# ANNA GIAKOUMAKI

# Classification and Taxonomy of Celestial Objects

## A new Classification and Taxonomy Method Based on Scientific Observations and Analysis

Author/Publisher:
**Anna Giakoumaki**

e-mail: ekdoseisopsidianos@hotmail.com

ISBN: 9798389963245

Front cover art by:
OPSIDIANOS PUBLICATIONS

Layout by:
OPSIDIANOS PUBLICATIONS

Production by:
Anna Giakoumaki

*"...if this intellect were also vast enough to submit these data to analysis,* ***it would embrace in a single formula the movements of the greatest bodies of the universe and those of the tiniest atom****..."*

*— Pierre Simon Laplace, A Philosophical Essay on Probabilities*

***Dear reader,***

*Laplace once observed scientific that any "natural Satellite"* on an Elliptical Orbit around its "natural Sun" should satisfy three important criteria, regardless of its size, mass, shape, composition or the direction of its orbit around its "Sun".*

*(* "natural satellite", can be any natural object that orbits around another bigger-mass natural object, such as a Planet around a Sun, a Moon around a Planet, or even the tiniest atom in an elliptical orbit around a core, etc.).*

*To my beloved twins*

*Socrates & Plato*

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# PART I
# INTRODUCTION

Ever since Jesus's birth and long before, humans were looking at the stars for cues, and they were amazed. But not all stars were born equal! Ancient civilizations, such as the Egyptians, Babylonians, and Greeks, made observations of the stars, planets, and other celestial bodies. They used these observations for various purposes, such as for timekeeping, navigation, and religious rituals. Different celestial bodies behave differently, and a systematic classification had started over 2,000 years ago with Aristarchus of Samos. Aristarchus of Samos was one of the first astronomers in ancient Greece to make significant contributions to the study of celestial objects. He proposed a heliocentric model of the solar system, in which the Sun, rather than the Earth, is at the center of the solar system. He also made estimates of the sizes and distances of the Sun and Moon, and attempted to classify the celestial objects he observed. However, the concept of planets as we understand it today, as well as the classification of celestial objects, in general, was not fully developed during his time, so it is hard to say exactly how he classified celestial objects or how much emphasis he put on classification.

In ancient Greece, the philosopher and mathematician Pythagoras is often credited with being one of the first to propose a classification system for celestial objects. According to the ancient Greek philosopher and astronomer Eudoxus of Cnidus, Pythagoras classified the celestial objects into seven groups: the Moon, Mercury, Venus, the Sun, Mars, Jupiter, and Saturn. This classification was based on the *relative speed* of the objects as they appeared to move across the sky.

The ancient Greeks also recognized that the five objects that we now call the planets (Mercury, Venus, Mars, Jupiter, and Saturn) were different from the stars, as they would change position among the stars over time. They named them "planetes", which means "wanderers" in Greek. This was the origin of the word planet.

The classification of celestial objects has evolved over time as well. Initially, people classified objects based on their appearance and behavior in the sky. For example, the ancient Greeks classified objects as "wandering stars" (planets) because they moved relative to the background stars, while the "fixed stars" were considered to be part of the starry background.

The concept of a "planet" also evolved over time. In ancient times, the word "planet" was used to describe any celestial object that appeared to move relative to the background stars. However, what followed after that was several changes in the classification of celestial objects, time and time again until present day. But what were the reasons behind these changes in classification of the objects?

Let us start from the beginning. The solar system seems that is composed of several types of celestial objects, each with its own unique characteristics and criteria for classification, according to the current classification methods. These objects include:

1. **Stars:** The sun is the only star in the solar system. To be classified as a star, an object must meet the following criteria:

- It must be massive enough to ignite nuclear fusion in its core, where hydrogen atoms are converted into helium and release energy in the form of light and heat.
- It must have its own energy source, generated through nuclear fusion, which powers the star and keeps it shining.
- It must be in hydrostatic equilibrium, meaning that the inward pull of gravity is balanced by the pressure generated by the energy release in the core.
- It must be emitting light and heat into space, which makes it visible from Earth.
- It must be a celestial body that is not classified as a planet, dwarf planet, moon, or other types of celestial objects.

2. **Planets:** Planets are celestial bodies that orbit the sun and are large enough to be spherical in shape due to their own gravity. To be classified as a planet, an object must meet the following criteria:
    - It must orbit the sun.
    - It must be spherical in shape due to its own gravity.
    - It must have cleared its orbit of other debris and smaller objects.
3. **Dwarf Planets:** Dwarf planets are similar to planets, but they have not cleared their orbits of other debris and smaller objects. To be classified as a dwarf planet, an object must meet the following criteria:
    - It must orbit the sun.
    - It must be spherical in shape due to its own gravity.

  - It must be massive enough to have gravity, but not massive enough to clear its orbit of other debris and smaller objects.
4. **Moons:** Moons are celestial bodies that orbit planets bit are much smaller than the planet they orbit. To be classified as a moon, an object must meet the following criteria:
   - It must orbit a planet.
   - It must be much smaller than the planet it orbits.
5. **Asteroids:** Asteroids are small, rocky objects that orbit the sun. To be classified as an asteroid, an object must meet the following criteria:
   - It must orbit the sun.
   - It must be small and rocky in composition.
6. **Comets:** Comets are small, icy objects that also orbit the sun. To be classified as a comet, an object must meet the following criteria:
   - It must orbit the sun.
   - It must be composed of a mixture of ice and dust.
   - It must have a visible coma and tail when it approaches the sun.

These criteria for classification have evolved over time as our understanding of the solar system has increased, and new objects have been discovered. Let us take a brief historical look to see what changed in the classification of celestial objects over the centuries, and review some notable reasons for this change each time.

- **Ancient Babylonians (1700 BC)** divided the sky into constellations based on the appearance of stars and used them for celestial navigation.
- **Ancient Egyptians (1500 BC)** also divided the sky into decans, which were used to predict eclipses and the movement of stars.
- **Ancient Greeks (4th century BC)** developed a more sophisticated system of constellations based on mythology, which was later adopted by the Romans.
- **Ptolemy (2nd century AD)** compiled a comprehensive catalog of stars in his Almagest, in which he organized stars into 48 constellations and introduced the concept of magnitude.
- **Tycho Brahe (16th century)** made highly accurate observations of the position and motion of celestial objects, paving the way for future scientists like Johannes Kepler and Galileo Galilei.

- **Galileo Galilei (1610)** was the first person to use a telescope to observe the heavens and make detailed observations of the moon, stars, and planets. He confirmed that the moon was a rocky surface, saw the phases of Venus, and observed four of Jupiter's largest moons, which he named the "Medicean Stars." These discoveries challenged the Aristotelian view of the cosmos, in which everything revolved around the Earth.
- **Sir Isaac Newton (1687)** published his laws of motion and universal gravitation, which provided a physical explanation for the motions of celestial objects and laid the foundations for modern astronomy.
- **English astronomer John Flamsteed (1705)** publishes a star catalog, in which he classified certain celestial objects as "planets." At the time, the term "planet" was used to describe any celestial body that moved across the sky.
- **Immanuel Kant (1755)** introduced the concept of a "planetesimal," which he believed were the building blocks of the planets.
- **German astronomer Johann Tobias Bode (1757)** introduced the "Bode's law," and he proposed that the distances between the planets and the Sun follow a mathematical sequence.
- **Italian astronomer Giuseppe Piazzi (1801)** discovered Ceres, which was initially classified as a planet.
- **German astronomer Heinrich Wilhelm Olbers (1802)** discovered Pallas, which was also initially classified as a planet.
- **German astronomer Johann Elert Bode (1803)** discovered Juno, which was also initially classified as a planet.
- **German astronomer Karl Ludwig Hencke (1804)** discovered Vesta, which was also initially classified as a planet.
- **German astronomer Wilhelm von Humboldt (1807)** introduced the term "asteroid" to describe the objects that had previously been classified as planets, including Ceres, Pallas, Juno, and Vesta.
- **Neptune (1845)** is discovered and becomes the eighth planet in our solar system.
- **German astronomer Max Wolf (1898)** discovered the first asteroid with a moon, 433 Eros.
- **Clyde Tombaugh (1930)** discovered Pluto, which was initially classified as the ninth planet in our solar system.

- **Astronomers (1992)** discovered 1992 QB1, the first of many small, icy objects in the Kuiper Belt region beyond Neptune. These objects are similar in size and composition to Pluto, leading to questions about Pluto's classification as a planet.
- **Astronomers (1995)** discovered the first moon orbiting an asteroid, 243 Ida.
- **Astronomers (2005)** discovered Eris, a large, icy object in the Kuiper Belt that is similar in size to Pluto. This discovery added further questions about Pluto's classification as a planet.
- **The International Astronomical Union (IAU) (2006)** officially redefined the term "planet" to exclude objects like Pluto, Ceres, and Eris, which are now classified as "dwarf planets." The definition of a planet is now limited to objects that orbit the Sun, are spherical in shape, and have cleared their orbit of other debris.
- **Chariklo (2011),** a Centaur object in the Solar System, is discovered to have two narrow rings. This discovery was unexpected, as rings were previously thought to be limited to the gas giant planets.
- **Haumea (2014),** a dwarf planet in the Kuiper Belt, is discovered to have a rapidly rotating shape that is elongated in the form of an American football. This discovery challenged our understanding of how planets and dwarf planets can form and evolve in the Solar System.
- **The first known interstellar object, 'Oumuamua (2017),** is detected passing through our Solar System. This object is shaped like a cigar and is believed to have originated from a planetary system beyond our own.
- **The first confirmed detection of a planet orbiting a binary star system, Kepler-1647b (2018),** was made using data from the Kepler Space Telescope. This discovery challenged the previously held belief that planets could only form around single stars.
- **The first possible evidence of a moon orbiting an exoplanet (2019)** discovered, using data from the Kepler and K2 missions.
- **The first detection of a Kuiper Belt object with a ring system (2021**), Arrokoth (formerly known as Ultima Thule), was made by the New Horizons spacecraft during its flyby. This discovery expanded our understanding of the diversity of ringed objects in the Solar System.

After the 2006 reclassification of objects by the International Astronomical Union (IAU), the debate over the definition of a planet has continued, with some scientists and members of the public challenging the IAU's definition and calling for the reinstatement of Pluto as a planet. Some scientists have proposed alternative definitions of a planet that would include objects like Pluto, while others have argued that the IAU's definition is appropriate and necessary for distinguishing between different types of celestial bodies in our solar system. Despite the ongoing debate, the IAU's definition remains the most widely recognized and widely used definition for the classification of celestial objects.

***Who is responsible today for the classification of the celestial objects and since when?***

The classification of celestial objects is primarily done by astronomical organizations and scientific institutions, such as the International Astronomical Union (IAU). The IAU was founded in 1919 and is responsible for classifying celestial objects, among other tasks, such as standardizing the names of celestial objects, defining astronomical units, and promoting international cooperation in astronomy. The IAU is the recognized authority for assigning designations and names to celestial bodies and their features, and its decisions are widely used and accepted by the astronomical community.

Historically, most of the objects that were considered planets were reclassified as non-planets. The most notable example is Pluto, which was reclassified as a "dwarf planet" in 2006 by the International Astronomical Union (IAU). It is worth noting that not all scientists or organizations agree with the IAU's definition, and some argue that Pluto should still be considered a planet. Additionally, some other objects that were previously considered to be asteroids, such as Ceres and Vesta, have been reclassified as "dwarf planets" based on their size and shape.

In addition, the classification of Ceres as a "dwarf planet" is a decision that was made by the International Astronomical Union (IAU). We just mentioned above that the IAU defines a planet as a celestial body that orbits the Sun, is spherical in shape, and has cleared its orbit of other debris. Ceres, which is the largest object in the asteroid belt between Mars and Jupiter, does not meet this last criterion, as its orbit is not cleared of debris. Therefore, the IAU classified it as a "dwarf planet" in 2006.

It is worth noting also that classification is a human construct, and as you might imagine, it is not always a straightforward process. The criteria for classification are

based on scientific observations and measurements, but they are also influenced by historical context, cultural perspectives, and social dynamics.
It is also important to note that opinions on the classification of Ceres, Pluto and other objects may vary among scientists. These criteria are not universally accepted, so some scientists have proposed different definitions and criteria to classify a celestial object as a planet. Some argue that the criteria used by the IAU are too restrictive and that Ceres should be considered a planet, while others argue that the criteria are appropriate and that Ceres is correctly classified as a dwarf planet.

Looking more closely at the criteria for classifying objects in the sky as planets, moons, stars, dwarf planets, asteroids or comets, we observe a common element; they must be in orbit around a larger-mass celestial body, such as the sun or a planet, in all cases. In other words, in every instance, we have a "natural satellite" in orbit around a "natural sun" (See this common criterion for the classification of celestial objects: **Planet:** must orbit the sun. **Dwarf Planet:** must orbit the sun. **Moon:** must orbit a planet. **Asteroid:** must orbit the sun. **Comet:** must orbit the sun.) However, being in orbit around a "natural sun" is not the only similarity shared by these "natural satellites". I will briefly show you their similarities that sparked my interest. Now, I'll create a table, with the common features these objects share. I'll write a "P" for a Planet, "DP" for a Dwarf Planet, "A" for Asteroid, "M" for a Moon and "C" for a Comet; I'll insert the common feature and the question will be "Are there any Planets, Moons, Asteroids, Dwarf Planets, Comets with this Feature?"; If the box below them has the letter "Y", it means "Yes".

| | Common Features | P | M | DP | A | C |
|---|---|---|---|---|---|---|
| 1 | Orbit as a "natural satellite" around a "natural Sun" | Y | Y | Y | Y | Y |
| 2 | Periodic Orbit around their "Sun" | Y | Y | Y | Y | Y |
| 3 | Moons | Y | Y | Y | Y | |
| 4 | Rings | Y | Y | Y | Y | Y |
| 5 | Smaller mass than their "Sun" | Y | Y | Y | Y | Y |
| 6 | Specific "Aphelion" and "Perihelion" from their "Sun" | Y | Y | Y | Y | Y |

As we see, celestial objects such as planets, dwarf planets, moons, asteroids, and comets share certain common characteristics which can be precisely measured and studied (e.g. as they orbit their "Sun", all have specific Orbital Speed and Orbital Period, and have a specific Aphelion and Perihelion, etc.). Perhaps celestial objects are more alike than we thought until now? Perhaps we are dealing with "Planets", or more correctly, with "natural satellites" in orbit around their “natural Sun”? And if so, how would we classify so many millions of objects? This could cause a chaotic situation. And here I also reach the dead end that great scientists before me reached, even the scientific team of IAU.

In order to answer questions related to these big questions - if, in other words, we are talking about the same objects that are “natural Satellites” in Orbit around their "natural Sun”- or if we are talking about different ones and second, if we are talking about the same objects, then how do we classify them so that we can easily refer to them and study them, I first studied the orbits of these celestial objects around their "sun" and present the results below. Finally, as the results show, we are not simply talking about 5 common elements among these celestial objects, but more than ten which are not based on established concepts (e.g. "The Aphelion of this object is located at ... km, etc."), but on specific concepts that are based on mathematics (e.g. " Any natural Satellite that is on an Elliptical Orbit around its natural Sun, has an almost stable distance by its Sun, with smaller difference than ±0.0059 million km for every 1 million km of “Perihelion”, each time that the first is at its “Aphelion” & its “Perihelion”. To find the “Perihelion’s” distance (the “perihelion/perigee” etc.), it’s enough to find just one “Perihelion” of the “natural Satellite” and measure the difference. If for example, its “Perihelion” is at 250 million km then, 250x0.0059= 1.475 million km is the maximum difference that this object can have from its “Aphelion” to its “Aphelion” and from its “Perihelion” to its “Perihelion”, not bigger than this). Below, you will see the observation. After you have studied the data and the results, come to your own conclusions.

# PART II
# SOME AXIOMS

## POSTULATE 1: Everything is Energy

Everything is Energy.

## POSTULATE 2: Universal Field (UF) is inhomogeneous

Our Universal Field (UF) is an inhomogeneous field.

## POSTULATE 3: Everything has order

Everything within the UF has order.

## POSTULATE 4: "...be accumulated in just one point..."

From the day 1 that the Energy began to be transported within this Inhomogeneous UF, it never stopped being transported will never stop until all Energy is accumulated in a single point of the UF (Giga Black Hole).

## POSTULATE 5: "The big fish always eats the small one"

In this UF, always objects with the largest mass will attract, decompose and absorb Energy by other objects with smaller mass than their own that will be found within their Personal Electromagnetic Field (PEF), in order to survive in their General Electromagnetic Field (GEF) they belong to.

## *POSTULATE 6*: The LAEC

Any object in the universe that has developed Magnetic Poles on its body and attracts/absorbs Energy by its PEF, it is a LAEC(1) (Large Active Energy Condensation of its PEF) and it is a LAEC(2) (Small Active Energy Condensation – “Food” for the biggest LAEC of the GEF) for any bigger-mass than itself LAEC.

## *POSTULATE 7:* The 7 Categories of LAECS in Nature/Universe

There are only **7 Categories of LAECS in Nature/Universe (Classified by the number of their Magnetic Poles & their Futures)**:

1) **LAEC**bhha (Black Hole, Helium′s Atom)
2) **LAEC**lgha (Lenticular Galaxy, Hydrogen′s Atom )
3) **LAEC**sg (Spiral Galaxy)
4) **LAEC**q1 (Quasar 1)
5) **LAEC**q2 (Quasar 2)
6) **LAEC**s (Sun)
7) **LAEC**sp (Satellite, Planet)

## *POSTULATE 8:* The LAECsp as a “Sun” for its “Moons”

Any LAECsp (e.g., a Planet) can be on the same time a “Sun” for its LAECsp (for its natural satellites/moons), but it has different future from a LAECs. So, on such cases, that we have to deal with two objects of type LAECsp (e.g., with a Planet and its Moon), we call the LAECsp which has the role of the “Sun” LAECsp(1), and the LAECsp, which has the role of the “Moon”, LAECsp(2).

## ***POSTULATE 9:*** Do not confuse a LAECsp with a LAECs

Different type of LAECS have different future and must not be confused. (The Earth is the Moon's "Sun", as the Sun is for the Earth. But, the Earth belongs to the LAECsp category and the Sun belongs to the LAECs category,; tis fact means that the Earth is an Object that orbits around its natural "Sun" and this orbit is PERIODIC, when the Sun does not have a periodic orbit around the core of the Milky Way Galaxy. The Sun is located about 27,000 light-years from the center of the galaxy in one of the spiral arms and moves within the Milky Way galaxy with a speed of about 220 km/sec. This motion is not on a straight line, but rather it is a complex path that is influenced by the gravitational forces of other objects in the galaxy.

## ***POSTULATE 10*** : The size of the LAEC does not play a role

The size of a LAEC does not play any role on the LAEC's classification. That's why two different objects such as the Hydrogen's Atom (as it captured by Anetta Soldotna & Mark Vrakking) and the Barred Lenticular Galaxy NGC 2859 can have the <u>same structure, properties & characteristics</u> (*Scientific Observation: Understanding Energy II. Anna Giakoumaki 2019*). Both are LAECSlgha (both: Magnetic dipoles, barred, with the inner and the outer ring developed, etc. See Figure 1 for the 2 images of hydrogen atom & NGC 2859)

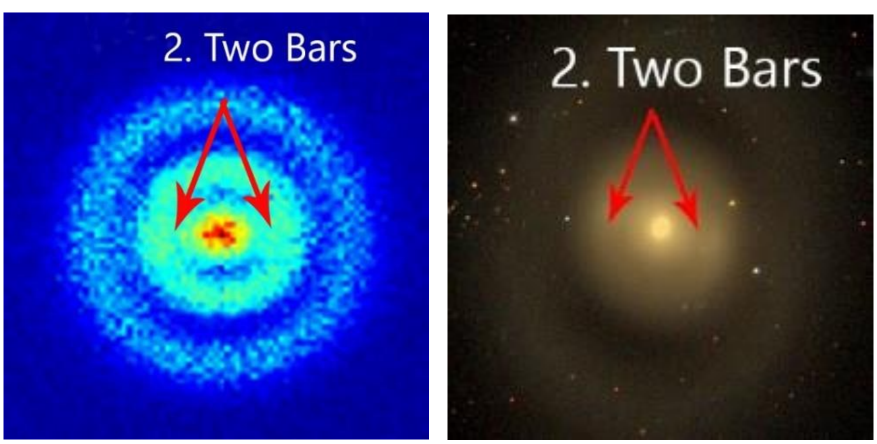


Figure 1. Back in 2013, Aneta Stodolna, of the FOM Institute for Atomic and Molecular Physics in the Netherlands, along with Marc Vrakking at the Max-Born-Institute in Berlin, Germany, and other colleagues in Europe and the US have shown that photoionization microscopy can directly obtain the nodal structure of the electronic orbital of a hydrogen atom placed in a static electric field. In the experiment, the hydrogen atom is placed in the electric field E and is excited by laser pulses. The ionized electron escapes from the atom and follows a particular trajectory to the detector – a dual microchannel plate (MCP) detector – that is perpendicular to the field itself. Given that there are many such trajectories that reach the same point on the detector, interference patterns can be observed, which the team magnify by a factor of more than 20,000 using an electrostatic zoom lens. The interference pattern directly reflects the nodal structure of the wavefunction. The experiments were carried out with both resonant ionization involving a Rydberg state and non-resonant ionization. The image on the left show experimental measurements for (n1,n2,m) = (2,27,0). Interference patterns are clearly observed where the number of nodes corresponds to the value of n1. The results may be compared to TDSE calculations shown to the left, revealing that the experimentally observed nodal structures originate from the transverse nodal structure of the initial state that is formed upon laser excitation.

(A. S. Stodolna, A. Rouzée, Franck Lépine, S. Cohen, F. Robicheaux, et al.. Hydrogen Atoms under Magnification: Direct Observation of the Nodal Structure of Stark States. Physical Review Letters, 2013, 110 (21), pp.213001. ff10.1103/PhysRevLett.110.213001ff. ffhal-03055046f)

On the right image, we see the Galaxy NGC 2859 as it imaged by the Hubble Space Telescope. NGC 2859 is a barred spiral galaxy located in the constellation Leo Minor. The galaxy has a diameter of about 100,000 light-years and is thought to contain about 200 billion stars. It was discovered by the German-British astronomer William Herschel in 1788 and was later catalogued by John Louis Emil Dreyer in the New General Catalogue, a widely used catalogue of astronomical objects. It is a relatively small galaxy, with a diameter of about 50,000 light-years, and is classified as a type SB(rs)bc galaxy, which indicates that it is a barred spiral galaxy with a central bar that is somewhat diffuse and a ring-like structure in its outer regions.

1. *Skrutskie, Michael F.; Cutri, Roc M.; Stiening, Rae; Weinberg, Martin D.; Schneider, Stephen E.; Carpenter, John M.; Beichman, Charles A.; Capps, Richard W.; Chester, Thomas; Elias, Jonathan H.; Huchra, John P.; Liebert, James W.; Lonsdale, Carol J.; Monet, David G.; Price, Stephan; Seitzer, Patrick; Jarrett, Thomas H.; Kirkpatrick, J. Davy; Gizis, John E.; Howard, Elizabeth V.; Evans, Tracey E.; Fowler, John W.; Fullmer, Linda; Hurt, Robert L.; Light, Robert M.; Kopan, Eugene L.; Marsh, Kenneth A.; McCallon, Howard L.; Tam, Robert; Van*

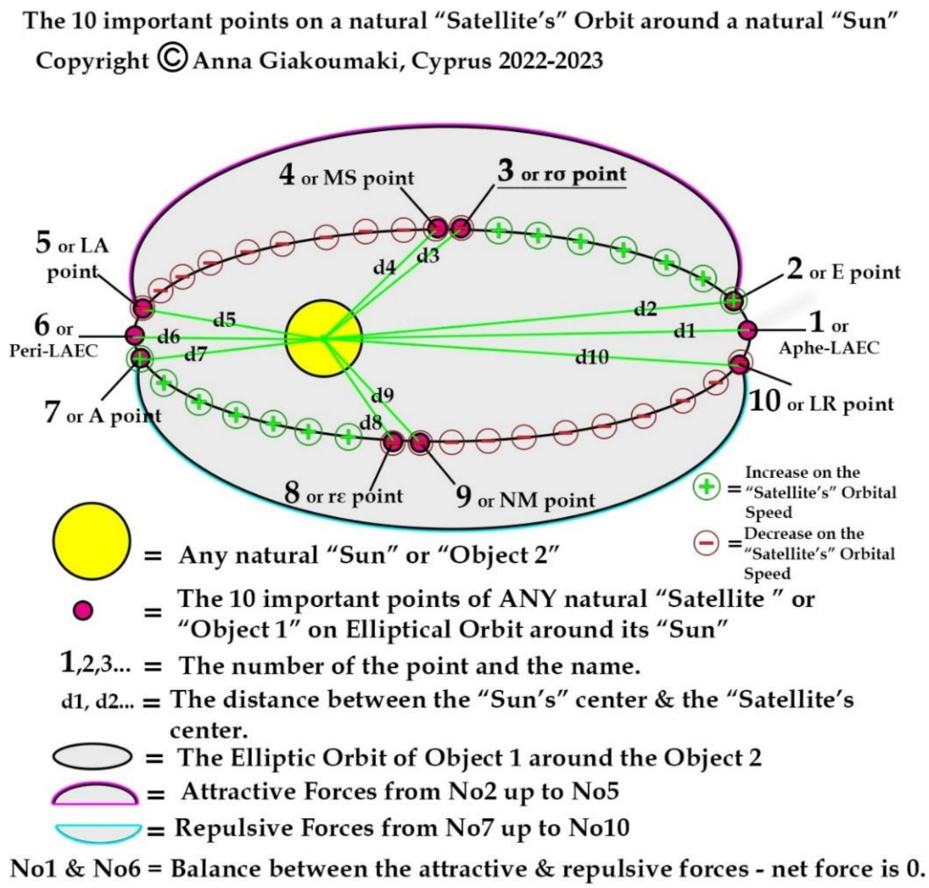
Dyk, Schuyler D.; Wheelock, Sherry L. (1 February 2006). "The Two Micron All Sky Survey (2MASS)". The Astronomical Journal. **131** (2): 1163–1183. Bibcode:2006AJ....131.1163S. doi:10.1086/498708. ISSN 0004-6256. S2CID 18913331.

2. Jet Propulsion Laboratory, California Institute of Technology. "Results for NGC 2859". NASA/IPAC Extragalactic Database. National Aeronautics and Space Administration. Retrieved 2006-11-21.
3. Richings, A. J.; et al. (August 2011), "The connection between radio loudness and central surface brightness profiles in optically selected low-luminosity active galaxies", Monthly Notices of the Royal Astronomical Society, **415** (3): 2158–2172, arXiv:1104.1053, Bibcode:2011MNRAS.415.2158R, doi:10.1111/j.1365-2966.2011.18845.x, S2CID 59476838.
4. Buta, Ronald J.; Corwin, Harold G.; Odewahn, Stephen C. (2007), Atlas of Galaxies, Cambridge University Press, p. 118, ISBN 978-0521820486.
5. de Lorenzo-Cáceres, A.; et al. (May 2013), "Distinct stellar populations in the inner bars of double-barred galaxies", Monthly Notices of the Royal Astronomical Society, **431** (3): 2397–2418, arXiv:1302.5701, Bibcode:2013MNRAS.431.2397D, doi:10.1093/mnras/stt334, S2CID 118502022.

In the two above images, the structure of the hydrogen atom is compared with the galaxy NGC 2859. We see that both objects have two bars, although they are different in size and mass. The bars are one of the twelve points that were compared and shared by both objects.

## *POSTULATE 11*: The 10 important Points and the d(x) (d1, d2, d3…)

Any LAECsp in the universe (any natural "Satellite", such as the Planets & the Moons in our Solar System) that is on an Elliptical Orbit around its LAECs or around a LAECsp(1) (around its natural "Sun"), has these 10 important Points, regardless of its size/mass/shape/composition/orbital direction.




Where,

| No of Point | Name of point | **d(x)** between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | d1 | The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | E | d2 | Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |

| | | | |
|---|---|---|---|
| 3 | rσ | d3 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | d4 | Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 5 | LA | d5 | Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| 6 | Peri-LAEC | d6 | The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 7 | A | d7 | Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 8 | Rε | d8 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | d9 | Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 10 | LR | d10 | Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |

## *POSTULATE 12* : The most important Point is No3

The most important Point of a LAECsp's Orbit around its LAECs or around its LAECsp(1) is the No3 (on the d3) and is related to the development of the LAECsp's Magnetosphere.

## *POSTULATE 13* : The circular orbit on the final stage

We observe circular orbit of the natural satellite around its "sun" always on the final stage of the life of the object; circular orbit means, no "moons", no "rings", weak "atmosphere" and that its structure will start to collapse after a while.

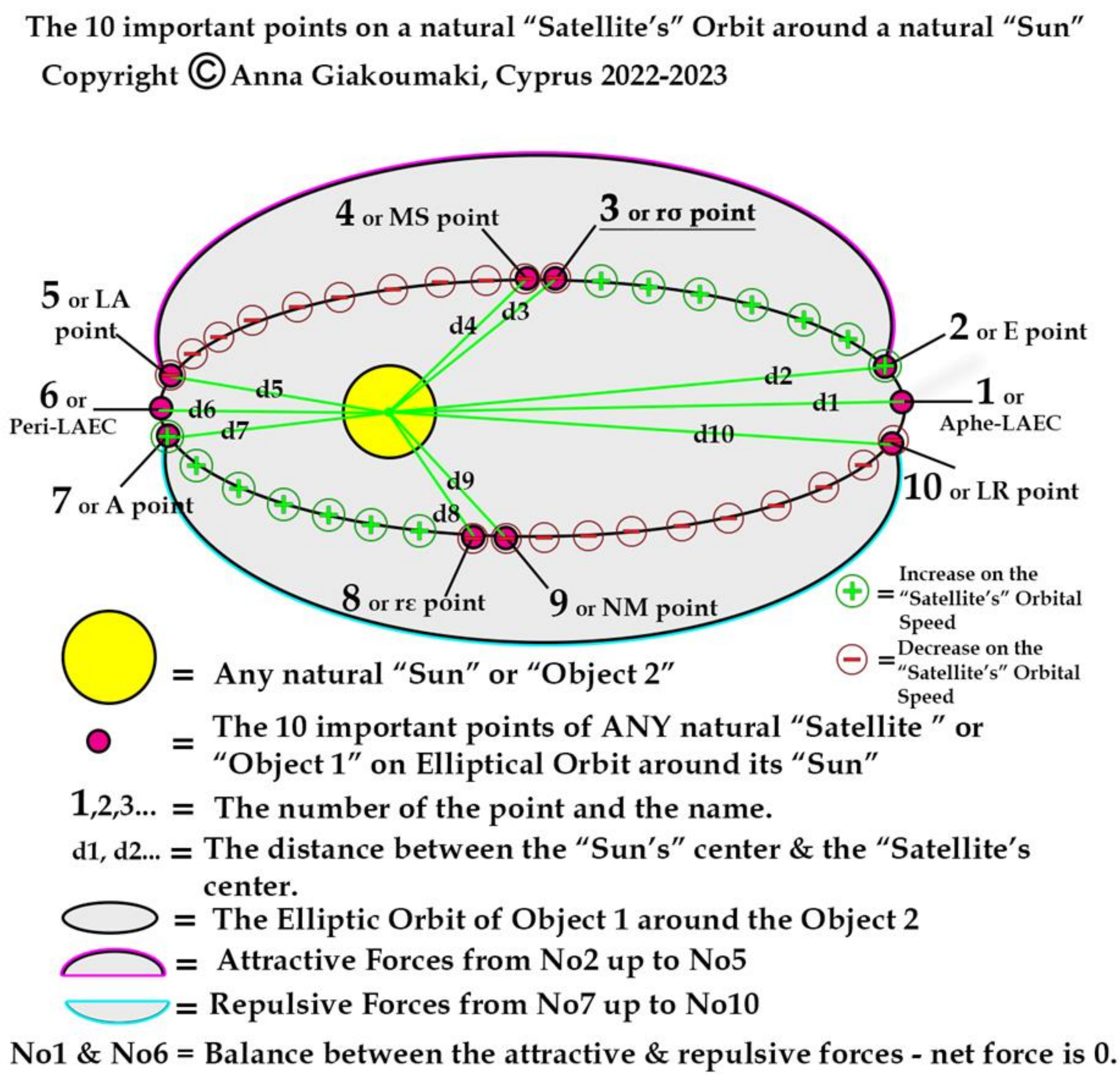
## *POSTULATE 14* : The circular orbit on the final stage

The Diameter of the natural satellite plays always a serious role to how close can approach its natural "Sun" (on what distance will be its Peri-LAEC)

# *PART III*

## Finding the 10 important d(x) (d1, d2, d3…)

On this part, I'll show you how I'm finding the 10 important distances (d1, d2, d3…).



What are these/what is happening at these 10 distances?

| No of Point | Name of point | d(x) between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | **d1** | The farthest distance of the natural “Satellite” by its natural “Sun”. Balance between the attractive & repulsive forces – net force is zero - the “Satellite” does not go farther or closer to its “Sun”. |
| 2 | E | **d2** | Here starts the attraction and the natural “Satellite” starts moving closer to its natural “Sun” with gradual increase of the “Satellite’s Orbital speed” by point No2 up to point No3. |
| 3 | rσ | **d3** | Rapid change (decrease) on the “Satellite’s” Orbital speed and anomaly on the “Satellite’s” Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | **d4** | Gradual decrease of the “Satellite’s Orbital speed” by point No4 up to point No6. |
| 5 | LA | **d5** | Last point with attractive forces between the natural “Satellite” and its natural “Sun”. |
| 6 | Peri-LAEC | **d6** | The closest distance of the natural “Satellite” by its natural “Sun”. Balance between the attractive & repulsive forces – net force is zero - the “Satellite” does not go farther or closer to its “Sun”. |
| 7 | A | **d7** | Here starts the repulsion and the natural “Satellite” starts moving farthest by its natural “Sun” with gradual increase of the “Satellite’s Orbital speed” by point No7 up to point No8. |
| 8 | rε | **d8** | Rapid change (decrease) on the “Satellite’s” Orbital speed and anomaly on the “Satellite’s” Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | **d9** | Gradual decrease of the “Satellite’s Orbital speed” by point No9 up to point No10. |
| 10 | LR | **d10** | Last point with repulsive forces between the natural “Satellite” and its natural “Sun”. |

It's time to set up my first proposition.

# *PROPOSITION A –*
## *Earth has these 10 points with these characteristics*

The Earth has these 10 points with these characteristics on its Elliptical Orbit around the Sun.

**Facts about Earth**

**Diameter (km):** 12,756

**Mass ($10^{24}$kg):** 5.97

**Shape:** The Earth is an irregularly shaped ellipsoid.

**Orbit:** Elliptical

**Direction of Orbit:** Anticlockwise.

**Composition:** The Earth is composed primarily of iron (32.1%), oxygen (30.1%), silicon (15.1%), magnesium (13.9%), sulfur (2.9%), nickel (1.8%), calcium (1.5%), and aluminum (1.4%), with the remaining 1.2% consisting of trace amounts of other elements. The Earth's atmosphere is composed primarily of nitrogen (78.09%) and oxygen (20.95%), with trace amounts of other gases including carbon dioxide (0.04%). The Earth's oceans contain 97% of the Earth's water, which is composed primarily of hydrogen and oxygen. The Earth's crust is composed primarily of oxygen, silicon, aluminum, iron, calcium, sodium, potassium, and magnesium.

**Step 1:**

I will create a table with 5 columns for the Earth. In the first two columns, I will insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Earth's distance from the Sun in million km

**Step 2:**

I will find these data for the next 3 columns:

- Column No3: The difference of the Earth's distance from the Sun from the previous day
- Column No4: The Sequence of the difference (it is also related to the Orbital Speed)
- Column No5: The 10 Points and comments

| Date 2020 | The Earth's distance from the Sun in million km | The difference of the Earth's distance from the Sun from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| June | | | | |
| 1 | 151.71 | - | | |
| 2 | 151.73 | +0.02 | +0.02 | |
| 3 | 151.75 | +0.02 | | |
| 4 | 151.77 | +0.02 | | |
| 5 | 151.79 | +0.02 | | |
| 6 | 151.81 | +0.02 | | |
| 7 | 151.83 | +0.02 | | |
| 8 | 151.85 | +0.02 | | |
| 9 | 151.87 | +0.02 | | |
| 10 | 151.89 | +0.02 | | |
| 11 | 151.91 | +0.02 | | |

| | | | | |
|---|---|---|---|---|
| **12** | **151.92** | **+0.01** | | |
| 13 | 151.94 | +0.02 | | |
| 14 | 151.95 | +0.01 | | |
| 15 | 151.97 | +0.02 | | |
| 16 | 151.98 | +0.01 | | |
| 17 | 152.00 | +0.02 | | |
| 18 | 152.01 | +0.01 | **+0.01** | |
| **19** | **152.02** | +0.01 | | |
| 20 | 152.03 | +0.01 | | |
| 21 | 152.04 | +0.01 | | |
| 22 | 152.05 | +0.01 | | |
| 23 | 152.06 | +0.01 | | |
| 24 | 152.07 | +0.01 | | |
| **25** | **152.07** | 0 | | |
| 26 | 152.08 | +0.01 | | |
| 27 | 152.08 | 0 | | |
| 28 | 152.09 | +0.01 | | |
| 29 | 152.09 | 0 | **0** | |
| **30** | **152.09** | 0 | | |
| | | | | |
| July | | | | |
| 1 | 152.09 | 0 | | |
| 2 | 152.09 | 0 | | |
| **3** | **152.10** | **+0.01 Aphe-LAEC ("Aphelion")** | | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the |

| | | | | |
|---|---|---|---|---|
| | | | | "Satellite" does not go farther or closer to its "Sun". |
| **4** | **152.10** | 0 | 0 | |
| **5** | **152.10** | **0** | | |
| **6** | **152.09** | **-0.01 E point (Exits the Aphe-LAEC's Zone – "Aphelion 's Zone")** | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 7 | 152.09 | 0 | 0 | |
| 8 | 152.09 | 0 | | |
| **9** | **152.09** | 0 | | |
| 10 | 152.09 | 0 | | |
| 11 | 152.08 | -0.01 | | |
| 12 | 152.08 | 0 | | |
| **13** | **152.07** | -0.01 | | |
| 14 | 152.07 | 0 | | |
| 15 | 152.06 | -0.01 | | |
| **16** | **152.05** | -0.01 | | |
| 17 | 152.05 | 0 | | |
| 18 | 152.04 | -0.01 | -0.01 | |
| 19 | 152.03 | -0.01 | | |
| **20** | **152.02** | -0.01 | | |
| 21 | 152.01 | -0.01 | | |
| **22** | **151.99** | -0.02 | | |
| 23 | 151.98 | -0.01 | | |
| 24 | 151.97 | -0.01 | | |

| | | | | |
|---|---|---|---|---|
| 25 | 151.95 | -0.02 | | |
| **26** | **151.93** | -0.02 | | |
| 27 | 151.92 | -0.01 | | |
| 28 | 151.90 | -0.02 | | |
| 29 | 151.88 | -0.02 | | |
| **30** | **151.86** | -0.02 | | |
| 31 | 151.85 | -0.01 | | |
| August | | | | |
| 1 | 151.83 | -0.02 | -0.02 | |
| 2 | 151.81 | -0.02 | | |
| 3 | 151.79 | -0.02 | | |
| **4** | **151.77** | -0.02 | | |
| **5** | **151.74** | -0.03 | | |
| **6** | **151.72** | -0.02 | | |
| 7 | 151.70 | -0.02 | | |
| 8 | 151.68 | -0.02 | | |
| 9 | 151.66 | -0.02 | | |
| **10** | **151.63** | -0.03 | | |
| 11 | 151.61 | -0.02 | | |
| **12** | **151.58** | -0.03 | | |
| 13 | 151.56 | -0.02 | | |
| 14 | 151.53 | -0.03 | | |
| 15 | 151.51 | -0.02 | | |
| 16 | 151.48 | -0.03 | -0.03 | |
| **17** | **151.45** | -0.03 | | |
| 18 | 151.42 | -0.03 | | |
| 19 | 151.39 | -0.03 | | |
| 20 | 151.36 | -0.03 | | |
| 21 | 151.33 | -0.03 | | |

| | | | | |
|---|---|---|---|---|
| 22 | 151.30 | -0.03 | | |
| 23 | 151.27 | -0.03 | | |
| 24 | 151.23 | -0.04 | | |
| 25 | 151.20 | -0.03 | | |
| 26 | 151.17 | -0.03 | | |
| 27 | 151.13 | -0.04 | | |
| 28 | 151.10 | -0.03 | | |
| 29 | 151.06 | -0.04 | | |
| 30 | 151.03 | -0.03 | | |
| 31 | 150.99 | -0.04 | | |
| September | | | | |
| 1 | 150.96 | -0.03 | | |
| 2 | 150.92 | -0.04 | | |
| 3 | 150.88 | -0.04 | | |
| 4 | 150.85 | -0.03 | | |
| 5 | 150.81 | -0.04 | | |
| 6 | 150.77 | -0.04 | | |
| 7 | 150.74 | -0.03 | | |
| 8 | 150.70 | -0.04 | | |
| 9 | 150.66 | -0.04 | | |
| 10 | 150.62 | -0.04 | | |
| 11 | 150.59 | -0.03 | | |
| 12 | 150.55 | -0.04 | -0.04 | |
| 13 | 150.51 | -0.04 | | |
| 14 | 150.47 | -0.04 | | |
| 15 | 150.43 | -0.04 | | |
| 16 | 150.39 | -0.04 | | |
| 17 | 150.35 | -0.04 | | |

| | | | | |
|---|---|---|---|---|
| 18 | 150.31 | -0.04 | | |
| 19 | 150.27 | -0.04 | | |
| 20 | 150.22 | -0.05 | | |
| 21 | 150.18 | -0.04 | | |
| 22 | 150.14 | -0.04 | | |
| 23 | 150.10 | -0.04 | | |
| 24 | 150.05 | -0.05 | | |
| 25 | 150.01 | -0.04 | | |
| 26 | 149.97 | -0.04 | | |
| 27 | 149.92 | -0.05 | | |
| 28 | 149.88 | -0.04 | | |
| 29 | 149.84 | -0.04 | | |
| 30 | 149.79 | -0.05 | | |
| | | | | |
| October | | | | |
| 1 | 149.75 | -0.04 | | |
| 2 | 149.71 | -0.04 | | |
| 3 | 149.67 | -0.04 | | |
| 4 | 149.62 | -0.05 | | |
| 5 | 149.58 | -0.04 | | |
| 6 | 149.54 | -0.04 | | |
| 7 | 149.50 | -0.04 | | |
| 8 | 149.45 | -0.05 | | |
| 9 | 149.41 | -0.04 | | |
| 10 | 149.37 | -0.04 | | |
| 11 | 149.33 | -0.04 | | |
| 12 | 149.29 | -0.04 | | |
| 13 | 149.24 | -0.05 | | |
| 14 | 149.20 | -0.04 | | |
| 15 | 149.16 | -0.04 | | |

| | | | | |
|---|---|---|---|---|
| 16 | 149.12 | -0.04 | | |
| 17 | 149.07 | -0.05 | | |
| 18 | 149.03 | -0.04 | | |
| 19 | 148.99 | -0.04 | | |
| 20 | 148.95 | -0.04 | | |
| 21 | 148.91 | -0.04 | | |
| 22 | 148.86 | -0.05 | | |
| 23 | 148.82 | -0.04 | | |
| 24 | 148.78 | -0.04 | | |
| 25 | 148.74 | -0.04 | | |
| 26 | 148.69 | **-0.05** | (max) | |
| 27 | 148.65 | -0.04 | -0.04 AGAIN? Why NOT -0.05? | |
| 28 | 148.61 | -0.04 | | |
| 29 | 148.57 | -0.04 | | |
| 30 | 148.53 | -0.04 | | |
| 31 | 148.49 | -0.04 | | |
| November | | | | |
| 1 | 148.45 | -0.04 | | |
| **2** | **148.42** | **-0.03** | **The rσ point. ANOMALY on the speed. It should be a sequence of -0.05 NOT -0.03** | **Point No3 or rσ (on d3):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |

| | | | | |
|---|---|---|---|---|
| 3 | 148.38 | -0.04 | -0.04 **MS point** | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 4 | 148.34 | -0.04 | | |
| 5 | 148.30 | -0.04 | | |
| 6 | **148.27** | -0.03 | | |
| 7 | 148.23 | -0.04 | | |
| 8 | 148.20 | -0.03 | | |
| 9 | 148.16 | -0.04 | | |
| 10 | 148.13 | -0.03 | | |
| 11 | 148.09 | -0.03 | | |
| 12 | 148.06 | -0.03 | | |
| 13 | 148.03 | -0.03 | | |
| 14 | 147.99 | -0.04 | | |
| 15 | 147.96 | -0.03 | | |
| 16 | 147.93 | -0.03 | | |
| 17 | 147.90 | -0.03 | | |
| 18 | 147.86 | -0.04 | | |
| 19 | 147.83 | -0.03 | -0.03 | |
| 20 | 147.80 | -0.03 | | |
| 21 | 147.77 | -0.03 | | |
| 22 | 147.74 | -0.03 | | |
| 23 | 147.71 | -0.03 | | |
| 24 | 147.68 | -0.03 | | |
| 25 | 147.65 | -0.03 | | |
| 26 | 147.62 | -0.03 | | |
| **27** | **147.60** | **-0.02** | | |
| 28 | 147.57 | -0.03 | | |

| | | | | |
|---|---|---|---|---|
| 29 | 147.54 | -0.03 | | |
| 30 | 147.52 | -0.02 | | |
| | | | | |
| December | | | | |
| 1 | 147.50 | -0.02 | | |
| 2 | 147.47 | -0.03 | | |
| 3 | 147.45 | -0.02 | -0.02 | |
| 4 | 147.43 | -0.02 | | |
| 5 | 147.41 | -0.02 | | |
| 6 | 147.39 | -0.02 | | |
| 7 | 147.37 | -0.02 | | |
| 8 | 147.35 | -0.02 | | |
| 9 | 147.33 | -0.02 | | |
| **10** | **147.32** | **-0.01** | | |
| 11 | 147.30 | -0.02 | | |
| 12 | 147.28 | -0.02 | | |
| 13 | 147.27 | -0.01 | | |
| 14 | 147.25 | -0.02 | | |
| 15 | 147.24 | -0.01 | | |
| 16 | 147.22 | -0.02 | | |
| 17 | 147.21 | -0.01 | | |
| 18 | 147.20 | -0.01 | | |
| 19 | 147.18 | -0.02 | | |
| 20 | 147.17 | -0.01 | -0.01 | |
| **21** | **147.16** | -0.01 | | |
| 22 | 147.15 | -0.01 | | |
| 23 | 147.14 | -0.01 | | |
| 24 | 147.13 | -0.01 | | |
| 25 | 147.12 | -0.01 | | |

| | | | | |
|---|---|---|---|---|
| 26 | 147.12 | 0 | | |
| 27 | 147.11 | -0.01 | | |
| 28 | 147.11 | 0 | | |
| 29 | 147.10 | -0.01 | | |
| 30 | 147.10 | 0 | | **Point No5 or LA (on d5):** Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| January 2021 | | | | |
| 1 | 147.09 | -0.01 | -0.01 and then "Perihelion". | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun".<br>Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | 147.09 | 0 | 0 | |
| 3 | 147.09 | 0 | | |
| 4 | 147.09 | 0 | | |
| 5 | 147.10 | +0.01 | | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 6 | 147.10 | 0 | | |
| 7 | 147.10 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 8 | 147.11 | +0.01 | | |
| 9 | 147.11 | 0 | | |
| 10 | 147.12 | +0.01 | | |
| 11 | 147.13 | +0.01 | | |
| 12 | 147.13 | 0 | | |
| 13 | 147.14 | +0.01 | +0.01 | |
| 14 | 147.15 | +0.01 | | |
| 15 | 147.16 | +0.01 | | |
| 16 | 147.16 | 0 | | |
| 17 | 147.17 | +0.01 | | |
| 18 | 147.18 | +0.01 | | |
| **19** | **147.20** | **+0.02** | | |
| 20 | 147.21 | +0.01 | | |
| 21 | 147.22 | +0.01 | | |
| 22 | 147.23 | +0.01 | | |
| **23** | **147.25** | **+0.02** | | |
| 24 | 147.26 | +0.01 | | |
| 25 | 147.28 | +0.02 | | |
| 26 | 147.29 | +0.01 | | |
| 27 | 147.31 | +0.02 | +0.02 | |
| 28 | 147.33 | +0.02 | | |
| 29 | 147.35 | +0.02 | | |
| 30 | 147.37 | +0.02 | | |
| 31 | 147.39 | +0.02 | | |
| February 2021 | | | | |
| 1 | 147.41 | +0.02 | | |
| 2 | 147.43 | +0.02 | | |
| 3 | 147.45 | +0.02 | | |
| 4 | 147.48 | +0.03 | | |

| | | | | |
|---|---|---|---|---|
| 5 | 147.50 | +0.02 | | |
| 6 | 147.53 | +0.03 | | |
| 7 | 147.55 | +0.02 | | |
| 8 | 147.58 | +0.03 | | |
| 9 | 147.61 | +0.03 | | |
| 10 | 147.63 | +0.02 | | |
| 11 | 147.66 | +0.03 | | |
| 12 | 147.69 | +0.03 | | |
| 13 | 147.72 | +0.03 | | |
| 14 | 147.74 | +0.02 | | |
| 15 | 147.77 | +0.03 | +0.03 | |
| 16 | 147.80 | +0.03 | | |
| 17 | 147.83 | +0.03 | | |
| 18 | 147.86 | +0.03 | | |
| 19 | 147.89 | +0.03 | | |
| 20 | 147.92 | +0.03 | | |
| 21 | 147.96 | +0.04 | | |
| 22 | 147.99 | +0.03 | | |
| 23 | 148.02 | +0.03 | | |
| 24 | 148.05 | +0.03 | | |
| 25 | 148.09 | +0.04 | | |
| 26 | 148.12 | +0.03 | | |
| 27 | 148.16 | +0.04 | | |
| 28 | 148.20 | +0.04 | | |
| March 2021 | | | | |
| 1 | 148.23 | +0.03 | | |
| 2 | 148.27 | +0.04 | | |
| 3 | 148.31 | +0.04 | | |
| 4 | 148.35 | +0.04 | | |

| | | | | |
|---|---|---|---|---|
| 5 | 148.38 | +0.03 | | |
| 6 | 148.42 | +0.04 | +0.04 | |
| 7 | 148.46 | +0.04 | | |
| 8 | 148.50 | +0.04 | | |
| 9 | 148.54 | +0.04 | | |
| 10 | 148.58 | +0.04 | | |
| 11 | 148.62 | +0.04 | | |
| 12 | 148.66 | +0.04 | | |
| 13 | 148.70 | +0.04 | | |
| 14 | 148.74 | +0.04 | | |
| 15 | 148.78 | +0.04 | | |
| 16 | 148.82 | +0.04 | | |
| 17 | 148.87 | +0.05 | | |
| 18 | 148.91 | +0.04 | | |
| 19 | 148.95 | +0.04 | | |
| 20 | 148.99 | +0.04 | | |
| 21 | 149.03 | +0.04 | | |
| 22 | 149.07 | +0.04 | | |
| 23 | 149.11 | +0.04 | | |
| 24 | 149.15 | +0.04 | | |
| 25 | 149.20 | +0.05 | | |
| 26 | 149.24 | +0.04 | | |
| 27 | 149.28 | +0.04 | | |
| 28 | 149.32 | +0.04 | | |
| 29 | 149.36 | +0.04 | | |
| 30 | 149.41 | +0.05 | | |
| 31 | 149.45 | +0.04 | | |
| April 2021 | | | | |
| 1 | 149.49 | +0.04 | | |

| | | | | |
|---|---|---|---|---|
| 2 | 149.54 | +0.05 | | |
| 3 | 149.58 | +0.04 | | |
| 4 | 149.63 | +0.05 | | |
| 5 | 149.67 | +0.04 | | |
| 6 | 149.71 | +0.04 | | |
| 7 | 149.76 | +0.05 | | |
| 8 | 149.80 | +0.04 | | |
| 9 | 149.84 | +0.04 | | |
| 10 | 149.89 | +0.05 | | |
| 11 | 149.93 | +0.04 | | |
| 12 | 149.97 | +0.04 | | |
| 13 | 150.02 | **+0.05** | (max) | |
| 14 | 150.06 | +0.04 | +0.04 | |
| 15 | 150.10 | +0.04 | | |
| 16 | 150.14 | +0.04 | | |
| 17 | 150.18 | +0.04 | | |
| 18 | 150.22 | +0.04 | | |
| 19 | 150.26 | +0.04 | | |
| 20 | 150.30 | +0.04 | | |
| 21 | 150.34 | +0.04 | | |
| 22 | 150.38 | +0.04 | | |
| 23 | 150.42 | +0.04 | | |
| 24 | 150.46 | +0.04 | | |
| 25 | 150.50 | +0.04 | | |
| 26 | 150.54 | +0.04 | | |
| 27 | 150.58 | +0.04 | | |
| 28 | 150.62 | +0.04 | | |
| 29 | 150.66 | +0.04 | | |
| 30 | 150.70 | +0.04 | | |
| May 2021 | | | | |

| | | | | |
|---|---|---|---|---|
| 1 | 150.74 | +0.04 | | |
| 2 | 150.78 | +0.04 | | |
| **3** | **150.81** | **+0.03** | **rε point. Anomaly on the speed. It should be a sequence of +0.05 not +0.03** | **Point No8 or rε (on d8):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | 150.85 | +0.04 | **NM point** | **Point No9 or NM (on d9):** Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 5 | 150.89 | +0.04 | | |
| 6 | 150.93 | +0.04 | | |
| 7 | 150.96 | +0.03 | | |
| 8 | 151.00 | +0.04 | | |
| 9 | 151.04 | +0.04 | | |
| 10 | 151.07 | +0.03 | | |
| 11 | 151.11 | +0.04 | | |
| 12 | 151.14 | +0.03 | | |
| 13 | 151.17 | +0.03 | | |
| 14 | 151.20 | +0.03 | | |
| 15 | 151.24 | +0.04 | | |
| 16 | 151.27 | +0.03 | +0.03 | |
| 17 | 151.30 | +0.03 | | |
| 18 | 151.33 | +0.03 | | |
| 19 | 151.36 | +0.03 | | |
| 20 | 151.39 | +0.03 | | |

| | | | | |
|---|---|---|---|---|
| 21 | 151.42 | +0.03 | | |
| 22 | 151.44 | +0.02 | | |
| 23 | 151.47 | +0.03 | | |
| 24 | 151.50 | +0.03 | | |
| 25 | 151.53 | +0.03 | | |
| 26 | 151.55 | +0.02 | | |
| 27 | 151.58 | +0.03 | | |
| 28 | 151.60 | +0.02 | | |
| 29 | 151.63 | +0.03 | | |
| 30 | 151.65 | +0.02 | | |
| 31 | 151.68 | +0.03 | | |
| June 2021 | | | | |
| 1 | 151.70 | +0.02 | | |
| 2 | 151.73 | +0.03 | | |
| 3 | 151.75 | +0.02 | +0.02 | |
| 4 | 151.77 | +0.02 | | |
| 5 | 151.79 | +0.02 | | |
| 6 | 151.81 | +0.02 | | |
| 7 | 151.83 | +0.02 | | |
| 8 | 151.85 | +0.02 | | |
| 9 | 151.87 | +0.02 | | |
| 10 | 151.89 | +0.02 | | |
| 11 | 151.91 | +0.02 | | |
| 12 | 151.92 | +0.01 | | |
| 13 | 151.94 | +0.02 | | |
| 14 | 151.95 | +0.01 | | |
| 15 | 151.96 | +0.01 | | |
| 16 | 151.98 | +0.02 | | |
| 17 | 151.99 | +0.01 | +0.01 | |

| | | | | |
|---|---|---|---|---|
| 18 | 152.00 | +0.01 | | |
| 19 | 152.01 | +0.01 | | |
| 20 | 152.02 | +0.01 | | |
| 21 | 152.03 | +0.01 | | |
| 22 | 152.04 | +0.01 | | |
| 23 | 152.05 | +0.01 | | |
| 24 | 152.05 | 0 | | |
| 25 | 152.06 | +0.01 | | |
| 26 | 152.07 | +0.01 | | |
| 27 | 152.07 | 0 | | |
| 28 | 152.08 | +0.01 | | |
| 29 | 152.08 | 0 | | |
| 30 | 152.09 | +0.01 | | |
| July 2021 | | | | |
| 1 | 152.09 | 0 | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |
| **2** | **152.10** | **+0.01** | **Point No1 or Aphe-LAEC ("Aphelion") again.** | |
| 3 | 152.10 | 0 | 0 | |
| 4 | 152.10 | 0 | | |
| 5 | 152.10 | 0 | | |
| 6 | 152.10 | 0 | | |
| 7 | 152.10 | 0 | | |
| 8 | 152.10 | 0 | | |
| 9 | 152.10 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 10 | 152.09 | -0.01 | | |
| 11 | 152.09 | 0 | | |
| 12 | 152.08 | -0.01 | | |
| 13 | 152.08 | 0 | | |
| 14 | 152.07 | -0.01 | -0.01 | |
| 15 | 152.06 | -0.01 | | |
| 16 | 152.05 | -0.01 | | |
| 17 | 152.04 | -0.01 | | |
| 18 | 152.03 | -0.01 | | |
| 19 | 152.02 | -0.01 | | |
| 20 | 152.01 | -0.01 | | |
| 21 | 152.00 | -0.01 | | |
| 22 | 151.99 | -0.01 | | |
| 23 | 151.97 | -0.02 | | |
| 24 | 151.96 | -0.01 | | |
| 25 | 151.95 | -0.01 | | |
| 26 | 151.93 | -0.02 | | |
| 27 | 151.92 | -0.01 | | |
| 28 | 151.90 | -0.02 | | |
| 29 | 151.89 | -0.01 | | |
| 30 | 151.87 | -0.02 | -0.02 | |
| 31 | 151.87 | -0.02 | ………… | |

## *PROPOSITION A – Conclusion*

The Earth has these 10 points with these characteristics on its Elliptical Orbit around the Sun.

The Earth is a LAECsp -a natural Satellite on Orbit around the LAECs –the natural "Sun". Venus, Mars, Mercury, etc., even the Earth's Moon as it Orbits around the Earth, belong also to the LAECsp category – they are all "natural Satellites" on Orbit around their "Sun". So, they must have these 10 points too. So, do they really have them?

## *PROPOSITION B –*

***All Planets (that are natural Satellites) in our Solar System have these 10 points with these characteristics, because they are the same, LAECsps – natural satellites – in an Elliptical Orbit around their natural Sun, regardless of their mass, size, shape, composition or their direction of orbit.***

---

The Objects that are natural "Satellites" (LAECsp) and they are in an Elliptical Orbit around a natural "Sun" (LAECs or LAECsp(1)) are the same, regardless of their mass/size/shape/direction of Orbit then, and all of them have these 10 points as they are Orbiting around their "Sun".

Now I will check the data of the Planets in our Solar System.

## *No1 – VENUS*

## *Natural Satellite (Planet) Venus in an Elliptical Orbit around a natural Sun (the Sun).*

---

**<u>Facts about Venus</u>**
**Diameter (km):** 12,104
**Mass ($10^{24}$kg):** 4.87
**Shape:** Venus is more nearly spherical than most planets.
**Orbit:** Elliptical

**Direction of Orbit:** All the planets in the Solar System orbit the Sun in an anticlockwise direction as viewed from above Earth's north pole. Most planets also rotate on their axes in an anti-clockwise direction, but Venus rotates clockwise in retrograde rotation once every 243 Earth days—the slowest rotation of any planet.

**Composition:** Venus is mostly composed of rock and metal, with a surface layer of mostly sulfuric acid clouds. Its thick atmosphere is primarily composed of carbon dioxide and nitrogen, with trace amounts of water vapor, sulfur dioxide, and other gases. The surface of Venus is rocky and covered in volcanoes, mountains, and vast plains. The planet's surface is thought to be composed of basalt, a type of volcanic rock. Venus also has a metallic core, likely made of iron and nickel. The overall composition of Venus is similar to that of Earth, but it lacks a protective magnetic field and has a much denser atmosphere.

**Note:** I have followed the same steps, but due to the length of the table, I will only show you where I found the 10 points and the 2 extrema on the table (**see Appendix A**). Typically, the points and the extrema on the table are seen in four groups, as you will see below.

## $1)\ Checking\ for\ the\ 10\ Points\ day-by-day$

### $I.\ Group\ A\ (Points\ No10, No1 - Aphe - LAEC -\ and\ No2)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 5/7/20 | 108.93 |
| No1 | 6/7/20 | 108.94 |
| No2 | 16/7/20 | 108.93 |

## $II. Group\ B\ (1st\ Max\ and\ Points\ No3\ and\ No4)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 31/8/20 | 108.30 |
| No3 | 22/9/20 | 107.87 |
| No4 | 23/9/20 | 107.85 |

## $III. Group\ C\ (Points\ No5, No6 - \ Peri - LAEC - \ and\ No7)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 28/10/20 | 107.48 |
| No6 | 29/10/20 | 107.49 |
| No7 | 2/11/20 | 107.48 |

## $IV. Group\ D\ (2nd\ Max\ and\ Points\ No8\ and\ No9)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max | 20/12/20 | 108.10 |
| No8 | 11/1/21 | 108.53 |
| No9 | 12/1/21 | 108.55 |

## *PROPOSITION B/No1 – Conclusion for Venus*

Venus has these 10 points with these characteristics on its Elliptic Orbit around the Sun.

## *No2 – MERCURY*

## *Natural Satellite (Planet) Mercury in an Elliptical Orbit around a natural Sun (the Sun).*

**Facts about Mercury**
**Diameter (km):** 4,879
**Mass ($10^{24}$kg):** 0.330
**Shape:** Oblate
**Orbit:** Elliptical
**Direction of Orbit:** Anticlockwise.
**Composition:** Mercury is a terrestrial planet, meaning it is composed mainly of rock and metal. Its surface is rocky and heavily cratered, and it is thought to have a metallic core. The composition of Mercury is similar to that of the Earth's crust, with a high percentage of silicon, oxygen, iron, magnesium, and other elements. It also has a thin atmosphere composed mainly of oxygen, sodium, and hydrogen.

**Note:** I have followed the same steps, but due to the length of the table, I will only show you where I found the 10 points and the 2 extrema on the table (**see Appendix B**)

# $1)\ Checking\ for\ the\ 10\ Points\ day-by-day$

## $I.\ Group\ A\ (Points\ No10, No1 – Aphe - LAEC -\ and\ No2)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 28/12/19 | 69.77 |
| No1 | 29/12/19 | 69.81 |
| No2 | 31/12/19 | 69.77 |

## $II.\ Group\ B\ (1st\ Max\ and\ Points\ No3\ and\ No4)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 27/1/21 | 54.79 |
| No3 | 28/1/20 | 53.93 |
| No4 | 30/1/20 | 53.23 |

## $III.\ Group\ C\ (Points\ No5, No6 –\ Peri - LAEC -\ and\ No7)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 10/2/20 | 46.10 |
| No6 | 11/2/20 | 46.01 |
| No7 | 13/2/20 | 46.11 |

## *IV. Group D (2nd Max and Points No8 and No9)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max | 29/2/20 | 56.52 |
| No8 | 1/3/20 | 57.38 |
| No9 | 2/3/20 | 58.23 |

## *PROPOSITION B/No2 – Conclusion for Mercury*

Mercury has these 10 points with these characteristics on its Elliptic Orbit around the Sun.

## *No3 – Natural Satellite (Planet) Mars in an Elliptical Orbit around a natural Sun (the Sun).*

**Facts about Mars**

**Diameter (km):** 6,792

**Mass ($10^{24}$kg):** 0.642

**Shape:** Oblate spheroid

**Orbit:** Elliptical

**Direction of Orbit:** Anticlockwise.

**Composition:** The composition of Mars is similar to that of the Earth, but it has a much lower density. The surface of Mars is mostly made up of rocky materials, including basalt and other volcanic rocks, as well as dust and regolith. The interior of

Mars is believed to be composed of a metallic core surrounded by a mantle and a crust. The core is thought to be made up of iron and nickel, while the mantle and crust are made up of silicate minerals. Mars also has a thin atmosphere composed mostly of carbon dioxide, with smaller amounts of nitrogen, oxygen, and water vapor.

**Note:** I have followed the same steps, but due to the length of the table, I will only show you where I found the 10 points and the 2 extrema on the table (**see Appendix C**)

## $1)\ \boldsymbol{Checking\ for\ the\ 10\ Points\ day - by - day}$

### $\boldsymbol{I. Group\ A\ (Points\ No10, No1 - Aphe - LAEC -\ and\ No2)}$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 22/8/19 | 249.23 |
| No1 | 23/8/19 | 249.24 |
| No2 | 28/8/19 | 249.23 |

### $\boldsymbol{II. Group\ B\ (1st\ Max\ and\ Points\ No3\ and\ No4)}$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 20/3/20 | 222.88 |
| No3 | 21/1/20 | 222.69 |
| No4 | 24/3/20 | 222.11 |

## *III. Group C (Points No5, No6 – Peri — LAEC — and No7)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 31/7/20 | 206.66 |
| No6 | 1/8/20 | 206.65 |
| No7 | 5/8/20 | 206.66 |

## *IV. Group D (2nd Max and Points No8 and No9)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max | 10/1/21 | 227.72 |
| No8 | 11/1/21 | 227.91 |
| No9 | 13/1/21 | 228.30 |

## *PROPOSITION B/No3 – Conclusion for Mars*

Mars has these 10 points with these characteristics on its Elliptical Orbit around the Sun.

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***Note:** All the Planets in our Solar System have these 10 Points on their Elliptical Orbit around the Sun;here is the link to check for yourselfs https://theskylive.com/planetarium by following these steps:

1) Type the name of the Planet

2) Click on "Set date and time"

3) Watch the "Sun distance:" and change the dates day by day, to find the "Aphelion" of the Planet to start with.

4) Create & fill the table with the five columns (Date, The Planet's distance from the Sun in million km, The difference of the Planet's distance from the Sun from the previous day, The Sequence of the difference & The 10 Points & comments)

## *PROPOSITION B – General Conclusion*

All the natural Satellites (Planets) in our Solar System have these 10 points with these characteristics because they are the same – natural Satellites in an Elliptical Orbit around their natural Sun-, regardless of their mass/size/shape/composition or their direction of orbit.

## *PROPOSITION Γ – The Earth's Moon (LAECsp(2) – (natural Satellite) has these 10 points with these characteristics*

The Earth's Moon (LAECsp(2) - natural Satellite) has these 10 Points with these characteristics, because it's same with the Planets of our Solar System – a LAECsp, a natural Satellite in an Elliptical Orbit around its LAECsp(1) (its "Sun", the Earth), regardless its mass/size/shape/composition or its direction of Orbit.

## *Natural Satellite (Moon) the Moon in an Elliptical Orbit around a natural Sun (the Earth).*

**Facts about Moon**

**Diameter (km):** 3,475

**Mass ($10^{24}$kg):** 0.073

**Shape:** Sphere

**Orbit:** Elliptical

**Direction of Orbit:** The moon orbits counterclockwise around the Earth.

**Composition:** The composition of the Earth's Moon is similar to that of the Earth's mantle, with the exception of a lack of volatile elements and compounds, such as water. The Moon's surface is made up of a variety of materials, including anorthosite, basalt, and breccia. The Moon's interior is thought to be composed of a metallic core, a mantle made up of rock, and a crust made up of silicate minerals and rocks. The Moon's surface and interior are thought to have been affected by meteor impacts and other geological processes.

**Note:** I have followed the same steps, but due to the length of the table, I will only show you where I found the 10 points and the 2 extrema on the table (**see Appendix D)**

## $1)\ Checking\ for\ the\ 10\ Points\ day-by-day$

### $I.\ Group\ A\ (Points\ No10, No1 - Aphe - LAEC - \ and\ No2)$

| Points | Date | Distance from the Sun in km |
|---|---|---|
| No10 | 13/9/19 | 405.75 |
| No1 | 14/9/19 | 405.886 |
| No2 | 15/9/19 | 405.141 |

### $II.\ Group\ B\ (1st\ Max\ and\ Points\ No3\ and\ No4)$

| Points | Date | Distance from the Sun in km |
| --- | --- | --- |
| 1st Max | 21/9/19 | 383.564 |
| No3 | 22/9/19 | 378.887 |
| No4 | 23/9/19 | 374.526 |

## $III.\ Group\ C\ (Points\ No5, No6 - \ Peri - LAEC - \ and\ No7)$

| Points | Date | Distance from the Sun in km |
| --- | --- | --- |
| No5 | 27/9/19 | 364.283 |
| No6 | 28/9/19 | 364.189 |
| No7 | 29/9/19 | 365.172 |

## $IV.\ Group\ D\ (2nd\ Max\ and\ Points\ No8\ and\ No9)$

| Points | Date | Distance from the Sun in km |
| --- | --- | --- |
| 2nd Max | 5/10/19 | 387.495 |
| No8 | 6/10/19 | 392.122 |
| No9 | 7/10/19 | 396.381 |

# *PROPOSITION Γ – Conclusion for Earth's Moon*

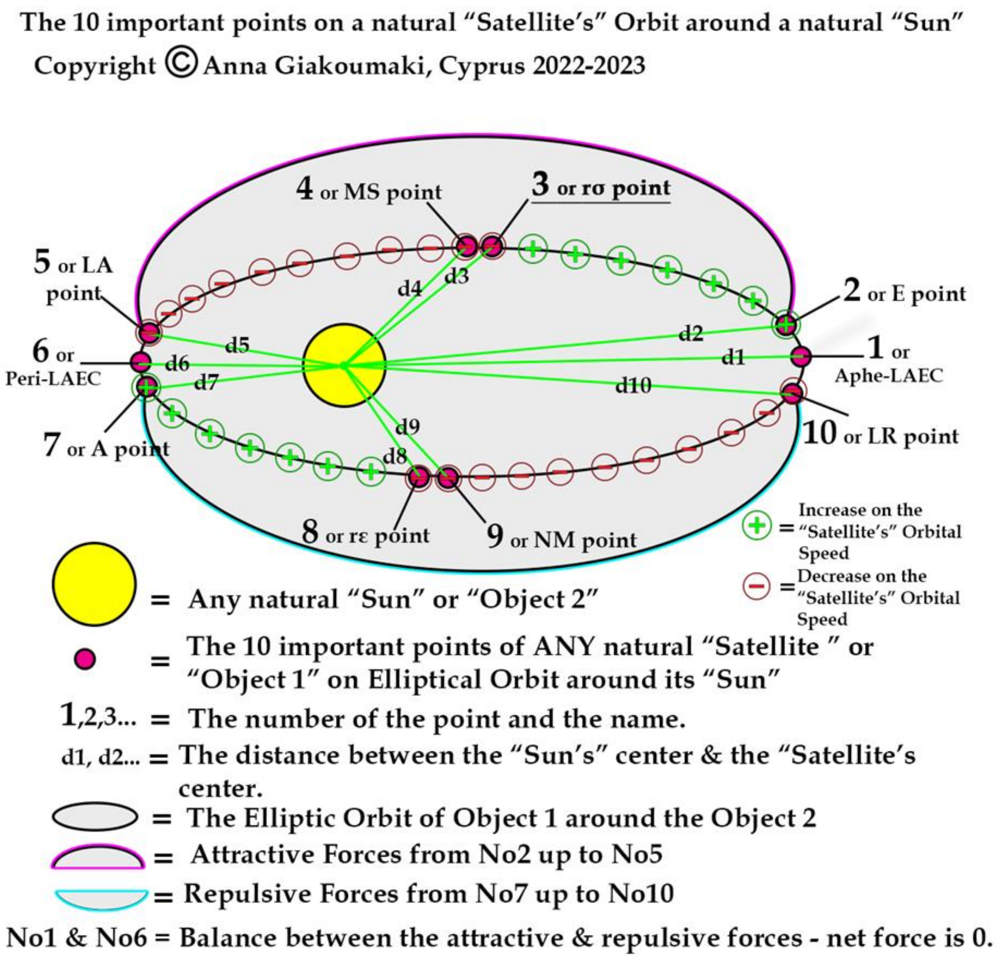
The Earth’s Moon has these 10 points with these characteristics on its Elliptical Orbit around the Earth.

***Note:*** *Being shorter the Orbit of the natural Satellite, correspondingly smaller must be the time unit that we will use to find these 10 points, especially on tiny natural Satellites, such as the atoms (but be careful with these tiny natural Satellites -the atoms-, they must not have 2 bars extended by their natural Sun –their core- because then they belong to another category, the LAEClgha; see that our Sun, even our Planets have not these two bars also)*

*So, as it seems, we have obtained a Theorem here.*

# *THEOREM 1*

Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), has these 10 points, regardless of its size/mass/shape or its direction of Orbit.




Where,

| No of Point | Name of point | **d(x)** between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | **$d_1$** | The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |

| | | | |
|---|---|---|---|
| 2 | E | $d_2$ | Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 3 | rσ | $d_3$ | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | $d_4$ | Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 5 | LA | $d_5$ | Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| 6 | Peri-LAEC | $d_6$ | The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 7 | A | $d_7$ | Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 8 | rε | $d_8$ | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | $d_9$ | Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 10 | LR | $d_{10}$ | Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |

## *POSTULATE 13 – These 10 important points show whose LAECs or LAECsp(1) ("sun") this object is a LAECsp (a "satellite") of

These 10 significant points show which LAECs's or LAECsp(1)'s ("sun's") LAECsp (natural "satellite") the object we observe is, because only the NATURAL "Satellites" of a natural "Sun" can have these 10 significant Points as they orbit around their "Sun".

# *PROPOSITION* Δ –

## $Earth\ is\ \ not\ Mercury's\ LAECsp(1)(the\ Mercury's\ Sun)$, $so, we$ $will\ not\ find\ only\ the\ 10\ important\ Points\ if\ we\ check$ $the\ distances\ between\ them\ day\ by\ day$

**Note:** I have followed the same steps, but due to the length of the table, I will write here just the conclusion (**see the table on Appendix E**).

# *PROPOSITION* Δ – $Conclusion\ for\ Earth$ – $if\ Earth\ it's\ Mercury's\ LAECsp(1)\ (the\ Mercury'sSun)$

No, the Earth is not the Mercury's natural "Sun" (LAECsp(1)), as we observe plus 9 anomalies on the sequences (the 10 points, plus 9 anomalies, 19 points totally). Also, we are missing the "smooth Elliptical Orbit", where the Satellite starts from 0 (zero), then, from Point N02 up to N03, has a "smooth" increment  on its Orbital speed (we saw 4 times the -0.04 sequence before the -0.05 difference that is the max and the rapid decrease at the point N03), then it has a smooth decrease up to point N05, and balances at point N06, to continue from N07 up to N08 with a smooth increasement again (we saw 5 times the 0.04 sequence before the 0.05 difference that is the max and the rapid decrease at the point N08), and then the anomaly on the point N08 and the smooth decrease from the point N09 up to N010. This Elliptical Orbit it's also asymmetric – on the Elliptical Orbit of a LAECsp (a natural Satellite) around its LAECs or LAECsp(1) (its natural Sun), there is a symmetry.

If this is not a random case, then, we must see a lot of anomalies and in other cases as well. Let's proceed to the next proposition.

## *PROPOSITION E –*

### $Earth\ is\ not\ Venus'\ LAECsp(1)(the\ Venus'\ Sun), so, we\ will\ not\ find\ only\ the\ 10\ important\ Points\ if\ we\ check\ the\ distances\ between\ them\ day\ by\ day$

**Note:** I have followed the same steps, but due to the length of the table, I will write here just the conclusion (**see the table on Appendix F**).

## *PROPOSITION E* – $Conclusion\ for\ Earth –$ $if\ Earth\ is\ Venus'\ LAECsp(1)\ (Sun)$

No, the Earth is not Venus' natural "Sun" (LAECsp(1)), as we are observing a table full of anomalies, no clear sequences, no symmetry, no 10 Points, etc.

## *PROPOSITION Z* – $The\ almost\ stable\ Aphe – LAEC\ \&\ Peri – LAEC\ of\ the\ LAECsp$

Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC*, each time that the first is at its Aphe-LAEC & its Peri-LAEC. Moreover, the period that the LAECsp needs to be again at its Aphe-LAEC & its Peri-LAEC, are also almost stable.

## * *POSTULATE 14* – The distance difference maximum limits from Aphe-LAEC to Aphe-LAEC & Peri-LAEC to Peri-LAEC / Examples

Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. To find the Peri-LAEC's distance (the "perihelion/perigee" etc.), it's enough to find just one Peri-LAEC of the LAECsp.

***Examples for the maximum distance difference that a LAECsp must have to classify it as a LAECsp of the LAECs or the LAECsp(1) that we are observing.***

| When the LAECsp's Peri-LAEC is smaller or equal to | Then, the maximum difference that can have the distance of the LAECsp(2) from Aphe-LAEC to Aphe-LAEC and from Peri-LAEC to Peri-LAEC is (all in million km) |
|---|---|
| 1 million km | ±0.0059 million km |
| 50 million km | ±0.295 |
| 100 million km | ±0.59 |
| 150 million km | ±0.885 |
| 200 million km | ±1.18 |
| 250 million km | ±1.475 |
| 300 million km | ±1.77 |

| | |
|---|---|
| 350 million km | ±2.065 |
| 400 million km | ±2.36 |
| 450 million km | ±2.655 |
| 500 million km | ±2.95 |
| 550 million km | ±3.245 |
| 600 million km | ±3.54 |
| 650 million km | ±3.835 |
| 700 million km | ±4.13 |
| 750 million km | ±4.425 |
| 800 million km | ±4.72 |
| 850 million km | ±5.015 |
| 900 million km | ±5.34 |
| 950 million km | ±5.605 |
| 1000 million km | ±5.9 |
| …… | …… |

**Step 1:**

I'll create a table for each planet with its Aphe-LAEC ("aphelion") its Peri-LAEC ("perihelion") from the Sun to compare the distances – if they are almost stable. The table will have 4 columns; the date of the LAECsp's (the Planet's/Satellite's) Aphe-LAEC & the distance of the LAECsp from LAECs (its Sun) and the date of the LAECsp's (the Planet's/Satellite's) Peri-LAEC & the distance of the LAECsp from LAECs (its Sun).

## A) *Mercury's Aphe – LAEC* & *Peri – LAEC* ("*aphelion*" & "*perihelion*")

Mercury's Peri-LAEC on 07 Nov. 2013 at 46.01 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.271459 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±0.271459 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±0.271459 million km |
|---|---|---|---|
| 24 Sept. 2013 | 69.81 | 07 Nov. 2013 | 46.01 |
| 21 Dec. 2013 | 69.82 | 03 Feb. 2014 | 46.00 |
| 19 March 2014 | 69.82 | 02 May 2014 | 46.00 |
| 15 June 2014 | 69.82 | 29 Jul. 2014 | 46.00 |
| 11 Sept. 2014 | 69.82 | 25 Oct. 2014 | 46.00 |
| 08 Dec. 2014 | 69.82 | 21 Jan. 2015 | 46.00 |
| 06 Mar. 2015 | 69.82 | 19 Apr. 2015 | 46.00 |
| 02 June 2015 | 69.82 | 16 Jul. 2015 | 46.00 |
| 29 Aug. 2015 | 69.82 | 12 Oct. 2015 | 46.00 |
| 25 Nov. 2015 | 69.82 | 8 Jan. 2016 | 46.00 |
| 21 Feb. 2016 | 69.82 | 05 Apr. 2016 | 46.00 |

**Is the distance from the Sun almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**

- Yes. Almost stable distance at Aphe-LAEC & Peri-LAEC.

**How many months from Aphe-LAEC to Aphe-LAEC?**
- 3, 3, 3, 3, 3, 3, 3, 3, 2, 3, 3 (almost stable)

**How many months from Peri-LAEC to Peri-LAEC?**
- 3, 3, 2, 3, 3, 3, 3, 3, 3, 3, 3 (almost stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.271459 million km)?**
- No. The max difference is 0.01 million km

## ***B) Venus' Aphe − LAEC & Peri − LAEC ("aphelion" & "perihelion")***

Venus' Peri-LAEC on 1 Sept. 2014 at 107.48 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.634132 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±0.634132 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±0.634132 million km |
|---|---|---|---|
| 13 May 2014 | 108.94 | 1 Sept. 2014 | 107.48 |

| | | | |
|---|---|---|---|
| 23 Dec. 2014 | 108.94 | 13 Apr. 2015 | 107.48 |
| 04 Aug. 2015 | 108.94 | 24 Nov. 2015 | 107.48 |
| 17 Mar. 2016 | 108.94 | 6 Jul. 2016 | 107.48 |
| 28 Oct. 2016 | 108.94 | 16 Feb. 2017 | 107.48 |
| 07 Jun. 2017 | 108.94 | 1 Oct. 2017 | 107.47 |
| 18 Jan. 2018 | 108.94 | 14 May 2018 | 107.47 |
| 31 Aug. 2018 | 108.94 | 22 Dec. 2018 | 107.48 |
| 15 Apr. 2019 | 108.94 | 4 Aug. 2019 | 107.48 |
| 26 Nov. 2019 | 108.94 | 15 Mar. 2020 | 107.48 |
| | | | |

**Is the distance from the Sun almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**

- Yes. Almost stable distance at Aphe-LAEC & Peri-LAEC.

**How many months from Aphe-LAEC to Aphe-LAEC?**

- 7, 8, 7, 7, 8, 7, 7, 8, 7 (almost stable)

**How many months from Peri-LAEC to Peri-LAEC?**

- 7, 7, 8, 7, 7, 7, 8, 7 (almost stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.634132 million km)?**

- No. The max difference is 0.01 million km

**Comment:** As the distances of the LAECsp (the Planet/Satellite/Moon) from its LAECs (its Sun) are almost stable, each time that the LAECsp is at its Aphe-LAEC or its Peri-LAEC, as well as, this period is almost stable. In the tables below, I will only the data.

## *C) Earth's Aphe – LAEC & Peri – LAEC ("aphelion" & "perihelion")*

Earth's Peri-LAEC on 31 Dec. 2014 at 147.10 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.86789 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km<br>* huge difference with previous Aphe-LAEC, over ±0.86789 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km<br>* huge difference with previous Peri-LAEC, over ±0.86789 million km |
|---|---|---|---|
| 29 Jun. 2014 | 152.09 | 31 Dec. 2014 | 147.10 |
| 1 Jul. 2015 | 152.09 | 30 Dec. 201 | 147.10 |
| 30 Jun. 2016 | 152.10 | 2 Jan. 2017 | 147.10 |
| 29 Jun. 2017 | 152.09 | 30 Dec. 2017 | 147.10 |
| 06 Jul. 2018 | 152.10 | 30 Dec. 2018 | 147.10 |
| 30 Jun. 2019 | 152.10 | 2 Jan. 2020 | 147.09 |
| 03 Jul. 2020 | 152.10 | 31 Dec. 2020 | 147.09 |
| 02 Jul. 2021 | 152.10 | 29 Dec. 2021 | 147.11 |
| 01 Jul. 2022 | 152.10 | 1 Jan. 2023 | 147.10 |
| 01 Jul. 2023 | 152.09 | 31 Dec. 2023 | 147.10 |
| | | | |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.86789 million km)?**

- No. The maximum difference is 0.02 million km.

## D) *Mars' Aphe – LAEC* & *Peri – LAEC* ("*aphelion*" & "*perihelion*")

Mars' Peri-LAEC on 9 Dec. 2014 at 206.63 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±1.219117 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±1.219117 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±1.219117 million km |
|---|---|---|---|
| 31 Dec. 2013 | 249.24 | 9 Dec. 2014 | 206.63 |
| 18 Nov. 2015 | 249.24 | 27 Oct. 2016 | 206.63 |
| 04 Oct. 2017 | 249.24 | 14 Sept. 2018 | 206.66 |
| 23 Aug. 2019 | 249.24 | 1 Aug. 2020 | 206.65 |
| 10 Jul. 2021 | 249.22 | 19 Jun. 2022 | 206.64 |
| 28 May 2023 | 249.22 | 06 May 2024 | 206.67 |
| 14 Apr. 2025 | 249.24 | 25 Mar. 2026 | 206.63 |
| 04 Mar. 2027 | 249.25 | 09 Feb. 2028 | 206.62 |
| 16 Jan. 2029 | 249.24 | 29 Dec. 2029 | 206.65 |
| 05 Dec. 2030 | 249.23 | 14 Nov. 2031 | 206.66 |
| | | | |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±1.219117 million km)?**

- No. The maximum difference is 0.03 million km.

## *E) Jupiter's Aphe – LAEC & Peri – LAEC* ("*aphelion*" & "*perihelion*")

Jupiter's Peri-LAEC on 10 Jan. 2023 at 740.66 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±4.369894 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±4.369894 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±4.369894 million km |
|---|---|---|---|
| 01 Feb. 2017 | 816.28 | 10 Jan. 2023 | 740.66 |
| 10 Dec. 2028 | 815.88 | 25 Nov. 2034 | 740.91 |
| 13 Nov. 2040 | 815.75 | 23 Oct. 2046 | 741.02 |
| 27 Sept. 2052 | 815.81 | 03 Sep. 2058 | 740.72 |
| 03 Aug. 2064 | 816.27 | 01 Jul. 2070 | 740.25 |
| 01 Jun. 2076 | 816.31 | 02 May 2082 | 740.59 |
| 17 Apr. 2088 | 815.92 | 21 Mar. 2094 | 740.88 |
| | | | |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±4.369894 million km)?**

- No. The maximum difference is 0.77 million km.

## *F) Saturn's Aphe – LAEC & Peri – LAEC ("aphelion" & "perihelion")*

Saturn's Peri-LAEC on 21 Nov. 2032 at 1348.61 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±7.956799 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±7.956799 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±7.956799 million km |
|---|---|---|---|
| 30 Mar. 2018 | 1505.80 | 21 Nov. 2032 | 1348.61 |
| 18 Jun. 2047 | 1502.88 | 21 May 2062 | 1351.01 |
| 10 Feb. 2077 | 1505.98 | 02 Oct. 2091 | 1348.52 |
| | | | |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±7.956799 million km)?**

- No. The maximum difference is 3.100 million km.

## *G) Earth's Moon Aphe – LAEC & Peri – LAEC ("apogee" & "perigee")*

Moon's Peri-LAEC on 21 Apr. 2022 at 0.36332359 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.002143609181 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in km * huge difference with previous Aphe-LAEC, over ±0.002143609181 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±0.002143609181 million km |
|---|---|---|---|
| 07 Apr. 2022 | 0.40549247 | 21 Apr. 2022 | 0.36332359 |
| 05 May 2022 | 0.40547448 | 18 May 2022 | 0.36336898 |
| 1 Jun. 2022 | 0.40546572 | 15 Jun. 2022 | 0.36329877 |
| 29 Jun. 2022 | 0.40548165 | 13 Jul. 2022 | 0.36340304 |
| 26 Jul. 2022 | 0.40547105 | 09 Aug. 2022 | 0.36332323 |
| 23 Aug. 2022 | 0.40548482 | 06 Sep. 2022 | 0.36333055 |
| 19 Sept. 2022 | 0.40542896 | 03 Oct. 2022 | 0.36333719 |
| 17 Oct. 2022 | 0.40550445 | 31 Oct. 2022 | 0.36333905 |
| 14 Nov. 2022 | 0.40543976 | 27 Nov. 2022 | 0.36333146 |
| | | | |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.002143609181 million km)?**

- No. The maximum difference is 0.00007549 million km

# ***PROPOSITION Z – Conclusion***

Yes, any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun) has an almost stable distance by its LAECs, with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. Moreover, the period that the LAECsp needs to be again at its Aphe-LAEC & its Peri-LAEC is also almost stable.

# ***PROPOSITION H – The NON stable Aphe – LAEC & Peri – LAEC of the LAECsp***

Any LAECsp (any object that supposed to be a natural Satellite) that it's NOT on an Elliptical Orbit around the LAECs or the LAECsp(1) that we are observing (the object that we think that it's its natural Sun), must NOT have an almost stable distance by the LAECs or the LAECsp(1), with anomalies on the difference bigger than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. Moreover, the period that the LAECsp needs to be again at its Aphe-LAEC & its Peri-LAEC cannot be (almost) stable.

**Step 1:**

I will assume that the Earth is the LAECsp(1) (the "Sun") of each LAECsp(2) (of each Planet in this case) and I will create a table for each planet with its Aphe-LAEC ("apogee") and its Peri-LAEC ("perigee") from the EARTH to compare the distances – if they are almost stable. The table will have 4 columns: The date of the LAECsp(2)'s (the Planet's/Satellite's) Aphe-LAEC & the distance of the LAECsp(2) from LAECsp(1) (its "Sun"- the Earth in this Proposition) and the date of the LAECsp(2)'s Peri-LAEC & the distance of the LAECsp(2) from LAECsp(1). Also, I will check the differences of the Aphe-LAECS & Peri-LAECS and the periods.

## *A) Mercury's Aphe – LAEC* & *Peri – LAEC* ("*apogee*" & "*perigee*")

Mercury's Peri-LAEC ("perigee") on 07 Jul. 2013 at 84.73 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.499907 million km.

| Date that LAECsp(2) was on its Aphe-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km * huge difference with previous Aphe-LAEC, over ±0.499907 million km | Date that LAECsp(2) was on its Peri-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km * huge difference with previous Peri-LAEC, over ±0.499907 million km |
|---|---|---|---|
| 09 May 2013 | 198.24 | 07 Jul. 2013 | 84.73 |
| 30 Aug. 2013 | 205.73* | 31 Oct. 2013 | 100.47* |
| 25 Dec. 2013 | 216.23 * | 17 Feb. 2014 | 95.79* |
| 23 Apr. 2014 | 199.35* | 18 Jun. 2014 | 82.78* |
| 13 Aug. 2014 | 202.99* | 15 Oct. 2014 | 99.22* |
| 07 Dec. 2014 | 217.09* | 01 Feb. 2015 | 98.10* |
| 05 Apr. 2015 | 201.15* | 30 May 2015 | 82.15* |
| 26 Jul. 2015 | 200.79* | 28 Sep. 2015 | 97.39* |
| 20 Nov. 2015 | 216.85* | 15 Jan. 2016 | 99.76* |

**Is the distance from the Earth almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**
- No.

**How many months from Aphe-LAEC to Aphe-LAEC?**
- Every 3.5 months (almost stable)

**How many months from Peri-LAEC to Peri-LAEC?**
- Every 3.5 months (almost stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.499907 million km)?**
- Yes. All differences are over ±0.499907 million km.

## ***B) Venus' Aphe – LAEC*** ("***apogee***" & "***perigee***")

Venus' Peri-LAEC ("perigee") on 09 Jan. 2014 at 39.84 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.235056 million km.

| Date that LAECsp(2) was on its Aphe-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km * huge difference with previous Aphe-LAEC, over ±0.235056 million km | Date that LAECsp(2) was on its Peri-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km * huge difference with previous Peri-LAEC, over ±0.235056 million km |
|---|---|---|---|
| 01 Apr. 2013 | 257.92 | 09 Jan. 2014 | 39.84 |
| 22 Oct. 2014 | 256.82* | 15 Aug. 2015 | 43.15* |
| 06 Jun. 2016 | 259.62* | 24 Mar. 2017 | 42.05* |
| 11 Jan. 2018 | 255.98* | 27 Oct. 2018 | 40.71* |
| 09 Aug. 2019 | 258.99* | 03 Jun. 2020 | 43.17* |
| 30 Mar. 2021 | 257.83* | 07 Jan. 2022 | 39.77* |
| 19 Oct. 2022 | 256.89* | 13 Aug. 2023 | 43.19* |

| | | | |
|---|---|---|---|
| 03 Jun. 2024 | 259.59* | 22 Mar. 2025 | 41.98* |

**Is the distance from the Earth almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**
- No.

**How many months from Aphe-LAEC to Aphe-LAEC?**
- 18, 20, 19, 19, 19, 20 (not stable)

**How many months from Peri-LAEC to Peri-LAEC?**
- 19, 19, 19, 20, 19, 19, 19, 19 (almost stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.235056 million km)?**
- Yes. All the differences are over ±0.235056 million km.

**Comment:** As the distances of the LAECsp (the Planet/Satellite/Moon) from its LAECs (its Sun –the Earth in this Proposition) are not stable each time that the LAECsp is at its Aphe-LAEC or its Peri-LAEC. In the next tables, I'll present what should be the maximum difference and the data.

## C) *Mars' Aphe – LAEC* ("*apogee*" & "*perigee*")

Mars' Peri-LAEC ("perigee") on 14 Apr. 2014 at 92.39 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.545101 million km.

| Date that LAECsp(2) was on its Aphe-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km * huge difference with previous Aphe-LAEC, over ±0.545101 million km | Date that LAECsp(2) was on its Peri-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km * huge difference with previous Peri-LAEC, over ±0.545101 million km |
|---|---|---|---|
| 3 Jun. 2013 | 368.98 | 14 Apr. 2014 | 92.39 |
| 10 Jul. 2015 | 386.99* | 30 May 2016 | 75.28* |
| 5 Aug. 2017 | 397.66* | 30 Jul. 2018 | 57.59* |
| 27 Aug. 2019 | 400.22* | 06 Oct. 2020 | 62.07* |
| 19 Sept. 2021 | 394.66* | 30 Nov. 2022 | 81.45* |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.545101 million km)?**
- Yes. All the differences are over ±0.545101 million km.

## D) Jupiter's Aphe – LAEC ("apogee" & "perigee")

Jupiter's Peri-LAEC ("perigee") on 04 Jan. 2014 at 629.87 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±3.716233 million km.

| Date that LAECsp(2) was on its Aphe-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km * huge difference with previous Aphe-LAEC, over ±3.716233 million km | Date that LAECsp(2) was on its Peri-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km * huge difference with previous Peri-LAEC, over ±3.716233 million km |
|---|---|---|---|
| 21 Jun. 2013 | 918.15 | 04 Jan. 2014 | 629.87 |
| 25 Jul. 2014 | 939.86* | 06 Feb. 2015 | 650.19* |
| 26 Aug. 2015 | 957.20* | 08 Mar. 2016 | 663.52* |
| 24 Sep. 2016 | 965.48* | 08 Apr. 2017 | 666.44* |
| 24 Oct. 2017 | 962.72* | 10 May 2018 | 658.21* |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±3.716233 million km)?**

- Yes. All the differences are over ±3.716233 million km.

## *E) Saturn's Aphe – LAEC ("apogee" & "perigee")*

Jupiter's Peri-LAEC ("perigee") on 10 May 2014 at 1331.37 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±7.855083 million km.

| Date that LAECsp(2) was on its Aphe-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km | Date that LAECsp(2) was on its Peri-LAEC | Distance of the LAECsp(2) from its LAECsp(1) in million km |
|---|---|---|---|

| | * huge difference with previous Aphe-LAEC, over ±7.855083 million km | | * huge difference with previous Peri-LAEC, over ±7.855083 million km |
|---|---|---|---|
| 06 Nov. 2013 | 1624.40 | 10 May 2014 | 1331.37 |
| 17 Nov. 2014 | 1635.74* | 22 May 2015 | 1341.40* |
| 29 Nov. 2015 | 1644.44* | 3 Jun. 2016 | 1348.61* |
| 09 Dec. 2016 | 1650.18* | 15 Jun. 2017 | 1352.77 |
| 21 Dec. 2017 | 1652.78 | 27 Jun. 2018 | 1353.68 |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±7.855083 million km)?**

- Yes. Almost all the differences over ±7.855083 million km.

## *PROPOSITION H – Conclusion*

Yes, the LAECsp (any object that supposed to be a natural Satellite) that it's not on an Elliptical Orbit around the LAECs or the LAECsp(1) that we are observing (the object that we think that it's its natural Sun), does not have an almost stable distance by the LAECs or the LAECsp(1), with anomalies on the difference bigger than ±0.0059 million km for every 1 million km of Peri-LAEC*, each time that the first is at its Aphe-LAEC & its Peri-LAEC. But, the period that the LAECsp(2) needs to be again at its Aphe-LAEC & its Peri-LAEC can be almost stable.

So, we have obtained a strong Theorem here, which will help us <u>to classify any object as a LAECsp (a natural Satellite/Moon/Planet) of the LAECs or the LAECsp(1) that we are observing</u>;

# *THEOREM 2 –*

## *Classifying objects as a LAECsp (Natural Satellite, Moon, Planet ) of a LAECs (of a natural Sun ) – The three characteristics –*

Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), it's 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:

**1) 10 important points*, regardless of its size/mass/shape/composition or its direction of Orbit**

*** The 10 important points**

| No of Point | Name of point | **d(x)** between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | d1 | The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | E | d2 | Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 3 | rσ | d3 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | d4 | Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |

| | | | |
|---|---|---|---|
| 5 | LA | d5 | Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| 6 | Peri-LAEC | d6 | The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 7 | A | d7 | Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 8 | rε | d8 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | d9 | Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 10 | LR | d10 | Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |

## 2) An almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC**, each time that the first is at its Aphe-LAEC & its Peri-LAEC

### ** The smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC (of "perihelion/perigee", etc.)

Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. To find the Peri-LAEC's distance (the "perihelion/perigee" etc.), it's enough to find just one Peri-LAEC of the LAECsp(2) and measure the difference.

### *Examples for the maximum distance difference that a LAECsp must have to classify it as a LAECsp of the LAECs or the LAECsp(1) that we are observing.*

| When the LAECsp's Peri-LAEC is smaller or equal to | Then, the maximum difference that can have the distance |
|---|---|

| | |
|---|---|
| | of the LAECsp(2) from Aphe-LAEC to Aphe-LAEC and from Peri-LAEC to Peri-LAEC is<br><br>(all in million km) |
| 1 million km | ±0.0059 million km |
| 50 million km | ±0.295 |
| 100 million km | ±0.59 |
| 150 million km | ±0.885 |
| 200 million km | ±1.18 |
| 250 million km | ±1.475 |
| 300 million km | ±1.77 |
| 350 million km | ±2.065 |
| 400 million km | ±2.36 |
| 450 million km | ±2.655 |
| 500 million km | ±2.95 |
| 550 million km | ±3.245 |
| 600 million km | ±3.54 |
| 650 million km | ±3.835 |
| 700 million km | ±4.13 |
| 750 million km | ±4.425 |
| 800 million km | ±4.72 |
| 850 million km | ±5.015 |
| 900 million km | ±5.34 |
| 950 million km | ±5.605 |

| | |
|---|---|
| 1000 million km | ±5.9 |
| …… | …… |

## 3) It Orbits in the other Object's Z9***

### *** Z9 - The "Moons'/Satellites' Orbiting Zone"

Nowhere else, except the Z9 a LAECsp, can be seen on an Elliptical Orbit around the LAECs or the LAECsp(1). The Z9 of a LAECsp(1) starts from the h6 and extends up to h8.

If the LAECsp(1) that we are observing has "Moons/Satellites" on Orbit around itself, then these "Moons/Satellites" will only be visible within the Z9.

**But, be careful – very important detail**: Objects such as Planets & Moons belong to the LAECsp category (Type "Satellite/Planet"), whereas objects such as the Sun belong to the LAECs category (Type Sun). Each category of LAEC has different futures. Even if both LAECsp & LAECs share some properties & characteristics (e.g., both have the 10 heights, orbit a bigger-mass object, have the 10 Zones, same total of Magnetic Poles, etc.), they have some big differences that are changing the results; That's why, if you want to make a classification e.g., for a "Planet", and you don't have the d3 to measure the h6 of the "Sun" (of the LAECs that the LAECsp orbits around), it's enough to find these two:

a) The "perihelion" of the closest to the "Sun", "Planet" &

b) The "aphelion" of the farthest from the "Sun", "Planet".

None LAECsp ever orbits out of the Z9.

# PART IV

## Classification of objects

### Classification of Ceres.

Ceres was discovered on January 1, 1801, by the Italian astronomer Giuseppe Piazzi. At the time, it was considered to be a planet, but it was later reclassified as an asteroid* and then (in 2006), as a "dwarf planet". Piazzi was searching for a "missing planet" between Mars and Jupiter when he discovered Ceres, which was later named in his honor. Ceres is the largest object in the Asteroids Belt, which is a region of the solar system between Mars and Jupiter that is populated by small, rocky objects. Ceres is thought to be a remnant of the early solar system and is believed to contain water ice and organic compounds. Ceres has a very thin atmosphere, with a surface pressure about a million times lower than that on Earth. Its surface temperature ranges from about -200 to -100 degrees Celsius (-328 to -148 degrees Fahrenheit). It is about 590 miles in diameter, making it about the same size as the state of Texas in the United States and takes about 4.6 years to orbit the Sun. It is located about 2.8 AU from the Sun. It has been visited by a spacecraft, NASA's Dawn mission, which studied Ceres from 2015 to 2018. The mission revealed that Ceres has a surface that is varied and geologically active, with mountains, craters, and other futures.

*****_The term "asteroid" was coined in the early 1800s to describe these small, rocky objects in the Asteroid Belt. Ceres was the first object to be classified as an asteroid. An Asteroid is a celestial object that meets the following criteria:_

_1) Orbits the Sun_

_2) It is made up of rock, metal, or a mixture of both_

_3) It is small, typically less than a few hundred kilometers in diameter._

So, we have a small celestial object, which is classified into different categories from time to time, with its last classification as a dwarf planet in 2006, as it meets the three criteria,

1. It orbits the Sun

2. It is spherical in shape due to its own gravity.
3. It has not cleared the neighborhood around its orbit of smaller objects.

In Propositions A, B, Γ, Δ, E, Z & H, we saw that:

a) Shape, size, mass & direction of orbit do not play any role in their classification as natural "Satellites" (e.g. Planets/Moons) of the "Sun" that we are observing. So, a "spherical" or an "almost spherical" shape or, the size of the object or, the mass or, what it is made up (since all the "Planets/Moons" are made up of different materials)– the criterion No2 for the classification collapses.
b) All the natural "Satellites" (such as the Planets and the Moons in our solar system), they just not orbit their "Sun", but they have an almost stable distance by their "Sun", with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC (e.g., "perihelion/perigee", etc.), each time that the first is at its Aphe-LAEC ("aphelion/apogee", etc.) & its Peri-LAEC. Because, as we saw in Proposition H, objects that are not natural "Satellites" (Planets/Moons) of the "Sun" that we are observing, have "Perihelion/perigee" etc., and "Aphelion/apogee", etc. on an almost stable period that can confuse the observer and classify them as natural "Satellites" (Planets/Moons) of this "Sun". So, the No1 criterion – the celestial object orbits the "Sun"- collapses as well.
c) All the natural "Satellites" (such as the Planets and the Moons in our solar system), as they orbit their "Sun", they have only the 10 important points – the 10 anomalies on their orbital speed, when objects that are not natural "Satellites" of the "Sun" that we are observing, have more than 10 anomalies.

And a comment about the 3rd criterion of IAU for the classification: The "Rings" (because the Asteroids Belt it's a Ring around the Sun, as any other Ring around a Planet in our solar system), as we know, they have different orbit around the Sun; the question is: If we have to deal with a Planet in a Ring –two different things; a Planet and a Ring-, where each one has different kind of orbit/movement – then, how is it possible for two objects whose orbits intersect continuously for one not to erase the tracks of the other, when the Ring has a circular movement around the Sun as a whole, with direction towards the Sun and the Planet has an Elliptical movement with direction towards the Sun? If Ceres is a different object –and not part of the Asteroids Belt then, and the third criterion for its classification as a "dwarf Planet" collapses.

But, what if we use the Theorem 2?

## *PROPOSITION Θ –*

## *Ceres is a Natural Satellite, as any other Planet, on an Elliptical Orbit around its natural Sun (the Sun)*

Now, I'll use the Theorem 2 to classify Ceres as a Planet or not of the Sun. I'll check Ceres' data for the 3 criteria.
Theorem 2 states that "*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), is 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:*

**1) 10 important points*, regardless of its size/mass/shape or its direction of Orbit**

*** The 10 important points**

| No of Point | Name of point | **d(x)** between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | d1 | The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | E | d2 | Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |

| | | | |
|---|---|---|---|
| 3 | rσ | d3 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | d4 | Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 5 | LA | d5 | Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| 6 | Peri-LAEC | d6 | The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 7 | A | d7 | Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 8 | rε | d8 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | d9 | Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 10 | LR | d10 | Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |

Let's check the first criterion.

## *I) Ceres –*
## *the 10 important points. Has Ceres these 10 points?*

**<u>Facts about Ceres</u>**

**Diameter (km):** Is about 940 km

**Mass:** 9.39 × 10^20

**Shape:** Ceres has a roughly spherical shape, but it is not a perfect sphere. It is slightly flattened at the poles and bulges slightly at the equator due to its rotation.

**Orbit:** Ceres has a nearly circular orbit around the sun, but it is slightly elliptical.

**Direction of Orbit:** Ceres orbits the sun in a counterclockwise direction.

**Composition:** It is made up of a mixture of water ice, rock, and various other materials, including clay minerals, carbonates, and ammoniated clays. It is thought to have a rocky core and a mantle of water ice, with a surface layer of regolith (a mixture of dust, rocks, and other debris). The composition of Ceres is similar to that of many other objects in the main asteroid belt, and it is thought to be representative of the composition of the early solar system.

**Note:** I have followed the same steps, but due to the length of the table, I will only show you where I found the 10 points and the 2 extrema on the table (**see Appendix G**)

## $1)\ Checking\ for\ the\ 10\ Points\ day-by-day$

### $I. Group\ A\ (Points\ No10, No1 - Aphe - LAEC -\ and\ No2)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 17/8/20 | 446.14 |
| No1 | 18/8/20 | 446.15 |
| No2 | 22/8/20 | 446.14 |

### $II. Group\ B\ (1st\ Max\ and\ Points\ No3\ and\ No4)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 5/1/22 | 406.57 |
| No3 | 11/1/22 | 405.37 |
| No4 | 12/1/22 | 405.25 |

## *III. Group C (Points No5, No6 – Peri – LAEC – and No7)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 30/11/22 | 381.35 |
| No6 | 1/12/22 | 381.34 |
| No7 | 10/12/22 | 381.35 |

## *IV. Group D (2nd Max and Points No8 and No9)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max | 29/1/24 | 416.42 |
| No8 | 30/1/24 | 415.55 |
| No9 | 25/2/24 | 419.67 |

**Does Ceres have these 10 important points?**
- Yes. It passes successfully the first criterion to be a Planet of the Sun.

Let's see the second criterion which is,

*"Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), it's 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:*

**2) An almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC**, each time that the first is at its Aphe-LAEC & its Peri-LAEC**

**** The smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC (of "perihelion/perigee", etc.)**

Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. To find the Peri-LAEC's distance (the "perihelion/perigee" etc.), it's enough to find just one Peri-LAEC of the LAECsp(2) and measure the difference.

## II) Ceres' Aphe − LAEC & Peri − LAEC ("aphelion" & "perihelion")

Ceres' Peri-LAEC on 23 Apr. 2018 at 382.68 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±2.257812 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±2.257812 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±2.257812 million km |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 31 Dec. 2015 | 445.47 | 23 Apr. 2018 | 382.68 |
| 17 Aug. 2020 | 446.15 | 02 Dec. 2022 | 381.34 |
| 19 Mar. 2025 | 446.65 | 9 Jul. 2027 | 380.86 |
| 20 Oct. 2029 | 446.70 | 11 Feb. 2032 | 381.26 |
| 29 May 2034 | 446.26 | 27 Sep. 2036 | 382.72 |
| 18 Jan. 2039 | 445.42 | 08 May 2041 | 382.59 |
| 26 Aug. 2043 | 445.95 | 10 Dec. 2045 | 381.79 |
| 28 Mar. 2048 | 446.15 | 10 Jul. 2050 | 381.73 |

**Is the distance from the Sun almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**
- Yes. Almost stable distance at Aphe-LAEC & Peri-LAEC.

**How many months from Aphe-LAEC to Aphe-LAEC?**
- 52, 52, 52, 52, 52, 52, 52 (almost stable)

**How many months from Peri-LAEC to Peri-LAEC?**
- 52, 52, 52, 52, 52, 52, 52 (almost stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±2.257812 million km)?**
- No. The max difference is 1.46 million km.

# *III) Ceres' orbits in the Sun's Z9*

### 3) It Orbits in the other Object's Z9***

***** Z9 - The "Moons'/Satellites' Orbiting Zone"**

Nowhere else, except the Z9 a LAECsp can be seen on an Elliptical Orbit around the LAECs or the LAECsp(1). The Z9 of a LAECsp(1) starts from the h6 and extends up to h8.

If the LAECsp(1) that we are observing has "Moons/Satellites" on Orbit around itself, then these "Moons/Satellites" will only be visible within the Z9.
**But, be careful – very important detail**: Objects such as Planets & Moons belongs to the LAECsp category (Type "Satellite/Planet"), when objects such as the Sun, belongs to the LAECs category (Type Sun). Each category of LAEC has different futures. Even if both LAECsp & LAECs share some properties & characteristics (e.g. both have the 10 heights, orbit a bigger-mass object, have the 10 Zones, same total of Magnetic Poles, etc.), they have some big differences that are changing the results; That's why, if you want to make a classification e.g., for a "Planet", and you don't have the d3 to measure the h6 of the "Sun" (of the LAECs that the LAECsp orbits around), it's enough to find these two:
a) The "perihelion" of the closest to the "Sun", "Planet" &
b) The "aphelion" of the farthest from the "Sun", "Planet".
None LAECsp ever orbits out of the Z9.

Sun is a LAECs. So,

**Step 1:**
I'll find the "perihelion" of the closest to the "Sun", "Planet".

The Planet closest to the Sun is Mercury. The "perihelion" of Mercury's orbit is 46.00 million km from the Sun.

**Step 2:**
I'll find the "aphelion" of the farthest from the "Sun", "Planet".
The Planet that is farthest from the Sun is Pluto. The "aphelion" of Pluto's orbit is about 7.4 billion km from the Sun.

**Step 3:**
Now I'll check Ceres' "perihelion" & "aphelion" to see if it's in the limits from 46.00 million km up to 7.4 billion km.

a) Ceres' "perihelion" is about 381.34 million km

b) Ceres' "aphelion" is about 446.15 million km

**It's in the limits from 46.00 million km up to 7.4 billion km?**
- Yes

Conclusion for Ceres.

## *PROPOSITION Θ – Conclusion for Ceres*

Yes, Ceres is not a "dwarf Planet" but, a Planet of the Sun (a LAECsp / a natural "satellite"), as any other Planet in our solar system, on an Elliptical Orbit around its natural "Sun" (the Sun), as it has successfully passed the three-tier test.

Let's do the same for some more objects.

## *PROPOSITION Ι –*

## *Asteroid 1566 Icarus is a Natural Satellite, as any other Planet, on an Elliptical Orbit around its natural Sun (the Sun)*

---

**Facts about Asteroid 1566 Icarus**

**Diameter (km):** 1.3

**Mass ($10^{24}$kg):** The mass of 1566 Icarus is not well-known and estimates of its mass can vary significantly.

**Shape:** Not well-constrained and more observations and analysis are needed to determine its exact shape.

**Orbit:** Elliptical

**Direction of Orbit:** Clockwise.

Now, I'll use the Theorem 2 to classify Asteroid 1566 Icarus as a Planet or not of the Sun. I'll check Asteroid's 1566 Icarus data for the 3 criteria.
Theorem 2 states, that "*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), is 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object −the natural "Sun") that we are observing, when it has the next three characteristics:*

**1) 10 important points*, regardless of its size/mass/shape or its direction of Orbit**

*** The 10 important points**

| No of Point | Name of point | **d(x)** between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | d1 | The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | E | d2 | Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 3 | rσ | d3 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | d4 | Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 5 | LA | d5 | Last point with attractive forces between the natural "Satellite" and its natural "Sun". |

| | | | |
|---|---|---|---|
| 6 | Peri-LAEC | d6 | The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 7 | A | d7 | Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 8 | rε | d8 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | d9 | Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 10 | LR | d10 | Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |

Let's check the first criterion.

## *I) Asteroid 1566 Icarus –*
## *the 10 important points. Has Asteroid 1566 Icarus these 10 points?*

**Step 1:**

I'll create a table with 4 columns for Asteroid 1566 Icarus.

Then, I'll insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Asteroid's 1566 Icarus distance from the Sun in million km

**Step 2:**

I'll find these data for the next 2 columns:

- Column No3: The difference of the Asteroid's 1566 Icarus distance from the Sun from the previous day
- Column No4: The 10 Points & comments

| Date 2021 | The Asteroid's 1566 Icarus distance from the Sun in million km | The difference of the Asteroid's 1566 Icarus distance from the Sun from the previous day ***Note:*** As it has many anomalies, I'll color with "**red**" the difference, every time that is not following the 1st criterion with the specific characteristics of the 10 important points & a short comment. | The 10 Points & comments |
|---|---|---|---|
| Jun. 29, '21 | 294.66 | 0 | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 30 | 294.66 | 0 | |
| 1-Jul | 294.65 | -0.01 | |
| 1 | 294.64 | -0.01 | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 3 | 294.61 | **-0.03** | Missing -0.02 |
| 4 | 294.57 | -0.04 | |
| 5 | 294.52 | -0.05 | |

| | | | |
|---|---|---|---|
| 6 | 294.47 | -0.05 | |
| 7 | 294.4 | **-0.07** | Missing -0.06 |
| 8 | 294.32 | -0.08 | |
| 9 | 294.24 | -0.08 | |
| 10 | 294.15 | -0.09 | |
| 11 | 294.04 | **-0.11** | Missing -0.10 |
| 12 | 293.93 | -0.11 | |
| 13 | 293.81 | -0.12 | |
| 14 | 293.67 | **-0.14** | Missing -0.13 |
| 15 | 293.53 | -0.14 | |
| 16 | 293.38 | -0.15 | |
| 17 | 293.22 | -0.16 | |
| 18 | 293.05 | -0.17 | |
| 19 | 292.87 | -0.18 | |
| 20 | 292.68 | -0.19 | |
| 21 | 292.48 | -0.2 | |
| 22 | 292.27 | -0.21 | |
| 23 | 292.05 | -0.22 | |
| 24 | 291.83 | -0.22 | |
| 25 | 291.59 | **-0.24** | Missing -0.23 |
| 26 | 291.34 | -0.25 | |
| 27 | 291.09 | -0.25 | |
| 28 | 290.82 | **-0.27** | Missing -0.26 |
| 29 | 290.54 | -0.28 | |
| 30 | 290.26 | -0.28 | |
| 31 | 289.96 | **-0.3** | Missing -0.29 |
| Aug. 1 | 289.66 | -0.3 | |
| 2 | 289.34 | **-0.32** | Missing -0.31 |
| 3 | 289.02 | -0.32 | |
| 4 | 288.69 | -0.33 | |
| 5 | 288.34 | **-0.35** | Missing -0.34 |
| 6 | 287.99 | -0.35 | |
| 7 | 287.62 | **-0.37** | Missing -0.36 |
| 8 | 287.25 | -0.37 | |
| 9 | 286.87 | -0.38 | |
| 10 | 286.47 | **-0.4** | Missing -0.39 |

| | | | |
|---|---|---|---|
| 11 | 286.07 | -0.4 | |
| 12 | 285.66 | -0.41 | |
| 13 | 285.24 | -0.42 | |
| 14 | 284.8 | **-0.44** | Missing -0.43 |
| 15 | 284.36 | -0.44 | |
| 16 | 283.91 | -0.45 | |
| 17 | 283.44 | **-0.47** | Missing -0.46 |
| 18 | 282.97 | -0.47 | |
| 19 | 282.49 | -0.48 | |
| 20 | 281.99 | **-0.5** | Missing -0.49 |
| 21 | 281.49 | -0.5 | |
| 22 | 280.98 | -0.51 | |
| 23 | 280.45 | **-0.53** | Missing -0.52 |
| 24 | 279.92 | -0.53 | |
| 25 | 279.37 | **-0.55** | Missing -0.54 |
| 26 | 278.82 | -0.55 | |
| 27 | 278.25 | **-0.57** | Missing -0.56 |
| 28 | 277.67 | -0.58 | |
| 29 | 277.09 | -0.58 | |
| 30 | 276.49 | **-0.6** | Missing -0.59 |
| 31 | 275.88 | -0.61 | |
| Sept. 1 | 275.26 | -0.62 | |
| 2 | 274.64 | -0.62 | |
| 3 | 274 | **-0.64** | Missing -0.63 |
| 4 | 273.35 | -0.65 | |
| 5 | 272.68 | **-0.67** | Missing -0.66 |
| 6 | 272.01 | -0.67 | |
| 7 | 271.33 | -0.68 | |
| 8 | 270.64 | -0.69 | |
| 9 | 269.93 | **-0.71** | Missing -0.70 |
| 10 | 269.22 | -0.71 | |
| 11 | 268.49 | **-0.73** | Missing -0.72 |
| 12 | 267.75 | -0.74 | |
| 13 | 267 | -0.75 | |
| 14 | 266.24 | -0.76 | |
| 15 | 265.47 | -0.77 | |

| | | | |
|---|---|---|---|
| 16 | 264.69 | -0.78 | |
| 17 | 263.89 | **-0.8** | Missing -0.79 |
| 18 | 263.09 | -0.8 | |
| 19 | 262.27 | **-0.82** | Missing -0.81 |
| 20 | 261.44 | -0.83 | |
| 21 | 260.6 | -0.84 | |
| 22 | 259.74 | **-0.86** | Missing -0.85 |
| 23 | 258.88 | -0.86 | |
| 24 | 258 | **-0.88** | Missing -0.87 |
| 25 | 257.12 | -0.88 | |
| 26 | 256.22 | **-0.9** | Missing -0.89 |
| 27 | 255.3 | **-0.92** | Missing -0.91 |
| 28 | 254.38 | -0.92 | |
| 29 | 253.44 | **-0.94** | Missing -0.93 |
| 30 | 252.49 | -0.95 | |
| Oct. 1 | 251.53 | -0.96 | |
| 2 | 250.56 | -0.97 | |
| 3 | 249.57 | **-0.99** | Missing -0.98 |
| 4 | 248.57 | -1 | |
| 5 | 247.56 | -1.01 | |
| 6 | 246.54 | -1.02 | |
| 7 | 245.5 | **-1.04** | Missing -1.03 |
| 8 | 244.45 | -1.05 | |
| 9 | 243.38 | **-1.07** | Missing -1.06 |
| 10 | 242.31 | -1.07 | |
| 11 | 241.22 | **-1.09** | Double anomaly, missing -.08 & -1.10 |
| 12 | 240.11 | **-1.11** | |
| 13 | 239 | -1.11 | |
| 14 | 237.87 | **-1.13** | Double anomaly |
| 15 | 236.72 | **-1.15** | |
| 16 | 235.56 | -1.16 | |
| 17 | 234.39 | -1.17 | |
| 18 | 233.2 | **-1.19** | Missing -1.18 |
| 19 | 232 | -1.2 | |
| 20 | 230.79 | -1.21 | |

