REPORTS OF THE NATIONAL ACADEMY OF SCIENCES OF THE REPUBLIC OF KAZAKHSTAN
ISSN 2224-5227
Volume 1, Number 317 (2018), 21 – 25

UDC 622

G.P. Metaxa, A.S. Metaxa

Institute of Mining of Kunayev, Almaty, Kazakhstan
gmetaksa@mail.ru, metaxa_anna@mail.ru

DOUBLE SOLAR ECLIPSE - FORECAST AND REALITY

Abstract: The paper shows new achievements of science in the field of cosmophysical interactions for nano- and macro-levels of consideration. On the example of the analysis of the solar eclipse consequences of 2009, calculations of some space-time parameters of the Earth-Sun system are presented.

Key words: solar eclipse, impact-response, macro level of consideration, astronomy, terrestrial surface.

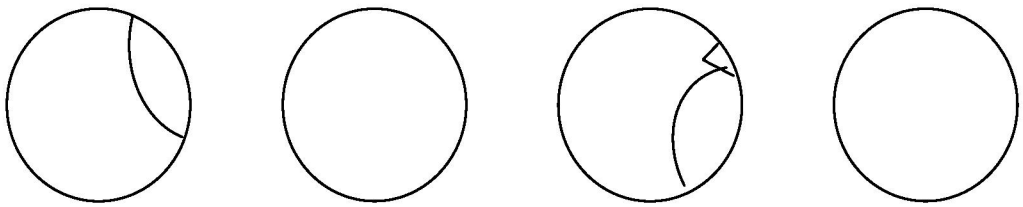
According to Butusov's forecast there is one more planet on Earth's orbit, which he called Gloria. For earthlings, it is invisible, because it is behind the Sun. In addition, in the scientific literature and in Internet publications, there were many reports on the emergence of a new system called Nibiru, moving toward the solar system with great speed. Astronomers noted its appearance in the last century, and now it is visible to the naked eye. The press discusses various options for the consequences of its passage through the solar system. These messages relate to the macro level of consideration of impact-response systems. For the nano-levels of consideration, academician Mironov V.Yu. performed a survey that highlights the latest discoveries of modern science. The most large-scale in its consequences is the discovery of a decrease in the proton radius by 4%, which affected the change in the spectral composition of all interactions. For the mining industry, these scientific facts can affect the emergence of new geotechnologies that correspond to the modern state of the noosphere.

In this paper we discuss some observations from the viewpoint of the macro level of consideration.

"The new Astronomy will be announced, The new Sun is approaching our
The solar system, like a comet, which will be established ... "

E.I. Roerich. At the threshold of a new world, M., 2000, p. 244 [1]

July 22, 2009, the author, while at the latitude of Lake Issyk-Kul, observed an unusual phenomenon on the Sun. On this day, a complete solar eclipse was observed in Japan, India, and China. In the images presented on the Internet, no special changes were noted, except for the appearance of an unprecedented activity [2], simultaneously with the eclipse of a magnetic storm. The X-ray detectors of the TESIS project recorded a double eclipse (without explanation). At the Issyk-Kul latitude, two partial eclipses were also seen, which sequentially fixed the lunar shadow first in the upper part of the Sun disc, and then in its lower part. The visible picture of the solar eclipse in all phases looked as follows:



I stage II stage III stage IV stage

It can be seen from the figures that the eclipse took place in 2 stages: first the upper side of the disk was closed (~ 25%), then the Sun returned to its original state, and a minute later the lower disk bore was darkened and the upper corner in the form of a triangular projection form. Visually the duration of both stages was approximately the same. It is not possible to make a reliable conclusion about the reason for the appearance of such a phenomenon on the basis of a single visual observation, therefore, all data from Internet publications [2], in which a double solar eclipse was fixed by a geophysical satellite by X-ray sensors, were carefully studied. The reason is not discussed.

Returning to the results of a visual observation of a double eclipse, we can assume two possible causes of this phenomenon:

- the appearance of two centers of mass (double Sun) near the Sun;
- the appearance near the Sun of a large object that is opaque to the visible radiation of the Sun.

In both cases, there should be a deviation from the equilibrium state of all objects participating in this process. The duration of the magnetic storm according to the TESIS project was 9 hours. Calculation of the radius of the orbit of the perturbing object, carried out according to Kepler's Law is [3]:

$$\frac{R^3}{T^2} = K\,; \qquad R^3 = T^2 \cdot K \tag{1}$$

$R^3 = (32400)^2 \cdot 3{,}36 \cdot 10^{18} = 1{,}049 \cdot 10^9 \cdot 3{,}36 \cdot 10^{18} = 3{,}52 \cdot 10^{27}$
$R = 1{,}52 \cdot 10^9$ м

In order of magnitude, this radius is ~ 100 times smaller than the radius of the earth's orbit and 2.18 times larger than the size of the Sun itself, which suggests that there is an additional center of mass near or inside the Sun.

Calculations of the radius of influence due to the daily rhythm of the Earth give the following meaning [4]:

$R^3 = (32400)^2 \cdot 3{,}477 \cdot 10^{10} = 1{,}049 \cdot 10^9 \cdot 3{,}477 \cdot 10^{10} = 3{,}647 \cdot 10^{19}$

$R = 1{,}54 \cdot 10^6$ м (~ 0,24 $R_{Земли}$)

In order of magnitude, this size is comparable to the radius of the moon and one quarter of the Earth's radius, i.e. response to this disturbance is the change in the state of the lunar surface and inner sphere (0.24 R3) of the Earth.

In the presence of a double center of mass near or inside the Sun, the initially balanced state of the Sun should change toward the return of the lost equilibrium by the generation of beats due to the appearance of perturbing accelerations ω [5]:

$$\varpi = \frac{m}{r_0^2} \tag{2}$$

where m is the mass of the perturbing planet (in fractions of the mass of the Sun); r is the distance between two planets.

So for the system Earth - Moon - Sun we have:

$$\varpi = \frac{1}{332945{,}7 \cdot (14{,}92 \cdot 10^{10})^2} = 135 \cdot 10^{-30}\ м/с^2$$

The beat period Tb is determined from the well-known formula [3]: