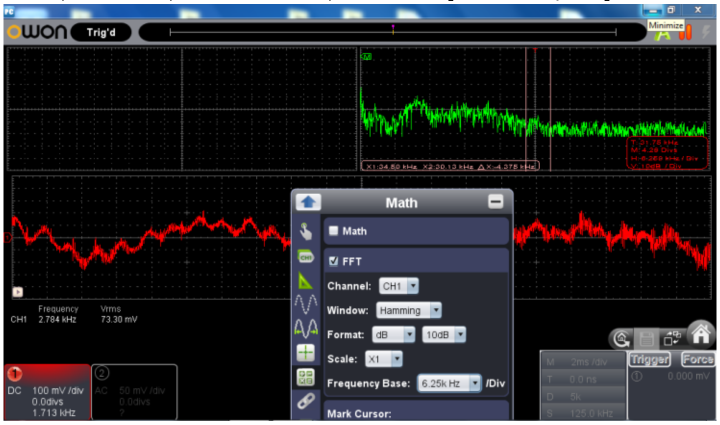
2.8 - 5 [Hz] //93mV/48mV=1.93//

Sl.12, “Sound, Ultrasound”, 17.04 h. [6.25 kHz/div]



3.7, 35 [kHz]

Sl.13, “Sound, Ultrasound”, 21.15 h. [6.25 kHz/div]



7.5-23.7 [kHz], pick: 10 kHz //73mV/49mV=1.5//

Measurement analysis:

On the measuring recordings shown, red color represent amplitude spectrum and green color represent frequency spectra in the VLF / LF band [6.25 kHz / div]: from 500 Hz to 60 kHz or ULF band [1.25 Hz / div]: from 0.1 Hz to 12 Hz.

Figure 1 shows the measurement of the electric field on the Pyramid of the Sun in the ULF range about 4 hours before the total Moon eclipse. The picture shows the visible presence of common signals from the domain of the Scumann spectrum.

Figure 2 shows the spectrum of the electric field in the VLF / LF band, before the eclipse, showing the presence of the signals detected during the previously performed measurements also (see [2] e.g.).

Figure 3 shows the electric field spectrum in the VLF / LF range **during the Moon eclipse**, where **we can see the presence of far greater number of "E" signals and nearly double "stronger" "E" fields** (886 mV / 1.6V = 1.8) **with a more pronounced signal of 28.8 kHz**. This also is supported by the measurement with the equipment [2] which shows that the dynamic electric field was twice as strong during the Moon's eclipse ("E" = 10 V / m before and 20 V / m during the eclipse). Signal 51.2 kHz comes from measuring equipment.

Figure 4 shows the magnetic field spectrum in the ULF band, that is very similar to the ULF band spectrum of the electric field (Fig. 1), which also corresponds to the Shumann spectrum. The fact that the signals of the same frequency band appear as electrical ("E") and as a magnetic ("H") component indicates their "Hertzian" form, i.e. conventional electromagnetic nature.

Figures 5 and 6 show a magnetic ("H") signal spectrum in the VLF / LF domain before and during the eclipse. Spectra are similar except in the part of the frequency band for which the Pyramid of the Sun is "resonant", which confirms its "energy machine" properties and which is illustrated by the appearance of the harmonic 31.5 kHz and 35.6 kHz which in "E" form are not present!

Figure 7 shows the spectrum of electromagnetic signals ("EM") in the ULF band which corresponds to the Shumann spectrum by values and form.

Figures 8 and 9 are "EM" spectrum recordings in the VLF / LF range - before and after the Moon eclipse. The spectrums are almost identical, meaning that there was no change in that conventional, energetic form. However, the "structural mechanism" of the Pyramid of the Sun as „energy machine“ or "resonator" is demonstrated here through a change in the "strength" of energy flows which, during the eclipse, were increased by about 1.7 times (806mV / 475mV = 1.7).

Figures 10 and 11 are images of mechanical vibrations in the infrasound domain (0.1 Hz to 12 Hz) and also show an increased activity during the Moon's eclipse (09.15 h), in the range of 2.8 - 5 Hz, as well as the increased mean amplitude level by about 2 times (93mV / 48mV = 1.93).

Figures 12 and 13 are images of mechanical vibrations in the domain of sound and ultrasound (500 Hz to 60 kHz), before and during the eclipse of the Moon. A different kind of signal and the structure of the frequency spectrum before and during the eclipse can be clearly seen. It is particularly emphasized the presence of signals from "audio range", so it is very likely that they originate from the city of Visoko, where in the evening hours a "Fair" was organized, so even at the top of the Pyramid of the Sun one could hear music, quiet but still noticeable (Noi = -15 dBrel before eclipse, Noi = 0 dBrel after eclipse). Therefore, these measurements, as well as the measurements shown in Figures 10 and 11, can not be considered relevant for the influence of cosmic-astronomical mechanisms.

Conclusion:

Measurements performed on July 27, 2018 on the top of the Bosnian Pyramid of the Sun at 17.04 h, before total Moon's eclipse, and at 21.15 h, during total eclypse of the Moon, unambiguously indicate the involvement and influence of the Bosnian Pyramid of the Sun, and possibly the complete "Archaeological Park: Bosnian Pyramid of the Sun" complex, on space energy flows and its „connection“ with the cosmic astronomical mechanisms.

The diversity of the the measurement results carried out before and after the Moon's eclipse, but also in relation to the previously performed measurements at different periods of the day on the same location (eg [2]), was certainly contributed to the fact that Mars was at its smallest distance from the Earth since 2003, why he looked larger and brighter than usually and was in the same Sun-Earth-Moon line, why it could be seen by the naked eye a little below and to the right of the Moon position.

This "Spatial-Time Exclusivity" - the proximity of Mars and the "alignment" of the Sun, Earth, Moon, and Mars certainly had an impact on subtle-energy cosmic flows what is verified by our measurements and expressed by an enhanced signal levels and a richer structure of the corresponding frequency spectra.

Minor qualitative changes in the domain of conventional electromagnetic waves and much noticeable changes in the field of longitudinal (Scalar) electrodynamic vibrations indicate a much „stronger“ interaction of the "Pyramid of the Sun" with subtle energy forms than with the conventional EM energy phenomena. So the idea that the APBPS facilities, especially the Pyramid of the Sun, are energetically "intertwined" with the material structure of their environment, the Solar planetary system, the galaxy, etc, is completely justified with masurements performed - and greatly strengthens the concept of the "Cosmic Internet" existence [3] as wll as the possibility of almost instant intergalactic communication in the Universe ...

Beograd, 30.07.2018.

Eng. Goran Marjanovic, dipl.ing

Reference:

[1] GEOLOGICAL SURVEY.., Herbert A. Pierce and Donald B. Hoover, pubs.usgs.gov/of/1988/0668/report.pdf

[2] SKALARNI TALASI NA BOSANSKIM PIRAMIDAMA!
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[3] OTKRIĆE TESLINIH TORZIONIH POLJA NA BOSANSKIM PIRAMIDAMA
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