| | | | |
|---|---|---|---|
| 21 | 229.56 | **-1.23** | Double anomaly |
| 22 | 228.31 | **-1.25** | |
| 23 | 227.05 | -1.26 | |
| 24 | 225.78 | -1.27 | |
| 25 | 224.49 | **-1.29** | Missing -1.28 |
| 26 | 223.19 | -1.3 | |
| 27 | 221.87 | **-1.32** | Double anomaly |
| 28 | 220.53 | **-1.34** | |
| 29 | 219.18 | -1.35 | |
| 30 | 217.81 | **-1.37** | From this point has too many anomalies on its Orbital speed. No sense to comment anymore, just see the numbers. Also, it's interesting to observe the frequency of the anomalies. |
| 31 | 216.37 | **-1.44** | |
| Nov. 1 | 214.98 | **-1.39** | |
| 2 | 213.56 | **-1.42** | |
| 3 | 212.13 | -1.43 | |
| 4 | 210.68 | **-1.45** | |
| 5 | 209.21 | **-1.47** | |
| 6 | 207.73 | -1.48 | |
| 7 | 206.23 | **-1.5** | |
| 8 | 204.71 | **-1.52** | |
| 9 | 203.18 | -1.53 | |
| 10 | 201.62 | **-1.56** | |
| 11 | 200.05 | -1.57 | |
| 12 | 198.46 | **-1.59** | |
| 13 | 196.85 | **-1.61** | |
| 14 | 195.22 | **-1.63** | |
| 15 | 193.58 | -1.64 | |
| 16 | 191.91 | **-1.67** | |
| 17 | 190.22 | **-1.69** | |
| 18 | 188.52 | -1.7 | |
| 19 | 186.79 | **-1.73** | |
| 20 | 185.04 | **-1.75** | |

| | | | |
|---|---|---|---|
| 21 | 183.27 | **-1.77** | |
| 22 | 181.48 | **-1.79** | |
| 23 | 179.67 | **-1.81** | |
| 24 | 177.84 | **-1.83** | |
| 25 | 175.98 | **-1.86** | |
| 26 | 174.11 | -1.87 | |
| 27 | 172.2 | **-1.91** | |
| 28 | 170.28 | -1.92 | |
| 29 | 168.33 | -1.95 | |
| 30 | 166.36 | **-1.97** | |
| Dec. 1 | 164.36 | **-2** | |
| 2 | 162.34 | **-2.02** | |
| 3 | 160.29 | **-2.05** | |
| 4 | 158.21 | **-2.08** | |
| 5 | 156.11 | **-2.1** | |
| 6 | 153.98 | **-2.13** | |
| 7 | 151.82 | **-2.16** | |
| 8 | 149.63 | **-2.19** | |
| 9 | 147.42 | **-2.21** | |
| 10 | 145.17 | **-2.25** | |
| 11 | 142.9 | **-2.27** | |
| 12 | 140.59 | **-2.31** | |
| 13 | 138.25 | **-2.34** | |
| 14 | 135.88 | **-2.37** | |
| 15 | 133.48 | **-2.4** | |
| 16 | 131.04 | **-2.44** | |
| 17 | 128.56 | **-2.48** | |
| 18 | 126.05 | **-2.51** | |
| 19 | 123.5 | **-2.55** | |
| 20 | 120.92 | **-2.58** | |
| 21 | 118.29 | **-2.63** | |
| 22 | 115.62 | **-2.67** | |
| 23 | 112.92 | **-2.7** | |
| 24 | 110.17 | **-2.75** | |
| 25 | 107.37 | **-2.8** | |
| 26 | 104.54 | **-2.83** | |

| | | | |
|---|---|---|---|
| 27 | 101.65 | **-2.89** | |
| 28 | 98.72 | **-2.93** | |
| 29 | 95.73 | **-2.99** | |
| 30 | 92.7 | **-3.03** | |
| 31 | 89.62 | **-3.08** | |
| 2022 Jan. 1 | 86.48 | **-3.14** | |
| 2 | 83.29 | **-3.19** | |
| 3 | 80.04 | **-3.25** | |
| 4 | 76.74 | **-3.3** | |
| 5 | 73.38 | **-3.36** | |
| 6 | 69.96 | **-3.42** | |
| 7 | 66.49 | **-3.47** | |
| 8 | 62.96 | **-3.53** | |
| 9 | 59.39 | **-3.57** | |
| 10 | 55.78 | **-3.61** | |
| 11 | 52.15 | **-3.63** | |
| 12 | 48.5 | **-3.65** | Here is the max (-3.65). After this we must see the Point No3. Remember what we should see from Point No2 up to Point No3, "… Point No2 or E (on d2): Here starts the attraction and the natural "Satellite" **starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed**" by point No2 up to point No3…". So far, the increasement of the orbital speed it's not gradual. It failed. |
| 13 | 44.88 | **-3.62** | If 1566 Icarus was a LAECsp of the Sun, here we should see this: "… **Point No3 or r σ (on d3):** Rapid change (decrease) on the "Satellite's" |

| | | | |
|---|---|---|---|
| | | | Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed.". Let's search for the next points. |
| 14 | 41.33 | **-3.55** | If 1566 Icarus was a LAECsp of the Sun, here we should see this: "…**Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6…". See on the next lines that the decreasement up to the Point No6 (the "perihelion") it's not gradual. It's also very short (only 5 days later after Point No4, the 1566 Icarus it's at its "perihelion" – no symmetry/ impossible for a LAECsp) |
| 15 | 37.92 | **-3.41** | |
| 16 | 34.74 | **-3.18** | |
| 17 | 31.96 | **-2.78** | |
| 18 | 29.76 | **-2.2** | |
| 19 | 28.35 | **-1.41** | If 1566 Icarus was a LAECsp of the Sun, here we should see this: "… **Point No5 or LA (on d5):** Last point with attractive forces between the natural "Satellite" and its natural "Sun"…". |
| **20** | **27.91** | **-0.44** | If 1566 Icarus was a LAECsp of the Sun, here we should see this: "… **Point No6 or** |

| | | | |
|---|---|---|---|
| | | | **Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun"...". See here the difference that it's 0.44 when on a real LAECsp case this is always 0 or close to 0 (e.g. -0.01 or -0.02 NOT +0.44!/ we never see increasement at the "perihelion") |
| 21 | 28.52 | **0.61** | |
| 22 | 30.07 | **1.55** | |
| 23 | 32.39 | **2.32** | |
| 24 | 35.25 | **2.86** | |

There is no reason to continue the observation, as there are too many discrepancies.

## *PROPOSITION I – Conclusion for Asteroid 1566 Icarus*

The Asteroid 1566 Icarus failed to successfully pass the first criterion to be classified as a LAECsp (as a natural "Planet") of the LAECs (of the Sun) - is not a Planet of the Sun.

If the Asteroid 1566 Icarus was a Planet of the Sun, it would pass **all the 3 criteria** as any other Planet in our solar system.

# *PROPOSITION K –*

## *Asteroid 4 Vesta is a Natural Satellite, as any otherPlanet, on an Elliptical Orbit around its natural Sun (the Sun)*

Now, I'll use the Theorem 2 to classify Asteroid 4 Vesta as a Planet or not of the Sun. I'll check Asteroid's 4 Vesta data for the 3 criteria.

Theorem 2 states that "*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), is 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:*

**1) 10 important points*, regardless of its size/mass/shape or its direction of Orbit**

*** The 10 important points**

| No of Point | Name of point | **d(x)** between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | d1 | The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | E | d2 | Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |

| | | | |
|---|---|---|---|
| 3 | rσ | d3 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | d4 | Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 5 | LA | d5 | Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| 6 | Peri-LAEC | d6 | The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 7 | A | d7 | Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 8 | rε | d8 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | d9 | Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 10 | LR | d10 | Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |

Let's check the first criterion.

## *I) Asteroid 4 Vesta – the 10 important points. Has Asteroid 4 Vesta these 10 points?*

**<u>Facts about Asteroid 4 Vesta</u>**

**Diameter (km):** Is about 530 km

**Mass:** 2.59 × 10^20 kilograms

**Shape:** Its shape is roughly ellipsoidal, with a number of large impact craters on its surface.

**Orbit:** Its orbit is slightly elliptical.

**Direction of Orbit:** Its direction of orbit is prograde, like most other objects in the solar system.

**Composition:** 4 Vesta is made up mostly of rock and metal, with a surface composition that is similar to the basaltic igneous rocks found on Earth. The surface of 4 Vesta is dark, with a low albedo, and it is thought to be coated with a layer of fine-grained pyroxene, a type of rock-forming mineral that is rich in iron and magnesium. The asteroid's interior is thought to be composed of a metallic core surrounded by a rocky mantle and crust. Scientists believe that 4 Vesta is a primitive, or undifferentiated, asteroid, meaning that it has not undergone the same kind of geological processes that have shaped and modified the surfaces of other asteroids and planets.

**Note:** I have followed the same steps, but due to the length of the table, I will only show you where I found the 10 points and the 2 extrema on the table (**see Appendix H**)

## $1)\ Checking\ for\ the\ 10\ Points\ day - by - day$

### $I.\ Group\ A\ (Points\ No10, No1 - Aphe - LAEC -\ and\ No2)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 25/2/20 | 384.62 |
| No1 | 26/2/20 | 384.63 |
| No2 | 7/3/20 | 38462 |

### $II.\ Group\ B\ (1st\ Max\ and\ Points\ No3\ and\ No4)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 7/3/21 | 350.40 |

| | | |
|---|---|---|
| No3 | 17/5/21 | 340.08 |
| No4 | 18/5/21 | 339.94 |

## $III. Group\ C\ (Points\ No5, No6 - \ Peri - LAEC - \ and\ No7)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 22/12/21 | 322.08 |
| No6 | 23/12/21 | 322.07 |
| No7 | 28/12/21 | 322.08 |

## $IV. Group\ D\ (2nd\ Max\ and\ Points\ No8\ and\ No9)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2$^{nd}$ Max | 25/11/22 | 351.90 |
| No8 | 9/1/23 | 362.90 |
| No9 | 10/1/23 | 363.04 |

### Has Asteroid 4 Vesta these 10 important points?

- Yes. It passes successfully the first criterion to be a Planet of the Sun.

Let’s see the second criterion which is, "*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), it's 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object −the natural "Sun") that we are observing, when it has the next three characteristics:*

**2) An almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC**, each time that the first is at its Aphe-LAEC & its Peri-LAEC**

**** The smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC (of "perihelion/perigee", etc.)**

Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. To find the Peri-LAEC's distance (the "perihelion/perigee" etc.), it's enough to find just one Peri-LAEC of the LAECsp(2) and measure the difference."

## *II) Asteroid's 4 Vesta Aphe – LAEC & Peri – LAEC ("aphelion" & "perihelion")*

Asteroid's 4 Vesta Peri-LAEC on 23 Dec. 2021 at 322.07 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±1.900213 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±1.900213 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±1.900213 million km |
|---|---|---|---|
| 26 Feb. 2020 | 384.63 | 23 Dec. 2021 | 322.07 |
| 16 Oct. 2023 | 384.94 | 11 Aug. 2025 | 321.43 |
| 02 Jun. 2027 | 385.08 | 29 Mar. 2029 | 321.59 |
| 20 Jan. 2031 | 384.94 | 14 Nov. 2032 | 321.56 |
| 04 Sep. 2034 | 385.19 | 26 Jun. 2036 | 321.22 |
| 20 Apr. 2038 | 385.14 | 12 Feb. 2040 | 321.66 |
| 08 Dec. 2041 | 384.94 | 30 Sep. 2043 | 321.48 |
| 21 Jul. 2045 | 385.00 | 18 May 2047 | 321.59 |
| 07 Mar. 2049 | 384.81 | 05 Jan. 2051 | 321.99 |
| 29 Oct. 2052 | 384.71 | 21 Aug. 2054 | 321.82 |
| 11 Jun. 2056 | 384.67 | 07 Apr. 2058 | 322.07 |

**Is the distance from the Sun almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**

- Yes. Almost stable distance at Aphe-LAEC & Peri-LAEC.

**How many months from Aphe-LAEC to Aphe-LAEC?**

- 22, 22, 22, 22, 22, 22, 22, 22, 22, 22 (almost stable)

**How many months from Peri-LAEC to Peri-LAEC?**

- 22, 22, 22, 22, 22, 22, 22, 22, 22, 22 (almost stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±1.900213 million km)?**

- No. The max difference is 0.64 million km

# *III) Asteroid 4 Vesta orbits in the Sun's Z9*

**3) It Orbits in the other Object's Z9*****

***** Z9 - The "Moons'/Satellites' Orbiting Zone"**

Nowhere else, except the Z9 a LAECsp can be seen on an Elliptical Orbit around the LAECs or the LAECsp(1). The Z9 of a LAECsp(1) starts from the h6 and extends up to h8.

If the LAECsp(1) that we are observing has "Moons/Satellites" on Orbit around itself, then these "Moons/Satellites" will only be visible within the Z9.

**But, be careful – very important detail**: Objects such as Planets & Moons belongs to the LAECsp category (Type "Satellite/Planet"), when objects such as the Sun, belongs to the LAECs category (Type Sun). Each category of LAEC has different futures. Even if both LAECsp & LAECs share some properties & characteristics (e.g. both have the 10 heights, orbit a bigger-mass object, have the 10 Zones, same total of Magnetic Poles, etc.), they have some big differences that are changing the results; That's why, if you want to make a classification e.g., for a "Planet", and you don't have the d3 to measure the h6 of the "Sun" (of the LAECs that the LAECsp orbits around), it's enough to find these two:

a) The "perihelion" of the closest to the "Sun", "Planet" &

b) The "aphelion" of the farthest from the "Sun", "Planet".

None LAECsp ever orbits out of the Z9.

Sun it's a LAECs. So,

**Step 1:**

I'll find the "perihelion" of the closest to the "Sun", "Planet".

The Planet closest to the Sun is Mercury. The "perihelion" of Mercury's orbit is 46.00 million km from the Sun.

**Step 2:**
I'll find the "aphelion" of the farthest from the "Sun", "Planet".
The Planet that is farthest from the Sun is Pluto. The "aphelion" of Pluto's orbit is about 7.4 billion km from the Sun.

**Step 3:**
Now I'll check Asteroid's 4 Vesta "perihelion" & "aphelion" to see if it's in the limits from 46.00 million km up to 7.4 billion km.

a) Asteroid's 4 Vesta "perihelion" is about 321.22 million km
b) Asteroid's 4 Vesta "aphelion" is about 384.94 million km

**It's in the limits from 46.00 million km up to 7.4 billion km?**
- Yes

Conclusion for Asteroid 4 Vesta.

## *PROPOSITION K – Conclusion for Asteroid 4 Vesta*

Yes, Asteroid 4 Vesta is NOT an "Asteroid" but a Planet of the Sun (a LAECsp / a natural "satellite"), as any other Planet in our solar system, on an Elliptical Orbit around its natural "Sun" (the Sun), as it has successfully passed the three-tier test.

Since the Asteroid 4 Vesta is no longer an "Asteroid" but a Planet, I am renaming it from "Asteroid 4 Vesta" to "AG Planet".

Let's move to the next Proposition.

# *PROPOSITION Λ –*
## *Asteroid 2 Pallas is a Natural Satellite, as any other Planet, on an Elliptical Orbit around its natural Sun (the Sun)*

Now, I'll use the Theorem 2 to classify Asteroid 2 Pallas as a Planet or not of the Sun. I'll check Asteroid's 2 Pallas data for the 3 criteria.

Theorem 2 states that "*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), is 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:*

**1) 10 important points*, regardless of its size/mass/shape or its direction of Orbit**

*** The 10 important points**

| No of Point | Name of point | **d(x)** between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | d1 | The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | E | d2 | Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |

| | | | |
|---|---|---|---|
| 3 | rσ | d3 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | d4 | Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 5 | LA | d5 | Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| 6 | Peri-LAEC | d6 | The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 7 | A | d7 | Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 8 | rε | d8 | Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | d9 | Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 10 | LR | d10 | Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |

Let's check the first criterion.

## *I) Asteroid 2 Pallas – the 10 important points. Has Asteroid 2 Pallas these 10 points?*

**Facts about Asteroid 2 Pallas**

**Diameter (km):** Is about 544 km

**Mass:** 2.11 × 10^20 kilograms

**Shape:** It has an irregular shape, with a number of small protuberances and a large impact crater on its surface.

**Orbit:** Its orbit around the Sun is slightly inclined and elliptical.

**Direction of Orbit:** It orbits in a direction that is counterclockwise as seen from above the solar system's ecliptic plane.

**Composition:** Its composition is thought to be a mixture of rock, metal, and water ice, with a surface that is relatively dark and highly reflective.

**Note:** I have followed the same steps, but due to the length of the table, I will only show you where I found the 10 points and the 2 extrema on the table (**see Appendix I**)

## 1) *Checking for the 10 Points day – by – day*

### *I. Group A (Points No10, No1 – Aphe – LAEC – and No2)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 7/11/20 | 510.39 |
| No1 | 8/11/20 | 510.40 |
| No2 | 14/11/20 | 510.39 |

### *II. Group B (1st Max and Points No3 and No4)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 6/5/22 | 394.45 |
| No3 | 28/6/22 | 375.20 |
| No4 | 29/6/22 | 374.84 |

## *III. Group C (Points No5, No6 – Peri – LAEC – and No7)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 4/3/23 | 319.01 |
| No6 | 5/3/23 | 319 |
| No7 | 9/4/23 | 319.01 |

## *IV. Group D (2nd Max and Points No8 and No9)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max | 19/12/23 | 388.39 |
| No8 | 19/2/24 | 410.95 |
| No9 | 20/2/24 | 411.31 |

**Has Asteroid 2 Pallas these 10 important points?**
- Yes. It passes successfully the first criterion to be a Planet of the Sun.

Let's see the second criterion which is,

"*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), it's 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:*

**2) An almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC**, each time that the first is at its Aphe-LAEC & its Peri-LAEC**

**<u>** The smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC (of "perihelion/perigee", etc.)</u>**

Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. To find the Peri-LAEC's distance (the "perihelion/perigee" etc.), it's enough to find just one Peri-LAEC of the LAECsp(2) and measure the difference."

## *II) Asteroid's 2 Pallas Aphe − LAEC & Peri − LAEC ("aphelion" & "perihelion")*

Asteroid's 2 Pallas Peri-LAEC on 5 March, 2023 at 319 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±1.8821 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km<br>* huge difference with previous Aphe-LAEC, over ±1.8821 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km<br>* huge difference with previous Peri-LAEC, over ±1.8821 million km |
|---|---|---|---|
| 08 Nov. 2020 | 510.40 | 5 Mar. 2023 | 319 |
| 21 Jun. 2025 | 509.95 | 15 Oct. 2027 | 318.64 |

| | | | |
|---|---|---|---|
| 30 Jan. 2030 | 509.87 | 22 May 2032 | 318.62 |
| 08 Sep. 2034 | 509.75 | 27 Dec. 2036 | 319.06 |
| 18 Apr. 2039 | 509.90 | 10 Aug. 2041 | 319.46 |
| 1 Dec. 2043 | 509.87 | 22 Mar. 2046 | 318.66 |
| 12 Jul. 2048 | 510.13 | 30 Oct. 2050 | 318.05 |

**Is the distance from the Sun almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**
- Yes. Almost stable distance at Aphe-LAEC & Peri-LAEC.

**How many months from Aphe-LAEC to Aphe-LAEC?**
- 54, 54, 54, 54, 54 (almost stable)

**How many months from Peri-LAEC to Peri-LAEC?**
- 54, 54, 54, 54, 54 (almost stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±1.8821 million km)?**
- No. The max difference is 0.8 million km

# *III) Asteroid 2 Pallas orbits in the Sun's Z9*

### 3) It Orbits in the other Object's Z9***

***** Z9 - The "Moons'/Satellites' Orbiting Zone"**

Nowhere else, except the Z9 a LAECsp can be seen on an Elliptical Orbit around the LAECs or the LAECsp(1). The Z9 of a LAECsp(1) starts from the h6 and extends up to h8.

If the LAECsp(1) that we are observing has "Moons/Satellites" on Orbit around itself, then these "Moons/Satellites" will only be visible within the Z9.

But, be careful – very important detail: Objects such as Planets & Moons belongs to the LAECsp category (Type "Satellite/Planet"), when objects such as the Sun, belongs to the LAECs category (Type Sun). Each category of LAEC has different futures. Even

if both LAECsp & LAECs share some properties & characteristics (e.g. both have the 10 heights, orbit a bigger-mass object, have the 10 Zones, same total of Magnetic Poles, etc.), they have some big differences that are changing the results; That's why, if you want to make a classification e.g., for a "Planet", and you don't have the d3 to measure the h6 of the "Sun" (of the LAECs that the LAECsp orbits around), it's enough to find these two:
a) The "perihelion" of the closest to the "Sun", "Planet" &
b) The "aphelion" of the farthest from the "Sun", "Planet".
None LAECsp ever orbits out of the Z9.

Sun it's a LAECs. So,

**Step 1:**
I'll find the "perihelion" of the closest to the "Sun", "Planet".

The Planet closest to the Sun is Mercury. The "perihelion" of Mercury's orbit is 46.00 million km from the Sun.

**Step 2:**
I'll find the "aphelion" of the farthest from the "Sun", "Planet".
The Planet that is farthest from the Sun is Pluto. The "aphelion" of Pluto's orbit is about 7.4 billion km from the Sun.

**Step 3:**
Now I'll check Asteroid's 2 Pallas "perihelion" & "aphelion" to see if it's in the limits from 46.00 million km up to 7.4 billion km.

a) Asteroid's 2 Pallas "perihelion" is about 319 million km
b) Asteroid's 2 Pallas "aphelion" is about 509.95 million km

**It's in the limits from 46.00 million km up to 7.4 billion km?**
- Yes

Conclusion for Asteroid 2 Pallas.

## *PROPOSITION Λ – Conclusion for Asteroid 2 Pallas*

Yes, Asteroid 2 Pallas is NOT an "Asteroid" but a Planet of the Sun (a LAECsp / a natural "satellite"), as any other Planet in our solar system, on an Elliptical Orbit around its natural "Sun" (the Sun), as it has successfully passed the three-tier test.

Since the Asteroid 2 Pallas is no longer an "Asteroid" but a Planet, I am renaming it from "Asteroid 2 Pallas" to "Crete Planet".

## *PROPOSITION M –*

## *Asteroid 2020 CD3 (Earth's minimoon) is a Natural Satellite, as any other Planet, on an Elliptical Orbit around its natural Sun (the Sun)*

Asteroid 2020 CD3 is a small asteroid that was discovered in February 2020 by the Zwicky Transient Facility (ZTF) at the Palomar Observatory in California. It is approximately 10 meters (33 feet) in diameter and has an orbit that takes it around the Sun. It was later determined to be a temporary Satellite of Earth, or "minimoon". This means that it is in a stable orbit around the Earth and will remain in this orbit for a period of time before eventually leaving. The term "minimoon" is used to describe small asteroids or other objects that temporarily become satellites of Earth or other Planets. But, what they call "natural satellite" of a Planet and what's the relation of the Planet and its "natural satellite"?

As we read, "*…A satellite is a celestial body that orbits around a planet or other larger body in space. In order to classify an object as a natural satellite of the planet, scientists and astronomers observe its orbit and determine that is in **stable orbit around the planet**. The relation between a planet and its natural satellite is that the planet and satellite are both **held in orbit around a common center** of mass, called barycenter…*". And on the third question, "Can a natural Satellite orbit more than one bigger-mass than itself objects?", the answer we get is, "*…No, a natural satellite **can only orbit one Planet**. A natural satellite is a celestial body that orbits a Planet, and **it is bound to that Planet by gravity**. Is not possible for a natural satellite to orbit more than one Planet because the gravitational pull of each Planet would be competing for the Satellite, and **it would not be able to maintain a stable orbit** around both Planets…*".

Nice. Let's see which "Sun's" natural Satellite is and if is not the Earth's then whose is it, and debunk the myth of the "Earth's minimoon" forever. Let's see if this Asteroid is a LAECsp of the Sun (a Planet of the Sun) or a LAECsp(2) of the Earth (a Moon of the Earth) and classify it by applying the Theorem 2.

Now, I'll use the Theorem 2 to classify Asteroid 2020 CD3 as a Planet or not of the Sun. I'll check Asteroid's 2020 CD3 data for the 3 criteria.

Theorem 2 states that "*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), is 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:*

**1) 10 important points*, regardless of its size/mass/shape or its direction of Orbit**

*** The 10 important points**

| No of Point | Name of point | **d(x)** between the center of the LAECsp and the center of its LAECs or LAECsp(1) | Comments/ Characteristics |
|---|---|---|---|
| 1 | Aphe-LAEC | $d_1$ | The farthest distance of the natural “Satellite” by its natural “Sun”. Balance between the attractive & repulsive forces – net force is zero - the “Satellite” does not go farther or closer to its “Sun”. |
| 2 | E | $d_2$ | Here starts the attraction and the natural “Satellite” starts moving closer to its natural “Sun” with gradual increase of the “Satellite’s Orbital speed” by point No2 up to point No3. |
| 3 | rσ | $d_3$ | Rapid change (decrease) on the “Satellite’s” Orbital speed and anomaly on the “Satellite’s” Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 4 | MS | $d_4$ | Gradual decrease of the “Satellite’s Orbital speed” by point No4 up to point No6. |
| 5 | LA | $d_5$ | Last point with attractive forces between the natural “Satellite” and its natural “Sun”. |
| 6 | Peri-LAEC | $d_6$ | The closest distance of the natural “Satellite” by its natural “Sun”. Balance between the attractive & repulsive forces – net force is zero - the “Satellite” does not go farther or closer to its “Sun”. |
| 7 | A | $d_7$ | Here starts the repulsion and the natural “Satellite” starts moving farthest by its natural “Sun” with gradual increase of the “Satellite’s Orbital speed” by point No7 up to point No8. |
| 8 | rε | $d_8$ | Rapid change (decrease) on the “Satellite’s” Orbital speed and anomaly on the “Satellite’s” Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 9 | NM | $d_9$ | Gradual decrease of the “Satellite’s Orbital speed” by point No9 up to point No10. |
| 10 | LR | $d_{10}$ | Last point with repulsive forces between the natural “Satellite” and its natural “Sun”. |

Let’s check the first criterion.

# $I)$ *Asteroid* $2020$ *CD3* $-$ *the* $10$ *important points. Has Asteroid* $2020$ *CD3 these* $10$ *points*?

**Facts about Asteroid 2020 CD3**

**Diameter (km):** Based on its brightness and the way it reflects light, 2020 CD3 is probably between 0.001 to 0.004 kilometers.

**Mass:** 4,897 kg

**Shape:** The 2020 CD3 is elongated and vaguely triangular in shape.

**Orbit:** Its orbit around the Sun is slightly inclined and elliptical.

**Direction of Orbit:** ?

**Composition:** C-type* asteroid.

**C-type asteroids are the most common variety, forming around 75% of known asteroids. They are volatile-rich and distinguished by a very low albedo because their composition includes a large amount of carbon, in addition to rocks and minerals. Their density averages at about 1.7 g/cm$^3$.*

**Note:** I have followed the same steps, but due to the length of the table, I will only show you where I found the 10 points and the 2 extrema on the table (**see Appendix J**)

## $1)$ *Checking for the* $10$ *Points day – by – day*

### $I.$ *Group A (Points No*$10$*, No*$1$ *– Aphe – LAEC – and No*$2$*)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 18/8/21 | 155.81 |
| No1 | 19/8/21 | 155.82 |
| No2 | 29/8/21 | 155.81 |

## $\boldsymbol{II. Group\ B\ (1st\ Max\ and\ Points\ No3\ and\ No4)}$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 8/12/21 | 153.57 |
| No3 | 9/12/21 | 153.54 |
| No4 | 23/12/21 | 153.13 |

## $\boldsymbol{III. Group\ C\ (Points\ No5, No6 - \ Peri - LAEC - \ and\ No7)}$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 23/2/22 | 152.03 |
| No6 | 24/2/22 | 152.02 |
| No7 | 7/3/22 | 152.03 |

## $\boldsymbol{IV. Group\ D\ (2nd\ Max\ and\ Points\ No8\ and\ No9)}$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max | 21/6/22 | 154.47 |
| No8 | 25/6/22 | 154.58 |
| No9 | 26/6/22 | 154.61 |

**Has Asteroid 2020 CD3 these 10 important points?**
- Yes. It passes successfully the first criterion to be a Planet of the Sun.

Let's see the second criterion which is,

"*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), is 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:*

**2) An almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC**, each time that the first is at its Aphe-LAEC & its Peri-LAEC**

**** The smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC (of "perihelion/perigee", etc.)**

Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. To find the Peri-LAEC's distance (the "perihelion/perigee" etc.), it's enough to find just one Peri-LAEC of the LAECsp(2) and measure the difference."

## *II)* $\boldsymbol{Asteroid's\ 2020\ CD3\ \ Aphe-LAEC\ \ \&\ Peri-LAEC}$ ("$\boldsymbol{aphelion}$" & "$\boldsymbol{perihelion}$")

Asteroid's 2020 CD3 Peri-LAEC on 24 Feb., 2022 at 152.02 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.896918 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km<br>* huge difference with previous Aphe-LAEC, over ±0.896918 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km<br>* huge difference with previous Peri-LAEC, over ±0.896918 million km |
|---|---|---|---|
| 18 Aug. 2021 | 155.82 | 24 Feb. 2022 | 152.02 |
| 04 Sep. 2022 | 155.85 | 17 Mar. 2023 | 152.03 |
| 20 Sep. 2023 | 155.85 | 30 Mar. 2024 | 152.04 |
| 6 Oct. 2024 | 155.85 | 14 Apr. 2025 | 152.04 |
| 24 Oct. 2025 | 155.85 | 29 Apr. 2026 | 152.04 |
| 07 Nov. 2026 | 155.84 | 18 May 2027 | 152.03 |
| 24 Nov. 2027 | 155.84 | 31 May 2028 | 152.03 |
| 07 Dec. 2028 | 155.83 | 19 Jun. 2029 | 152.02 |
| 23 Dec. 2029 | 155.83 | 03 Jul. 2030 | 152.02 |
| 10 Jan. 2031 | 155.83 | 19 Jul. 2031 | 152.02 |
| 27 Jan. 2032 | 155.83 | 05 Aug. 2032 | 152.01 |

**Is the distance from the Sun almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**
- Yes. Almost stable distance at Aphe-LAEC & Peri-LAEC.

**How many months from Aphe-LAEC to Aphe-LAEC?**
- 6, 6, 6, 6, 6, 6, 6, 6, 6, 6 (almost stable)

**How many months from Peri-LAEC to Peri-LAEC?**
- 6, 6, 6, 6, 6, 6, 6, 6, 6, 6 (almost stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.896918 million km)?**
- No. The max difference is 0.01 million km

## *III) Asteroid 2020 CD3 orbits in the Sun's Z9*

**3) It Orbits in the other Object's Z9*****

***** Z9 - The "Moons'/Satellites' Orbiting Zone"**
Nowhere else, except the Z9 a LAECsp can be seen on an Elliptical Orbit around the LAECs or the LAECsp(1). The Z9 of a LAECsp(1) starts from the h6 and extends up to h8.
If the LAECsp(1) that we are observing has "Moons/Satellites" on Orbit around itself, then these "Moons/Satellites" will only be visible within the Z9.
**But, be careful – very important detail**: Objects such as Planets & Moons belongs to the LAECsp category (Type "Satellite/Planet"), when objects such as the Sun, belongs to the LAECs category (Type Sun). Each category of LAEC has different futures. Even if both LAECsp & LAECs share some properties & characteristics (e.g. both have the 10 heights, orbit a bigger-mass object, have the 10 Zones, same total of Magnetic Poles, etc.), they have some big differences that are changing the results; That's why, if you want to make a classification e.g., for a "Planet", and you don't have the d3 to measure the h6 of the "Sun" (of the LAECs that the LAECsp orbits around), it's enough to find these two:
a) The "perihelion" of the closest to the "Sun", "Planet" &
b) The "aphelion" of the farthest from the "Sun", "Planet".
None LAECsp ever orbits out of the Z9.

Sun it's a LAECs. So,

**Step 1:**
I'll find the "perihelion" of the closest to the "Sun", "Planet".

The Planet closest to the Sun is Mercury. The "perihelion" of Mercury's orbit is 46.00 million km from the Sun.

**Step 2:**

I'll find the "aphelion" of the farthest from the "Sun", "Planet".
The Planet that is farthest from the Sun is Pluto. The "aphelion" of Pluto's orbit is about 7.4 billion km from the Sun.

**Step 3:**

Now I'll check Asteroid's 2020 CD3 "perihelion" & "aphelion" to see if it's in the limits from 46.00 million km up to 7.4 billion km.

a) Asteroid's 2020 CD3 "perihelion" is about 319 million km
b) Asteroid's 2020 CD3 "aphelion" is about 509.95 million km

**It's in the limits from 46.00 million km up to 7.4 billion km?**
- Yes

Conclusion for Asteroid 2020 CD3.

## *PROPOSITION M – Conclusion for Asteroid 2020 CD3*

Yes, Asteroid 2020 CD3 is NOT an "Asteroid", neither a natural satellite of the Earth but a Planet of the Sun (a LAECsp / a natural "satellite"), as any other Planet in our solar system, on an Elliptical Orbit around its natural "Sun" (the Sun), as it has successfully passed the three-tier test.

Since the Asteroid 2020 CD3 is no longer an "Asteroid" but a Planet of the Sun, I am renaming it from "Asteroid 2020 CD3" to "Planet Greece".

So we have seen that the Planet Greece (the ex-Asteroid 2020 CD3) is a Planet of the Sun and, as we read before, an object can only be a natural Satellite of one "Sun" and not more. Since it is proven as a LAECsp (a natural Satellite/Planet/Moon) of the Sun, it cannot be a LAECsp of the Earth. Based on the criteria of Theorem 2, it will not meet one or more of the three criteria. We will check the Asteroid 2020 CD3 to see if it meets the second criterion, as it can give as a quicker result.

# *PROPOSITION N –*

## *Asteroid 2020 CD3 (Earth's minimoon) is a Natural Satellite, as any other Planet, on an Elliptical Orbit around its natural Sun (the EARTH)*

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The second criterion of Theorem 2 is,

"*Any LAECsp (any natural Satellite), which is on an Elliptical Orbit around its LAECs or a LAECsp(1) (around its natural Sun), is 100% a LAECsp (a natural "Satellite/Moon/Planet") of the LAECs or the LAECsp(1) (the Object –the natural "Sun") that we are observing, when it has the next three characteristics:*

**2) An almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC**, each time that the first is at its Aphe-LAEC & its Peri-LAEC**

**** The smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC (of "perihelion/perigee", etc.)**

Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. To find the Peri-LAEC's distance (the "perihelion/perigee" etc.), it's enough to find just one Peri-LAEC of the LAECsp(2) and measure the difference."

## *Asteroid's 2020 CD3 Aphe − LAEC* & *Peri − LAEC* ("*apogee*" & "*perigee*")

Asteroid's 2020 CD3 Peri-LAEC on 07 Aug., 2018 at 0.32 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.001888 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±0.001888 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±0.001888 million km |
|---|---|---|---|
| | | 07 Aug. 2018 | 0.32 |
| 08 May 2032 | 304.65 | 16 Mar. 2044 | 3.66* |
| 17 May 2053 | 307.79* | 19 Aug. 2061 | 5.17* |
| 29 May 2071 | 306.29* | 21 Jan. 2082 | 6.59* |
| 05 May 2092 | 305.55* | | |

**Is the distance from the Sun almost stable, when the Planet is at its Aphe-LAEC & Peri-LAEC?**

- Yes. Almost stable distance at Aphe-LAEC & Peri-LAEC.

**How many years from Aphe-LAEC to Aphe-LAEC?**

- 21, 18, 21 (not stable)

**How many years from Peri-LAEC to Peri-LAEC?**
- 26, 17, 21 (not stable)

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.001888 million km)?**
- Yes. All are over ±0.001888 million km with max. difference +3.34 million km

# *PROPOSITION N – Conclusion for Asteroid 2020 CD3*

Yes, Asteroid 2020 CD3 is NOT an "Asteroid", neither a natural satellite of the Earth but a Planet of the Sun (a LAECsp / a natural "satellite"), as any other Planet in our solar system, on an Elliptical Orbit around its natural "Sun" (the Sun), as it has successfully passed the three-tier test.

Since the Asteroid 2020 CD3 is no longer an "Asteroid" but a Planet of the Sun, I am renaming it from "Asteroid 2020 CD3" to "Planet Greece".

# *PART V*

## *Additional criteria for the classification of objects*

On the following pages, I will present some additional criteria that I use to classify an object as a LAECsp (a "natural Satellite") of a LAECs (of a "natural Sun"). Most of these, one finds in all natural satellites that are in an elliptical orbit around their "Sun", however, because there are certain exceptions, they could not constitute criteria of Theorem 2. However, they are very interesting. These criteria are:

### *I. The almost anti – symmetry (or sometimes, the almost symmetry) of the LAECsp's (the "natural Satellite's") Chart of Orbit around its "Sun"*

Always, the Orbit Chart of a natural Satellite, has some kind of anti-symmetry (or symmetry) between its two periods (the first period starts from its

"Aphelion/Apogee", etc. and ends up to its "Perihelion/Perigee", etc., when the second period starts from its "Perihelion/Perigee", etc. and ends up to its "Aphelion/Apogee", etc.). If we flip the second period vertical and horizontal we see the almost anti-symmetry (in few cases, there is almost symmetry and we have to flip only vertical).

## ***II. Any "natural satellite" can be in orbit around only one "natural Sun"***

e.g. Mars, cannot orbit the Sun and on the same time, orbit another object in the solar system. We can check which "Sun" orbits by applying the Theorem 2.

## ***III. The Pattern of the Orbit starts from zero ...***

Usually it starts from zero (0), or the same number. Then we see a gradual increment (e.g. 0, -0.01, -0.02, -0.03, -0.04, etc.) up to the max and then we see gradual decrement up to zero, or the same number. Follows again, gradual increment (e.g. 0, 0.01, 0.02, 0.03, 0.04, etc.) up to the max that has the same value on the number line (e.g. if the previous max was -0.05, this max must be 0.05, etc.) and then we see gradual decrement up to zero, or the same number.

## ***IV. The orbit of a LAECsp (a natural "Satellite") around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti – symmetry) are the same and have the same values on the number line***

***1st quadrant***: *From "Aphelion" to max*

***2nd quadrant:*** *From max to "Perihelion"*

***3rd quadrant:*** *From "Perihelion" to max*

***4th quadrant:*** *From max to "Aphelion"*

***e.g.*** *If 1st quadrant -from "Aphelion" to max- is, 0, -0.01, -0.02, -0.03 then we must see on the 3rd quadrant, 0, 0.01, 0.02, 0.03.*

*If the 4th quadrant is 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0, then on the 2nd quadrant we must see -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0, etc.*

*But on some cases, where the orbit is almost symmetric (and not anti-symmetric), we see the first and fourth, and the second with third quadrants being same.*

*Anyway, there is a kind of anti-symmetry or symmetry on the Orbit, fact that we don't see when the object is not a natural satellite of the "Sun" that we are observing.*

***V. If this object is a natural satellite of the "Sun" that we are observing, then its Aphe − LAEC ("Aphelion, Apogee", etc.) from its "Sun", cannot have huge difference from its Peri − LAEC ("Perihelion, Perigee", etc.).***

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For example, a Planet of the Sun cannot have Aphelion at 3000 million km and Perihelion at 20 million km.

***VI. If this object is a natural satellite of the "Sun" that we are observing, then if we know just 1 quadrant, we can predict the full pattern of the object's Orbit.***

---

For example, if we have a 2nd quadrant like this, **-0.03 (max), -0.02, -0.01, 0 (Peri-LAEC)**, then the full Pattern of the Object's Orbit will be: -0.03 (max), -0.02, -0.01, 0 (Peri-LAEC), 0.01, 0.02, 0.03 (max), 0.02, 0.01, 0 (Aphe-LAEC), -0.01, -0.02, -0.03 (max).

***VII. 9 more additional criteria about the natural satellite's Pattern of Orbit for more detailed analysis. If this object is a natural satellite of the "Sun" that we are observing, then almost always, its Pattern of Orbit has these characteristics***

---

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

g) The two extrema are equal but opposite in sign.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

***VIII. If this object is a natural satellite of the "Sun" that we are observing, and so,***
***a) shares the same characteristics with any known natural satellite on orbit around its "Sun" in the solar system, such as the Planets or the Moons, etc. and as we know,***
***b) Planet Venus is one of the natural satellites of the Sun that has an almost circular orbit around its Sun (The Aphelion of Venus is about 108.94 million km and the Perihelion is about 107.48 million km − * Postulate 13), and Venus' diameter is 12104 km then, if we apply the Rule of 3 by using the Diameter of Venus, the Perihelion of Venus and the Diameter of the natural satellite which we are observing, then we will get the minimum distance – its Peri − LAEC ("Perihelion") − that this natural satellite that we are observing, will have an almost circular orbit, like Venus'. If the natural satellite is at a smaller distance by this distance that we found by the rule of 3, then we must see a more circular orbit; as smaller the Peri − LAEC of the natural satellite than the distance we found by using the rule of 3, such circular its orbit around its "Sun"; as bigger, such Elliptical its Orbit around its "Sun".***

For example, if we use the rule of 3 for Earth, we will find:

(12104/12756=107.48/x)=**<u>113.27</u>** million km. The Earth's Peri-LAEC ("Perihelion") is about 147.10 million km – bigger than this number. So, what we expect to see, <u>is a more Elliptical Orbit</u> / <u>bigger difference</u> between the Earth's Aphelion and Perihelion than the difference that Venus has between its Aphelion and it Perihelion. See this difference;

- The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: <u>1.349228352278%</u>

Let's see what is the Earth's percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

- The Perihelion of Earth is about 147.1 million km and the Aphelion of Earth is about 152 million km. Percentage difference: 3.2764961551321%

**Remember, Postulate 14, "...The Diameter of the natural satellite plays always a serious role to how close can approach its natural "Sun" (on what distance will be its Peri-LAEC)...".*

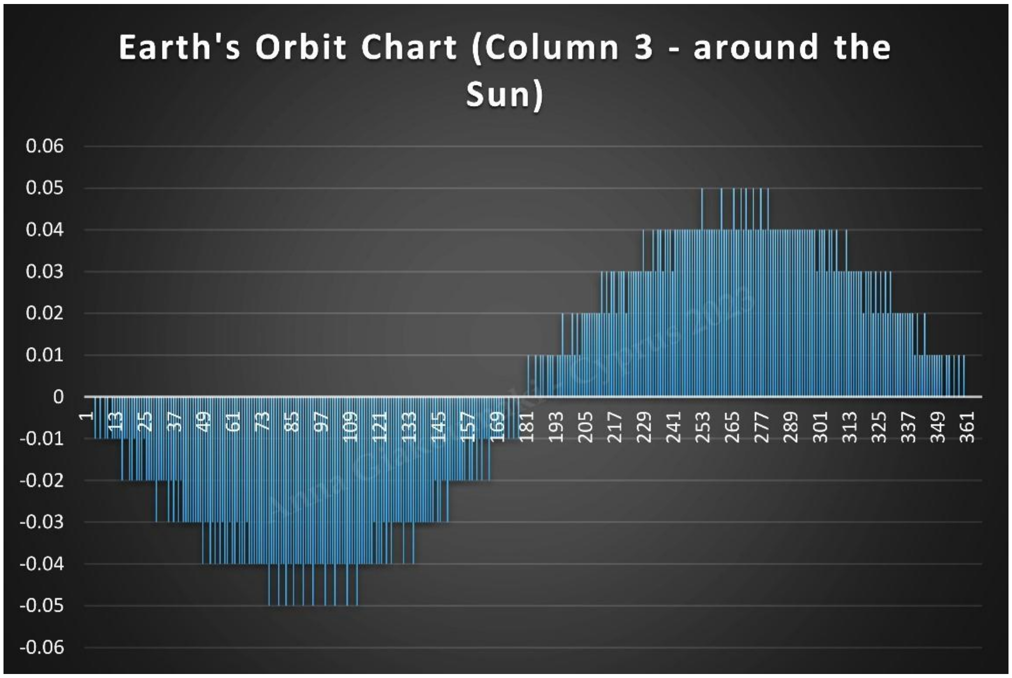
With the 3 basic criteria of Theorem 2, you can identify fast and easy if the celestial object that you are observing is a natural satellite or not of this "Sun" and classify it, but, by using these additional criteria, you can get a more detailed picture about your object. Usually, a real natural satellite of the "Sun" that you are observing **meets minimum the 7 out of 8 of these additional criteria** when you check it.

Please, let me show you what I found when I searched for these eight criteria on objects of our solar system.

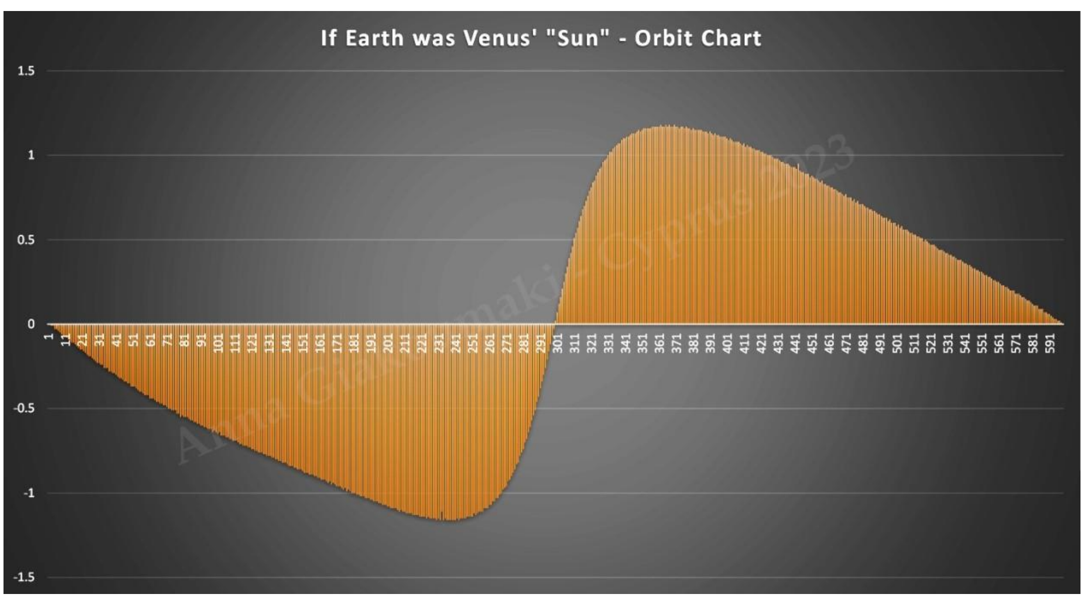
## *Additional criteria – Examples with real LAECsps (with real natural Satellites in orbit around their "Sun")*

# 1) EARTH (*orbit around the Sun*)

## *I) The Earth's Orbit Chart around the Sun*




## *II) The Earth's Orbit Chart around Venus*



## *III) The Earth's Orbit Pattern around the Sun*

**Pattern:** **0**, -0.01, -0.02, -0.03, -0.04, **-0.05 (max)**, -0.04, -0.03, -0.02, -0.01, **0**, 0.01, 0.02, 0.03, 0.04, **0.05 (max)**, 0.04, 0.03, 0.02, 0.01, **0**.

## *IV) The Earth's Four Quadrants on its Orbit around the Sun*

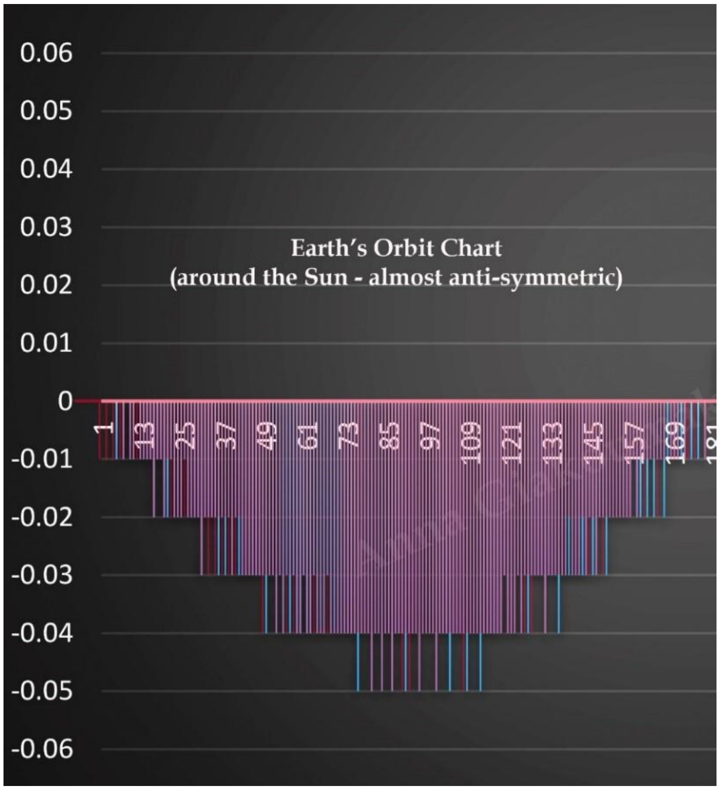
*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

***1st quadrant*:** **0**, -0.01, -0.02, -0.03, -0.04, **-0.05 (max)**

***2nd quadrant*:** **-0.05 (max)**, -0.04, -0.03, -0.02, -0.01, **0**

***3rd quadrant*:** **0**, 0.01, 0.02, 0.03, 0.04, **0.05 (max)**

***4th quadrant*:** **0.05 (max)**, 0.04, 0.03, 0.02, 0.01, **0**




*And this is the chart with the Earth's (almost) anti-symmetry*

With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion"(the second half, flipped vertically and horizontally)

## *V) The Earth's "Aphelion" and "Perihelion" has not huge difference*

The Perihelion of Earth is about 147.1 million km.

The Aphelion of Earth is about 152 million km

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 2nd quadrant and by this, we have to predict the Earth's Full Orbit Pattern

***2nd quadrant:*** **-0.05 (max)**, -0.04, -0.03, -0.02, -0.01, **0**

***Predicting its Orbit Pattern based on the quadrant we have:***

**-0.05 (max), -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC),** 0.01, 0.02, 0.03, 0.04, 0.05 (max), 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC), 0, -0.01, -0.02, -0.03, -0.04, -0.05 (max).

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Earth's Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

   - **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

   - **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.05 & 0.05.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

   - **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

   - **Yes**. After the 1st max -0.05, we see the -0.04.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

   - **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

   - **Yes**. After the 2nd max 0.05, we see the 0.04.

g) The two extrema are equal but opposite in sign.

   - **Yes**, -0.05 & 0.05.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

   - **Yes**.

   **1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05 (max)
   **3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.05 (max), -0.04, -0.03, -0.02, -0.01, 0

**4th quadrant:** 0.05 (max), 0.04, 0.03, 0.02, 0.01, 0

## ***VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit***

*"...If the natural satellite is at a smaller distance by this distance we found by the Rule of 3 (113.27 million km), then we must see a more circular orbit; as smaller the Peri-LAEC of the natural satellite than the distance we found by using the Rule of 3, such circular the Orbit around its "Sun"; as bigger, such elliptical its Orbit around its "Sun"..."*

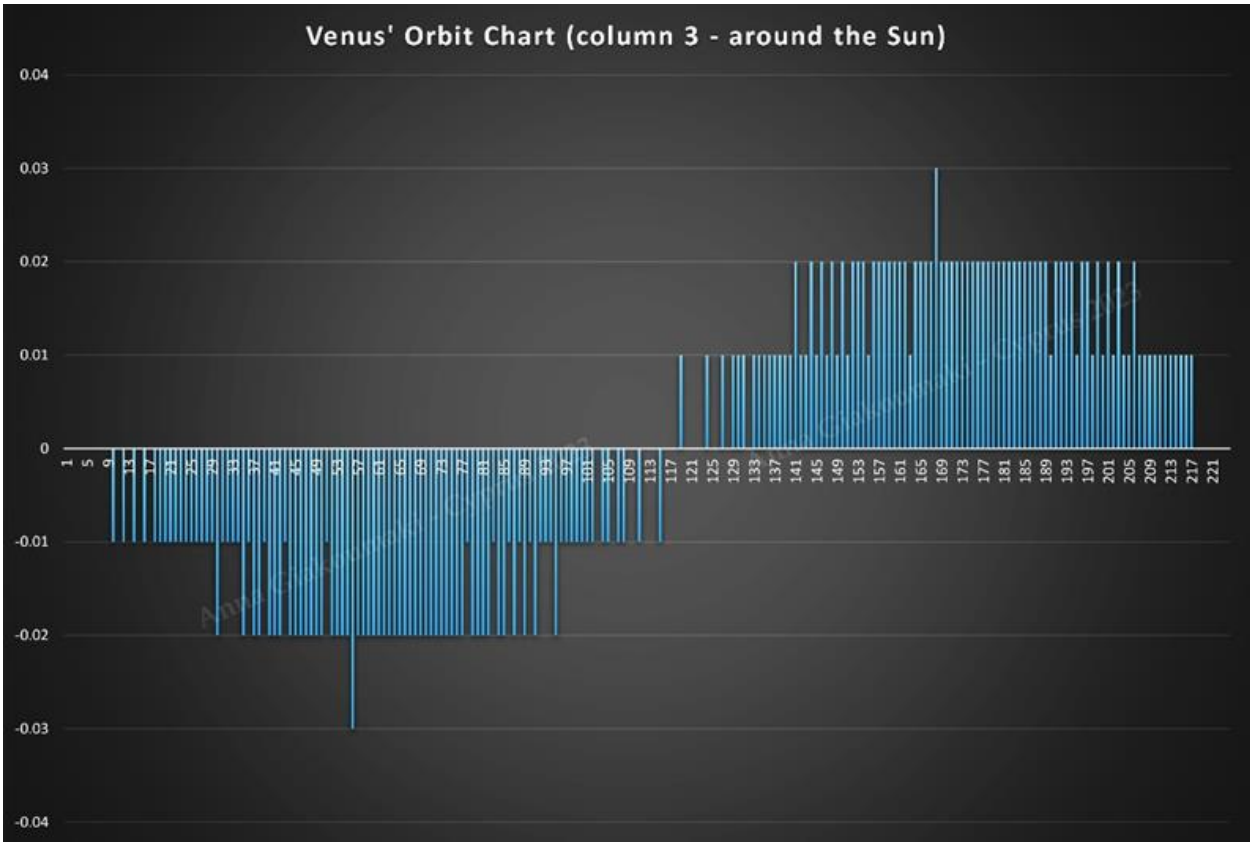
- The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: 1.349228352278%

Let's see what is the Mercury's percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

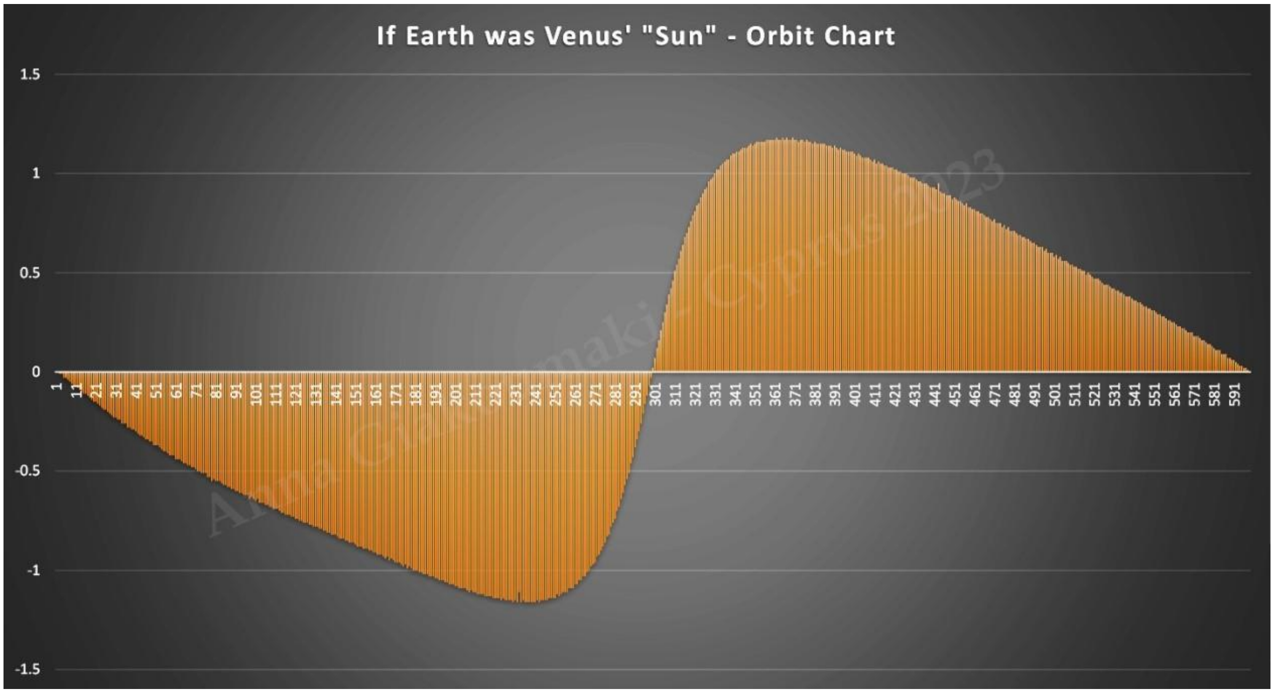
- The Perihelion of Mercury is about 147.1 million km and the Aphelion of Mercury is about **152** million km. Percentage difference: 3.2764961551321%

# 2) VENUS (*orbit around the Sun*)

## *I*) *The Venus Orbit Chart around the Sun*



## II) The Venus' Orbit Chart around Earth




## III) Venus' Orbit Pattern around the Sun

**Pattern:** **0**, -0.01, -0.02, **-0.03 (max)**, -0.02, -0.01, 0, 0.01, 0.02, **0.03 (max)**, 0.02, 0.01, **0**.

## IV) Venus' Four Quadrants on its Orbit around the Sun

*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

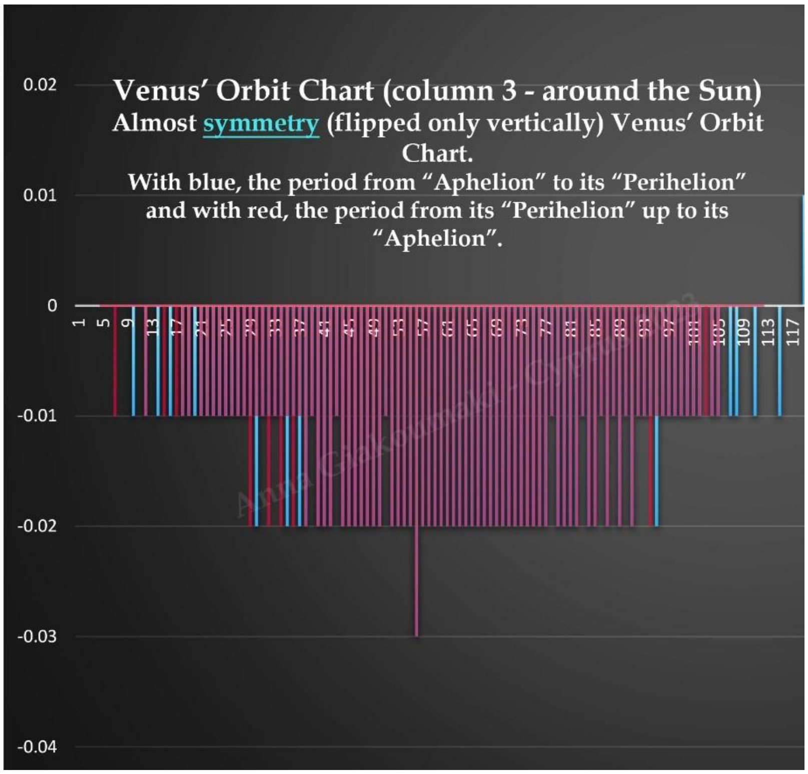
***1st quadrant:*** **0**, -0.01, -0.02, **-0.03 (max)**

***2nd quadrant:*** **-0.03 (max)**, -0.02, -0.01, **0**

***3rd quadrant:*** **0**, 0.01, 0.02, **0.03 (max)**

***4th quadrant:*** **0.03 (max)**, 0.02, 0.01, **0**

*And this is the chart with the Venus' (almost) anti-symmetry*




With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion" (the second half, flipped only vertically)

## *V) Venus' "Aphelion" and "Perihelion" has not huge difference*

The Perihelion of Venus is about 108.94 million km.

The Aphelion of Venus is about 107.48 million km

# *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 3rd quadrant and by this, we have to predict the Venus' Full Orbit Pattern

***3rd quadrant:*** **0**, 0.01, 0.02, **0.03 (max)**

***Predicting its Orbit Pattern based on the quadrant we have:***
**0 (Peri-LAEC), 0.01, 0.02, 0.03 (max),** 0.02, 0.01, 0 (Aphe-LAEC), -0.01, -0.02, -0.03 (max), -0.02, -0.01, 0 (Peri-LAEC).

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Venus' Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

   - **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

   - **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.03 & 0.03.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.03, we see the -0.02.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.03, we see the 0.02.

g) The two extrema are equal but opposite in sign.

- **Yes**, -0.03 & 0.03.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03 (max)
**3rd quadrant:** 0, 0.01, 0.02, 0.03 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

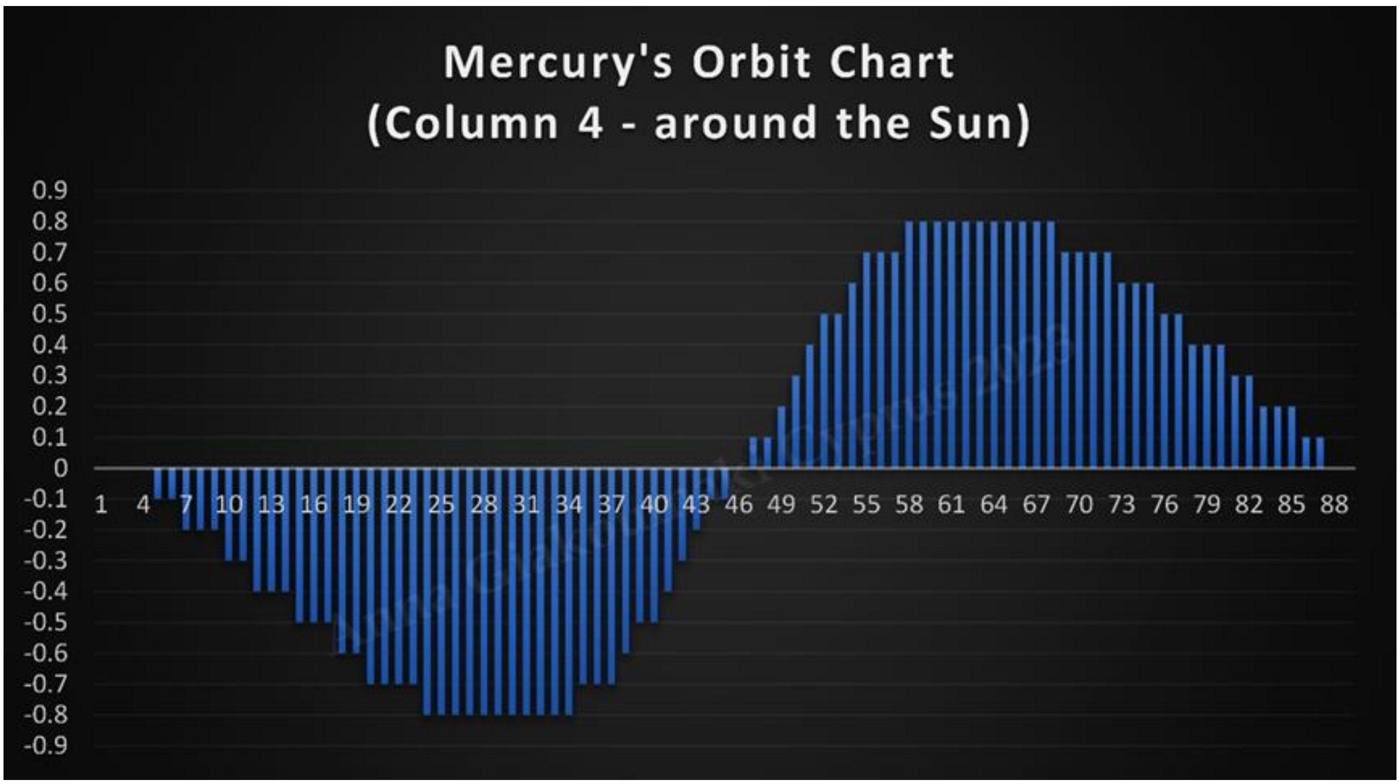
**2nd quadrant:** -0.03 (max), -0.02, -0.01, 0
**4th quadrant:** 0.03 (max), 0.02, 0.01, 0

## *VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit (we cannot compare Venus with Venus)*

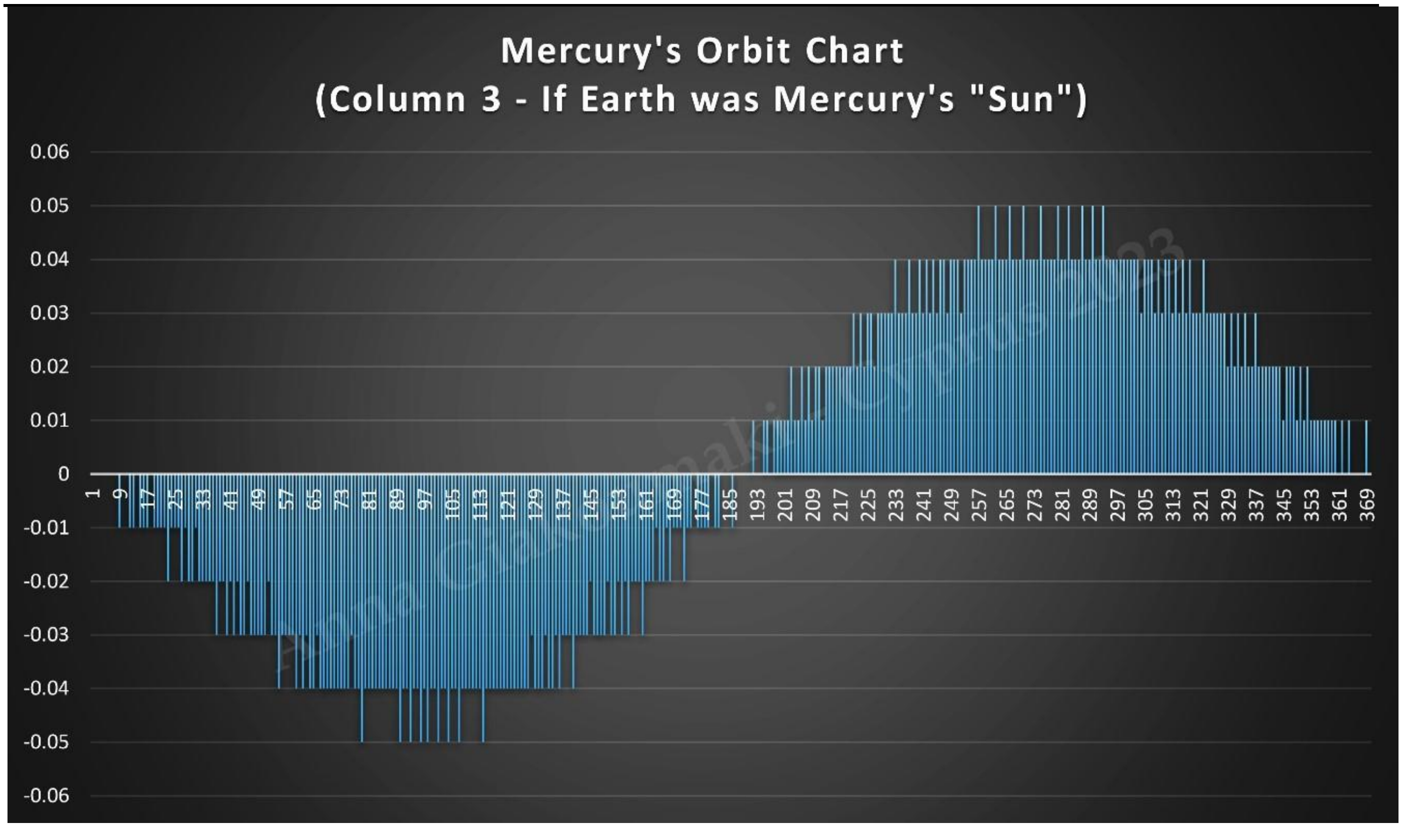
*Venus is the only object that we cannot compare with VENUS, because we are using Venus' results to find all the other natural satellites' Orbits.*

# 3) MERCURY (*orbit around the Sun*)

## *I) Mercury's Orbit Chart around the Sun*



## *II) Mercury's Orbit Chart around Earth*



## *III*) *Mercury's Orbit Pattern around the Sun*

**Pattern:** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, **-0.08 (max)**, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, **0.08 (max)**, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**.

## *IV*) *Mercury's Four Quadrants on its Orbit around the Sun*

*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

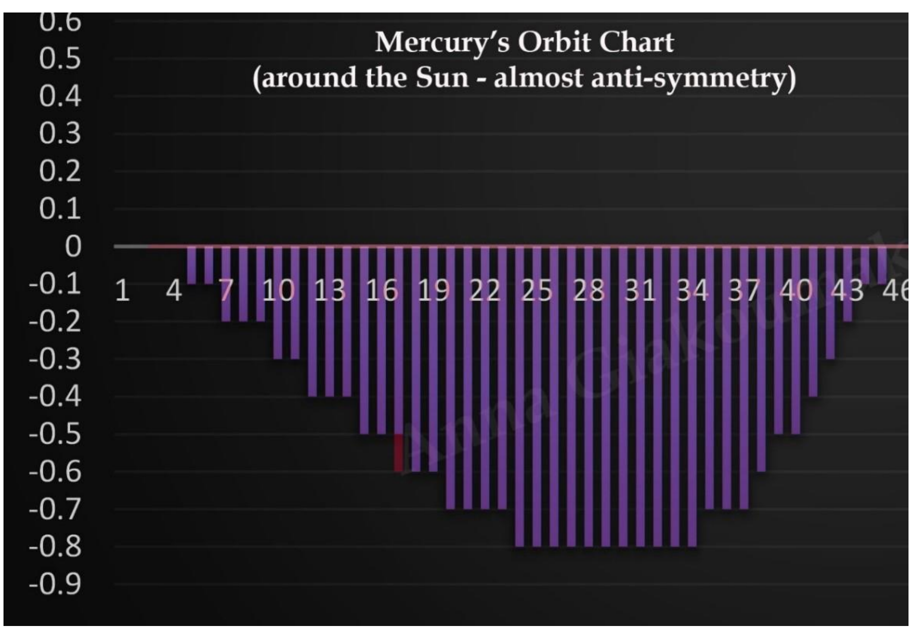
***1st quadrant:*** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, **-0.08 (max)**

***2nd quadrant:*** **-0.08 (max)**, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, **0.08 (max)**

***4th quadrant:*** **0.08 (max)**, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**

*And this is the chart with Mercury's (almost) anti-symmetry*




With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion" (the second half, flipped vertically and horizontally)

## *V) Mercury's "Aphelion" and "Perihelion" has not huge difference*

The Perihelion of Mercury is about 46 million km.

The Aphelion of Mercury is about 69.8 million km

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 1st quadrant and by this, we have to predict the Mercury's Full Orbit Pattern

***1st quadrant*:** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, **-0.08 (max)**

***Predicting its Orbit Pattern based on the quadrant we have:***

**0 (Aphe-LAEC), -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08 (max),** -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC), 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08 (max), 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC).

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Mercury's Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.08 & 0.08.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.08, we see the -0.07.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.08, we see the 0.07.

g) The two extrema are equal but opposite in sign.

- **Yes**, -0.08 & 0.08.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08 (max)

**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.08 (max), -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0

**4th quadrant:** 0.08 (max), 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0

## *VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit*

*"…If the natural satellite is at a smaller distance by this distance we found by the Rule of 3 (113.27 million km), then we must see a more circular orbit; as smaller the Peri-LAEC of the natural satellite than the distance we found by using the Rule of 3, such circular the Orbit around its "Sun"; as bigger, such elliptical its Orbit around its "Sun"…"*

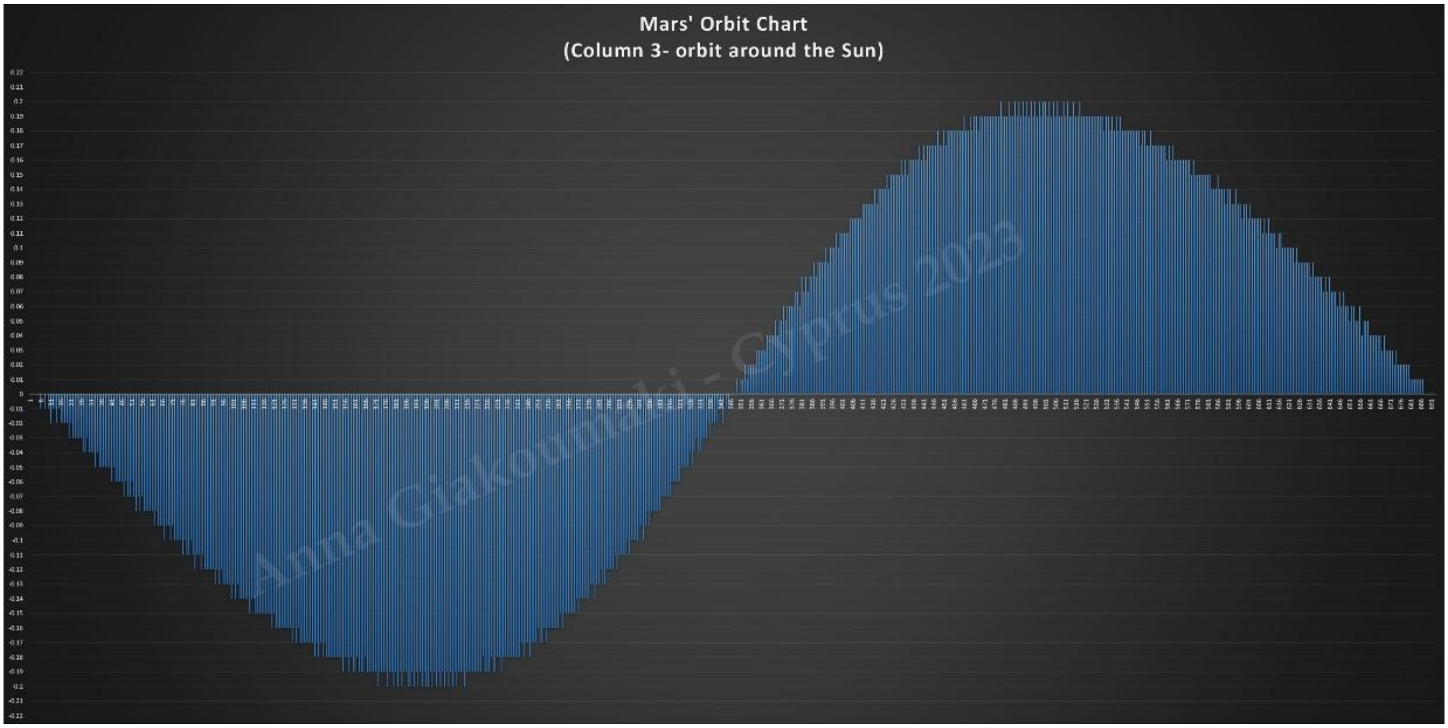
- The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: 1.349228352278%

Let's see what is the Mercury's percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

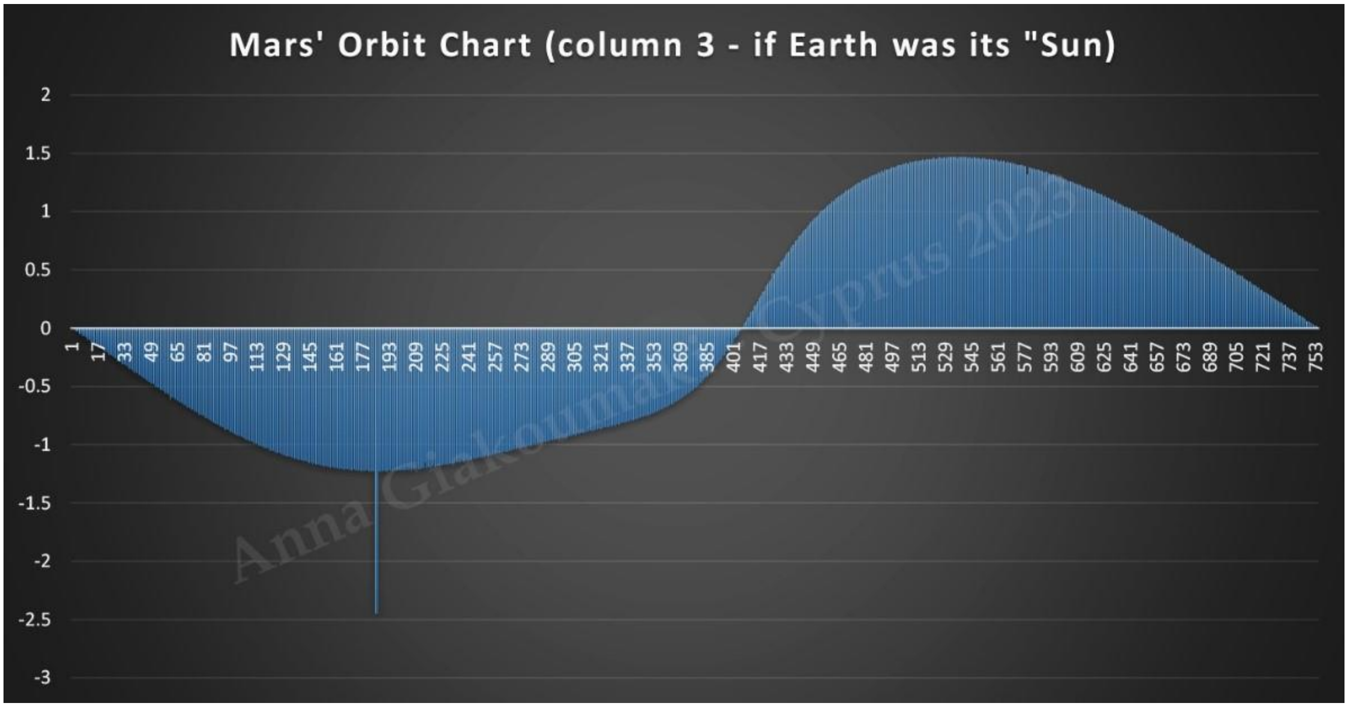
- The Perihelion of Mercury is about 46 million km and the Aphelion of Mercury is about 69.8 million km. Percentage difference: 41.105354058722%

# 4) MARS (*orbit around the Sun*)

## *I*) *Mars' Orbit Chart around the Sun*



## *II) Mars' Orbit Chart around Earth*




## *III) Mars' Orbit Pattern around the Sun*

**Pattern:** **0**, −0.01, −0.02, −0.03, −0.04, −0.05, −0.06, −0.07, −0.08, −0.09, −0.10, −0.11, −0.12, −0.13, −0.14, −0.15, −0.16, −0.17, −0.18, −0.19, **−0.20 (max)**, −0.19, −0.18, −0.17, −0.16, −0.15, −0.14, −0.13, −0.12, −0.11, −0.10, −0.09, −0.08, −0.07, −0.06, −0.05, −0.04, −0.03, −0.02, −0.01, **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, **0.20 (max)**, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**.

## IV) Mars' Four Quadrants on its Orbit around the Sun

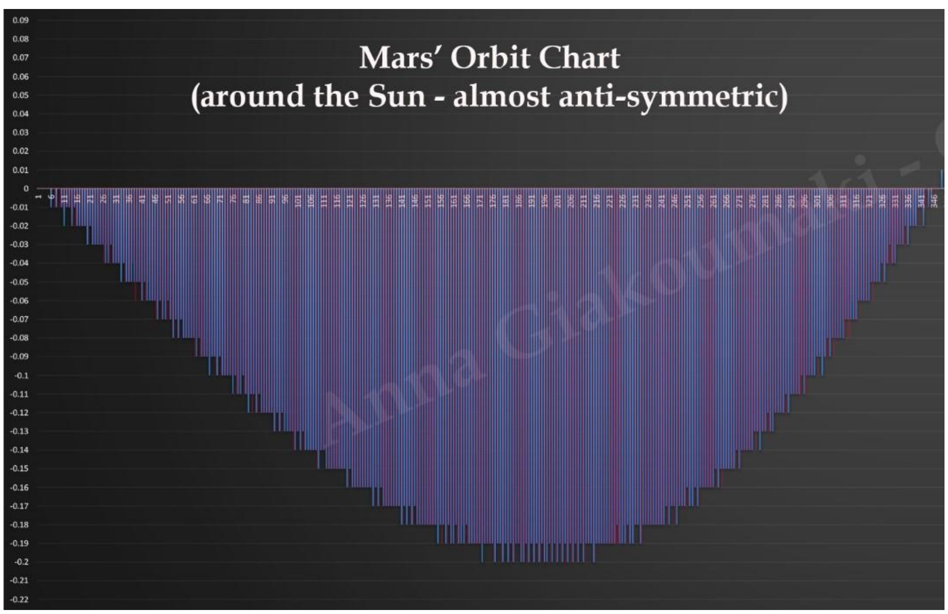
*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

***1st quadrant:*** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, **-0.20 (max)**

***2nd quadrant:*** **-0.20 (max)**, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**.

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, **0.20 (max)**

***4th quadrant:*** **0.20 (max)**, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**.




*And this is the chart with the Mars' (almost) anti-symmetry*

With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion"(the second half, flipped vertically and horizontally)

## V) Mars' "Aphelion" and "Perihelion" has not huge difference

The Perihelion of Mars is about 206.63 million km.

The Aphelion of Mars is about 249.24 million km.

You can check the remaining celestial objects by yourself, if they meet these five criteria. Below, I would like to show you the results from checking the four out of five criteria (I've excluded the criterion II, because of the long period of orbit), on the "New Planets" (the Planets, Ceres, AG, Crete, and Greece) and then, I will present the results from applying some of these criteria to objects that are not natural satellites of the "Sun" that we are observe.

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 4th quadrant and by this, we have to predict the Mars' Full Orbit Pattern

***4th quadrant:*** **0.20 (max)**, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**.

***Predicting its Orbit Pattern based on the quadrant we have:***

**0.20 (max), 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC),** -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20 (max), -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC), 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20 (max).

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Mars' Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.20 & 0.20.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.20, we see the -0.19.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.20, we see the 0.19.

g) The two extrema are equal but opposite in sign.

- **Yes**, -0.20 & 0.20.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20 (max)

**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.20 (max), -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0.

**4th quadrant:** 0.20 (max), 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0.

## *VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit*

*"...If the natural satellite is at a smaller distance by this distance we found by the Rule of 3 (113.27 million km), then we must see a more circular orbit; as smaller the Peri-LAEC of the natural satellite than the distance we found by using the Rule of 3, such circular the Orbit around its "Sun"; as bigger, such elliptical its Orbit around its "Sun"..."*

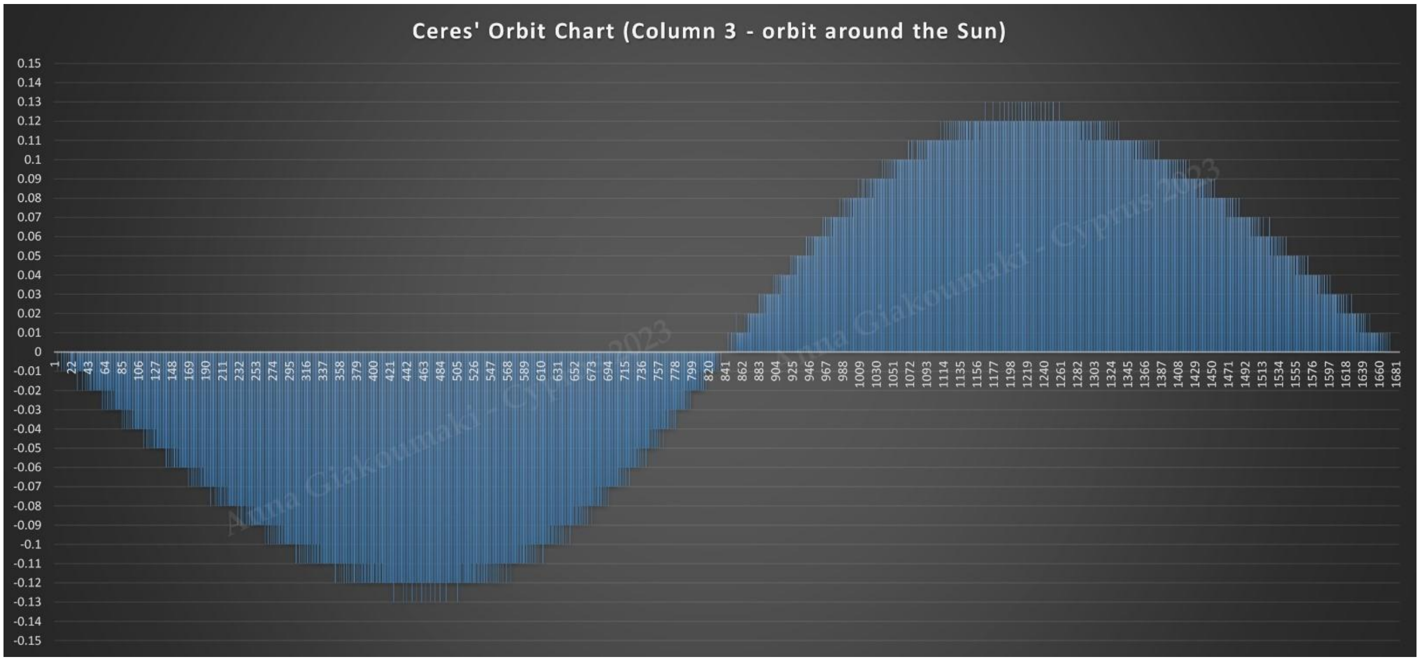
- The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: 1.349228352278%

Let's see what is the Mars' percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

- The Perihelion of Mars is about 206.63 million km and the Aphelion of Mars is about 249.24 million km. Percentage difference: 18.693925899928%

# 5) PLANET CERES (*orbit around the Sun*)

## *I*) *Ceres' Orbit Chart around the Sun*




## *II*) *Ceres' Orbit Chart around another "Sun" (excluded)*

## *III*) *Ceres' Orbit Pattern around the Sun*

**Pattern:** **0**, −0.01, −0.02, −0.03, −0.04, −0.05, −0.06, −0.07, −0.08, −0.09, −0.10, −0.11, −0.12, **−0.13 (max)**, −0.12, −0.11, −0.10, −0.09, −0.08, −0.07, −0.06, −0.05, −0.04, −0.03, −0.02, −0.01, **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, **0.13 (max)**, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**.

## *IV) Ceres' Four Quadrants on its Orbit around the Sun*

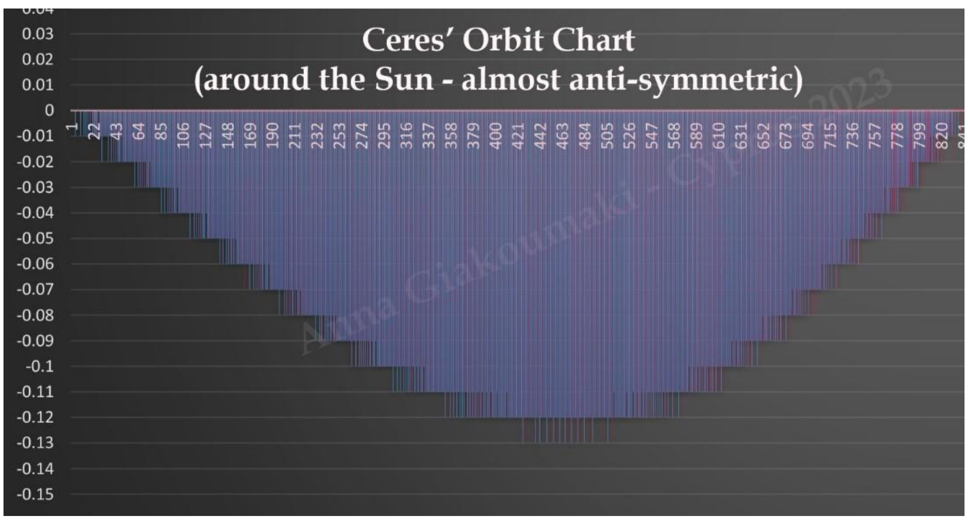
*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

***1st quadrant:*** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, **-0.13 (max)**

***2nd quadrant:*** **-0.13 (max)**, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, **0.13 (max)**

***4th quadrant:*** **0.13 (max)**, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**




*And this is the chart with Ceres' (almost) anti-symmetry*

With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion"(the second half, flipped vertically and horizontally)

## *V) Ceres'"Aphelion" and "Perihelion" has not huge difference*

The Perihelion of Ceres is about 384 million km.

The Aphelion of Ceres is about 445 million km

# *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 2nd quadrant and by this, we have to predict the Ceres' Full Orbit Pattern

***2nd quadrant:*** **-0.13 (max)**, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**

***Predicting its Orbit Pattern based on the quadrant we have:***

**-0.13 (max), -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC),** 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13 (max), 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC), -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13 (max).

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Ceres' Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

   - **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.13 & 0.13.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.13, we see the -0.12.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.13, we see the 0.12.

g) The two extrema are equal but opposite in sign.

- **Yes**, -0.13 & 0.13.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13 (max)
**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.13 (max), -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0
**4th quadrant:** 0.13 (max), 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0.

## *VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit*

*"...If the natural satellite is at a smaller distance by this distance we found by the Rule of 3 (113.27 million km), then we must see a more circular orbit; as smaller the Peri-LAEC of the natural satellite than the distance we found by using the Rule of 3, such circular the Orbit around its "Sun"; as bigger, such elliptical its Orbit around its "Sun"..."*

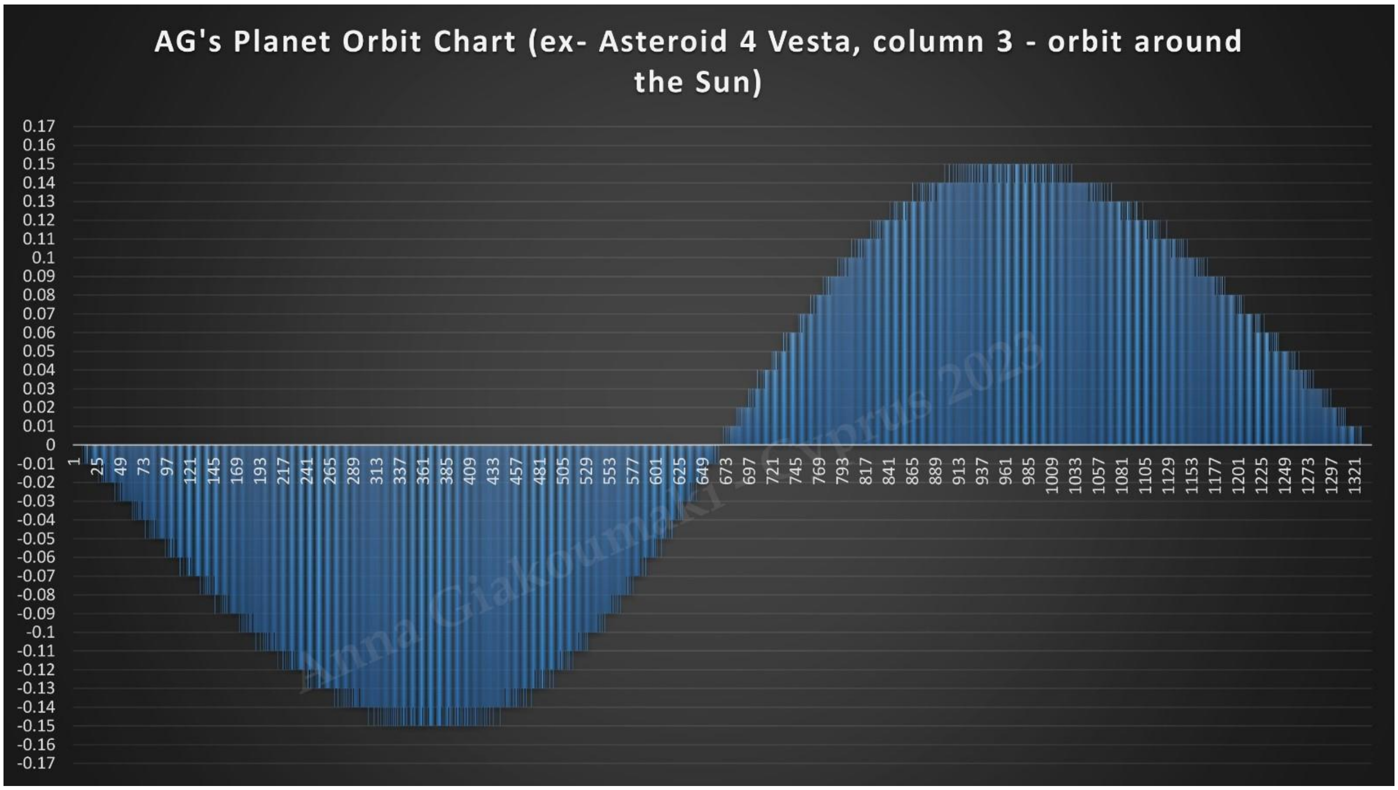
- The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: 1.349228352278%

Let's see what is the Ceres' percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

- The Perihelion of Ceres is about 384 million km and the Aphelion of Ceres is about 445 million km. Percentage difference: 14.716525934861%

# 6) AG PLANET (*ex – Asteroid 4 Vesta – orbit around the Sun*)

## *I) AG's Orbit Chart around the Sun*




## *II) AG's Orbit Chart around another "Sun" (excluded)*

## *III) AG's Orbit Pattern around the Sun*

**Pattern:** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, **-0.15 (max)**, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, **0.15 (max)**, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**.

## *IV) AG's Four Quadrants on its Orbit around the Sun*

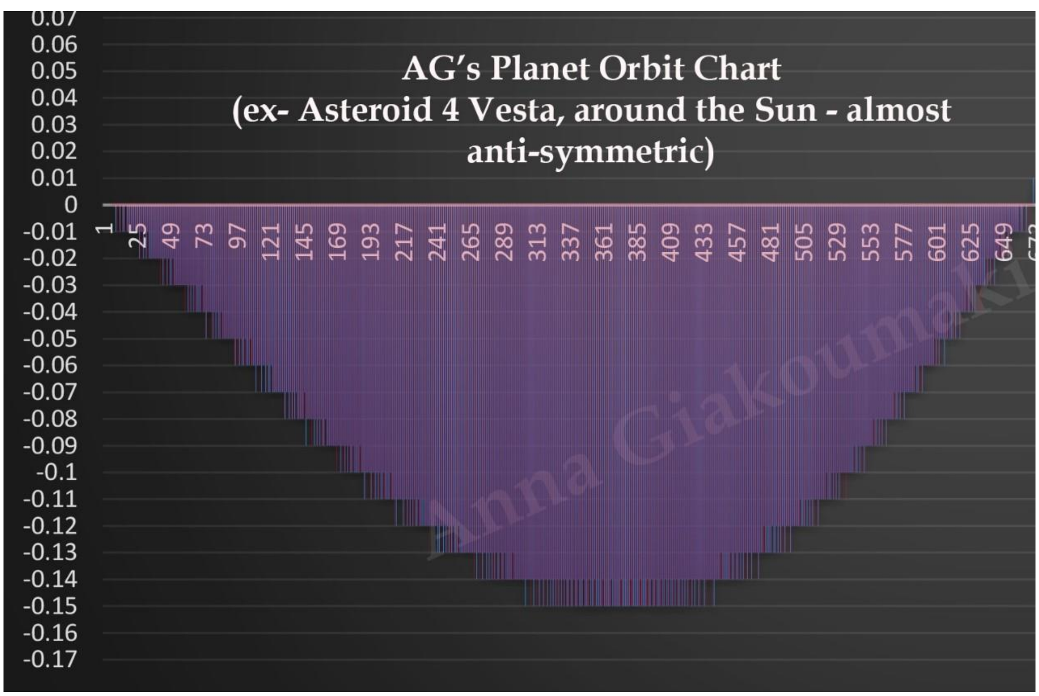
*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

***1st quadrant:*** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, **-0.15 (max)**

***2nd quadrant:*** **-0.15 (max)**, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, **0.15 (max)**

***4th quadrant:*** **0.15 (max)**, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**




*And this is the chart with the AG's (almost) anti-symmetry*

With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion"(the second half, flipped vertically and horizontally)

## *V) AG's "Aphelion" and "Perihelion" has not huge difference*

The Perihelion of AG is about 321 million km.

The Aphelion of AG is about 385 million km

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 3rd quadrant and by this, we have to predict the AG's Full Orbit Pattern

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, **0.15 (max)**

***Predicting its Orbit Pattern based on the quadrant we have:***

**0 (Peri-LAEC), 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15 (max),** 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC), -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15 (max), -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC)

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has AG's Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.15 & 0.15.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.15, we see the -0.14.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.15, we see the 0.14.

g) The two extrema are equal but opposite in sign.

- **Yes**, -0.15 & 0.15.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15 (max)

**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.15 (max), -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0
**4th quadrant:** 0.15 (max), 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0

## *VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit*

*"...If the natural satellite is at a smaller distance by this distance we found by the Rule of 3 (113.27 million km), then we must see a more circular orbit; as smaller the Peri-LAEC of the natural satellite than the distance we found by using the Rule of 3, such circular the Orbit around its "Sun"; as bigger, such elliptical its Orbit around its "Sun"..."*

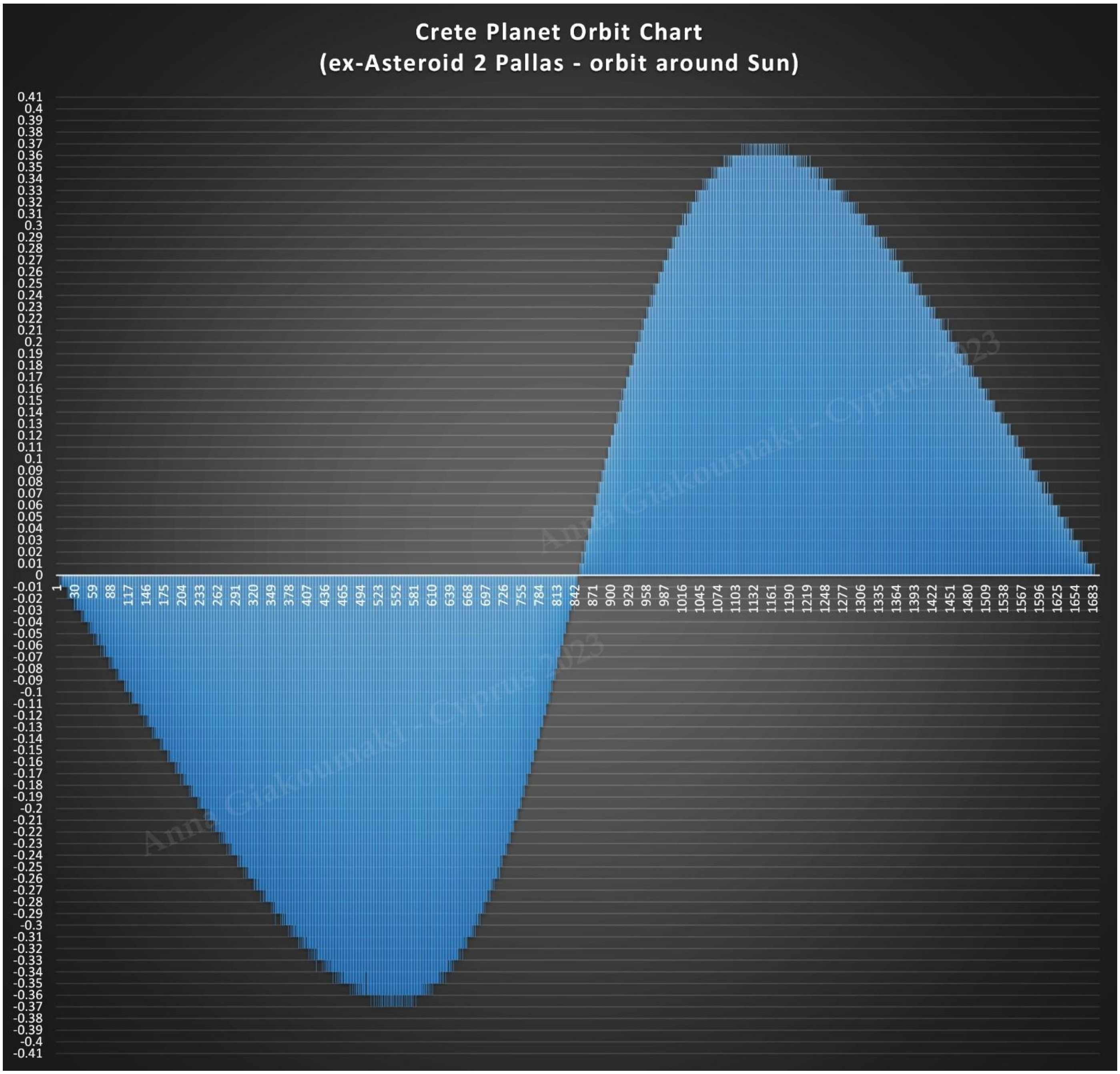
- The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: 1.349228352278%

Let's see what is the AG's percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

- The Perihelion of AG is about 321 million km and the Aphelion of AG is about 385 million km. Percentage difference: 18.130311614731%

# 7) CRETE PLANET (*ex − Asteroid 2 Pallas − orbit around the Sun*)

## *I) Crete's Orbit Chart around the Sun*



## *II) Crete's Orbit Chart around another "Sun" (excluded)*

## *III) Crete's Orbit Pattern around the Sun*

**Pattern: 0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, -0.23, -0.24, -0.25, -0.26, -0.27, -0.28, -0.29, -0.30, -0.31, -0.32, -0.33, -0.34, -0.35, -0.36, **-0.37 (max)**, -0.36, -0.35, -0.34, -0.33, -0.32, -0.31, -0.30, -0.29, -0.28, -0.27, -0.26, -0.25, -0.24, -0.23, -0.22, -0.21, -0.20, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, **0.37 (max)**, 0.36, 0.35, 0.34, 0.33, 0.32, 0.31, 0.30, 0.29, 0.28, 0.27, 0.26, 0.25, 0.24, 0.23, 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**

## *IV) Crete's Four Quadrants on its Orbit around the Sun*

*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

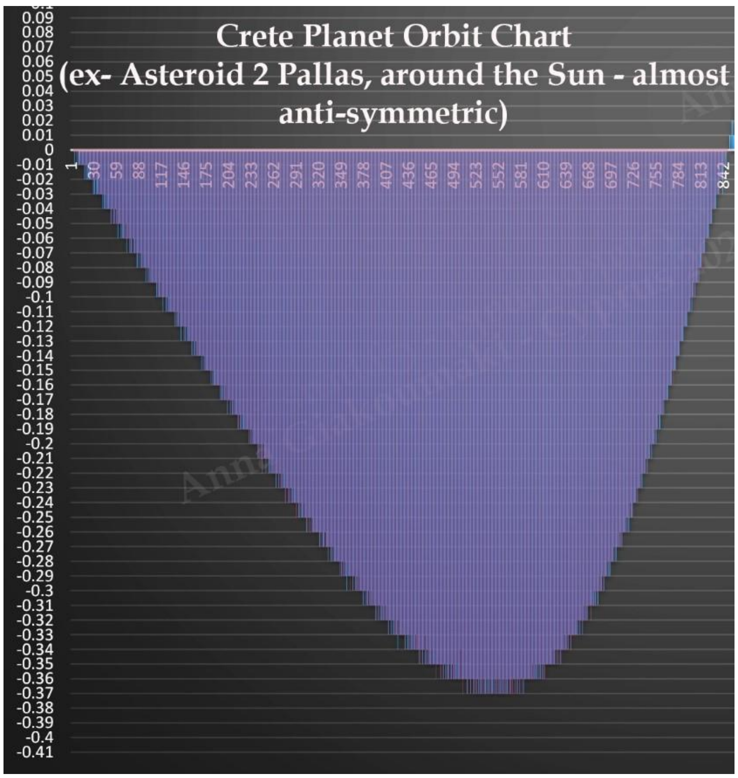
***1st quadrant*: 0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, -0.23, -0.24, -0.25, -0.26, -0.27, -0.28, -0.29, -0.30, -0.31, -0.32, -0.33, -0.34, -0.35, -0.36,**-0.37 (max)**

***2nd quadrant:* -0.37 (max)**, -0.36, -0.35, -0.34, -0.33, -0.32, -0.31, -0.30, -0.29, -0.28, -0.27, -0.26, -0.25, -0.24, -0.23, -0.22, -0.21, -0.20, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**

***3rd quadrant:* 0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, **0.37 (max)**

***4th quadrant:*** **0.37 (max)**, 0.36, 0.35, 0.34, 0.33, 0.32, 0.31, 0.30, 0.29, 0.28, 0.27, 0.26, 0.25, 0.24, 0.23, 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**

*And this is the chart with Crete's (almost) anti-symmetry*




With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion"(the second half, flipped vertically and horizontally)

## *V) Crete's "Aphelion" and "Perihelion" has not huge difference*

The Perihelion of Crete is about 319 million km.

The Aphelion of Crete is about 510 million km

# *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 1st quadrant and by this, we have to predict the Crete's Full Orbit Pattern

***1st quadrant*:** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, -0.23, -0.24, -0.25, -0.26, -0.27, -0.28, -0.29, -0.30, -0.31, -0.32, -0.33, -0.34, -0.35, -0.36,**-0.37 (max)**

***Predicting its Orbit Pattern based on the quadrant we have:***

**0 (Aphe-LAEC), -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, -0.23, -0.24, -0.25, -0.26, -0.27, -0.28, -0.29, -0.30, -0.31, -0.32, -0.33, -0.34, -0.35, -0.36,-0.37 (max),** -0.36, -0.35, -0.34, -0.33, -0.32, -0.31, -0.30, -0.29, -0.28, -0.27, -0.26, -0.25, -0.24, -0.23, -0.22, -0.21, -0.20, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC), 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37 (max), 0.36, 0.35, 0.34, 0.33, 0.32, 0.31, 0.30, 0.29, 0.28, 0.27, 0.26, 0.25, 0.24, 0.23, 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC).

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Crete's Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.37 & 0.37.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.37, we see the -0.36.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.37, we see the 0.36.

g) The two extrema are equal but opposite in sign.

- **Yes**, -0.37 & 0.37.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, -0.23, -0.24, -0.25, -0.26, -0.27, -0.28, -0.29, -0.30, -0.31, -0.32, -0.33, -0.34, -0.35, -0.36, -0.37 (max)
**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23, 0.24, 0.25, 0.26, 0.27, 0.28, 0.29, 0.30, 0.31, 0.32, 0.33, 0.34, 0.35, 0.36, 0.37 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.37 (max), -0.36, -0.35, -0.34, -0.33, -0.32, -0.31, -0.30, -0.29, -0.28, -0.27, -0.26, -0.25, -0.24, -0.23, -0.22, -0.21, -0.20, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0
**4th quadrant:** 0.37 (max), 0.36, 0.35, 0.34, 0.33, 0.32, 0.31, 0.30, 0.29, 0.28, 0.27, 0.26, 0.25, 0.24, 0.23, 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0

## *VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit*

*"...If the natural satellite is at a smaller distance by this distance we found by the Rule of 3 (113.27 million km), then we must see a more circular orbit; as smaller the Peri-LAEC of the natural satellite than the distance we found by using the Rule of 3, such circular the Orbit around its "Sun"; as bigger, such elliptical its Orbit around its "Sun"..."*

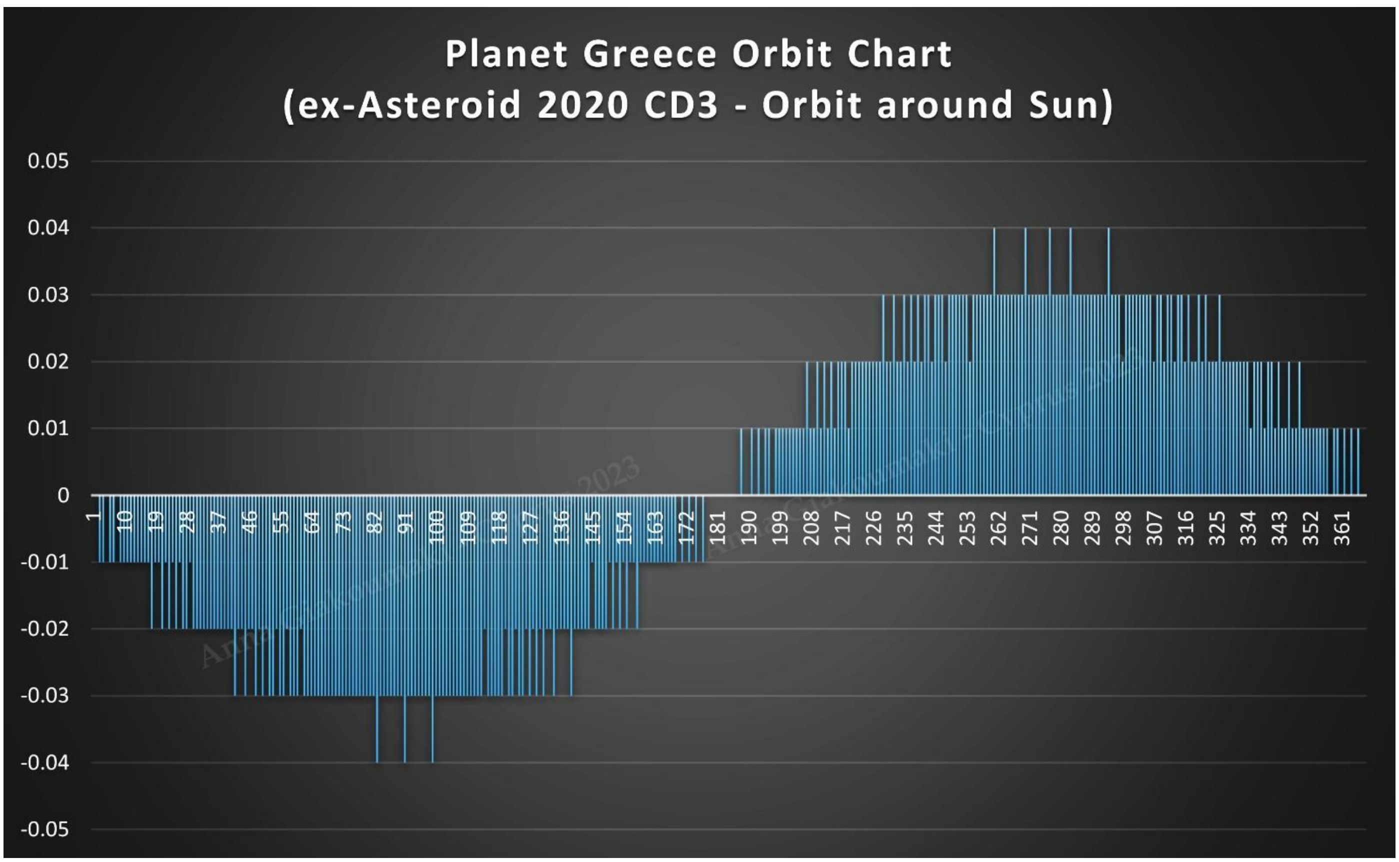
– The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: 1.349228352278%

Let's see what is the Crete's percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

– The Perihelion of Crete is about 319 million km and the Aphelion of Crete is about 510 million km. Percentage difference: 46.0796139927762%

## 8) PLANET GREECE (*ex – Asteroid 2020 CD3 – orbit around the Sun*)

### *I) Greece's Orbit Chart around the Sun*



## *II) Greece's Orbit Chart around another "Sun" (excluded)*

## *III) Greece's Orbit Pattern around the Sun*

**Pattern:** **0**, −0.01, −0.02, −0.03, **−0.04 (max)**, −0.03, −0.02, −0.01, **0**, 0.01, 0.02, 0.03, **0.04 (max)**, 0.03, 0.02, 0.01, **0**.

## *IV) Greece's Four Quadrants on its Orbit around the Sun*

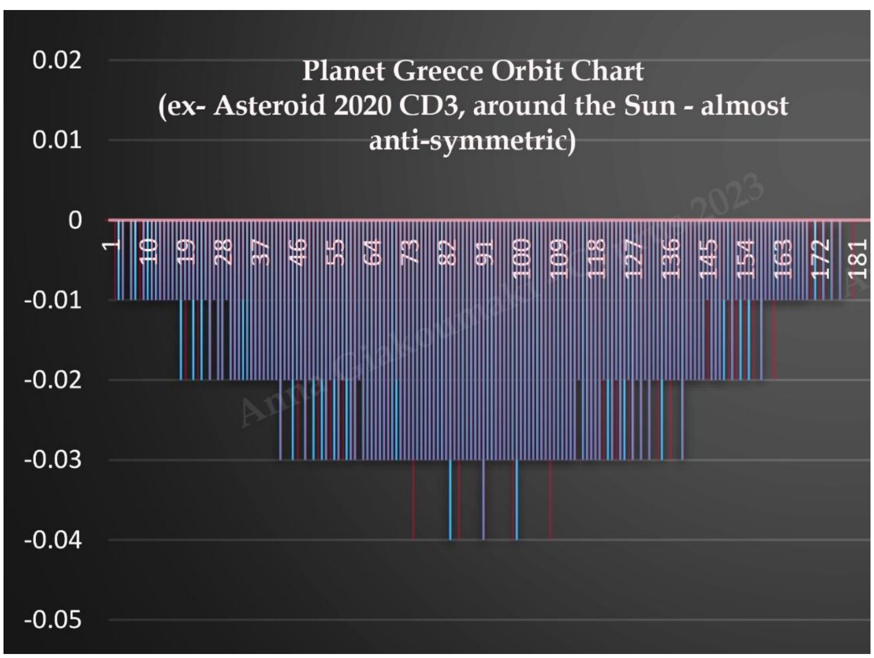
*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

***1st quadrant:*** **0**, -0.01, -0.02, -0.03, **-0.04 (max)**

***2nd quadrant:*** **-0.04 (max)**, -0.03, -0.02, -0.01, **0**

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, **0.04 (max)**

***4th quadrant:*** **0.04 (max)**, 0.03, 0.02, 0.01, **0**




*And this is the chart with Greece's (almost) anti-symmetry*

With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion"(the second half, flipped vertically and horizontally)

## *V) Greece's "Aphelion" and "Perihelion" has not huge difference*

The Perihelion of Greece is about 152.02 million km.

The Aphelion of Greece is about 155.85 million km

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 4th quadrant and by this, we have to predict the Greece's Full Orbit Pattern

***4th quadrant:*** **0.04 (max)**, 0.03, 0.02, 0.01, **0**

### *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Greece's Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.04 & 0.04.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.04, we see the -0.03.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.04, we see the 0.03.

g) The two extrema are equal but opposite in sign.

- **Yes**, -0.04 & 0.04.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04 (max)
**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.04 (max), -0.03, -0.02, -0.01, 0
**4th quadrant:** 0.04 (max), 0.03, 0.02, 0.01, 0

## *VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit*

*"...If the natural satellite is at a smaller distance by this distance we found by the Rule of 3 (113.27 million km), then we must see a more circular orbit; as smaller the Peri-LAEC of the natural satellite than the distance we found by using the Rule of 3, such circular the Orbit around its "Sun"; as bigger, such elliptical its Orbit around its "Sun"..."*

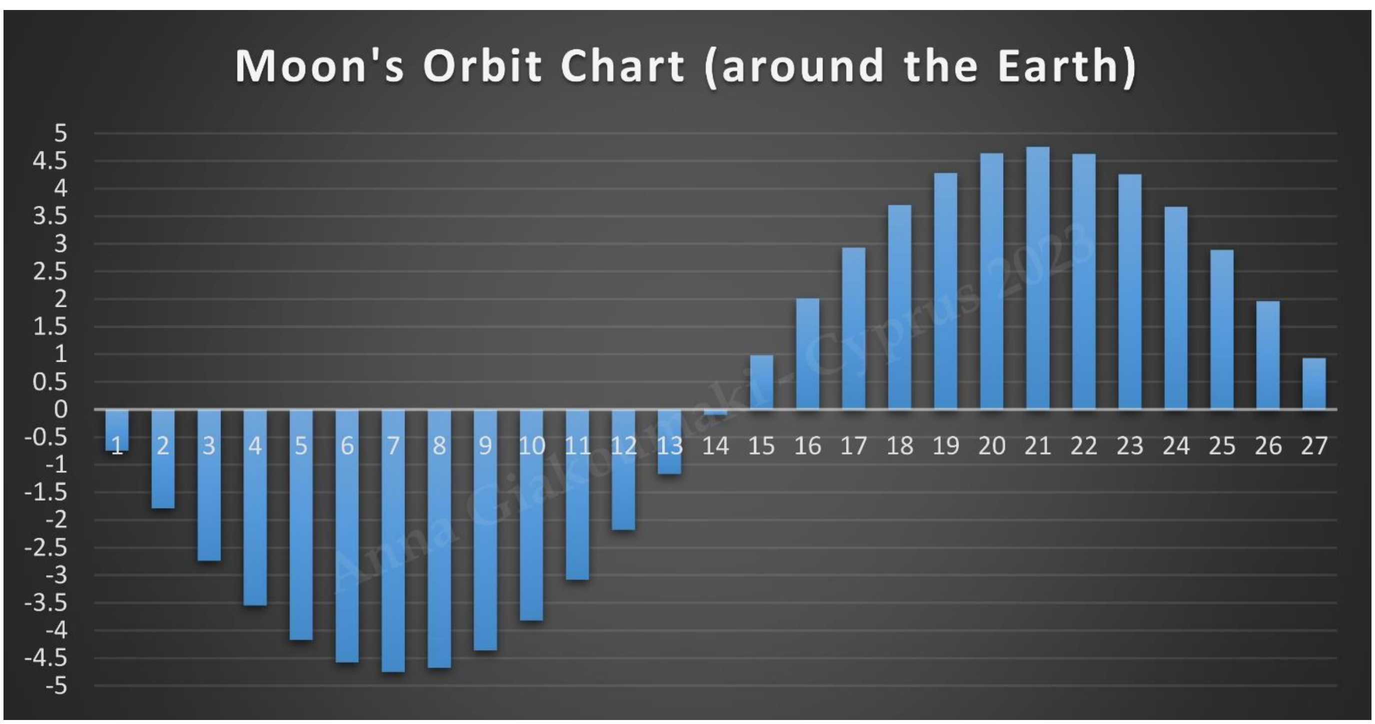
- The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: 1.349228352278%

Let's see what is the Greece's percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

- The Perihelion of Greece is about 152.02 million km and the Aphelion of Greece is about 155.85 million km. Percentage difference: 2.4880631435346%

## 9) EARTH'S MOON (*orbit around the Earth*)

### *I) Earth's Moon Orbit Chart around the Earth*



## *II) Earth's Moon Orbit Chart around another Sun (excluded)*

## *III) The Earth's Moon Orbit Pattern around the Earth*

**Pattern:** **0**, -0.01, -0.02, -0.03, -0.04, **-0.05 (max)**, -0.04, -0.03, -0.02, -0.01, **0**, 0.01, 0.02, 0.03, 0.04, **0.05 (max)**, 0.04, 0.03, 0.02, 0.01, **0**.

## *IV) The Earth's Moon Four Quadrants on its Orbit around the Earth*

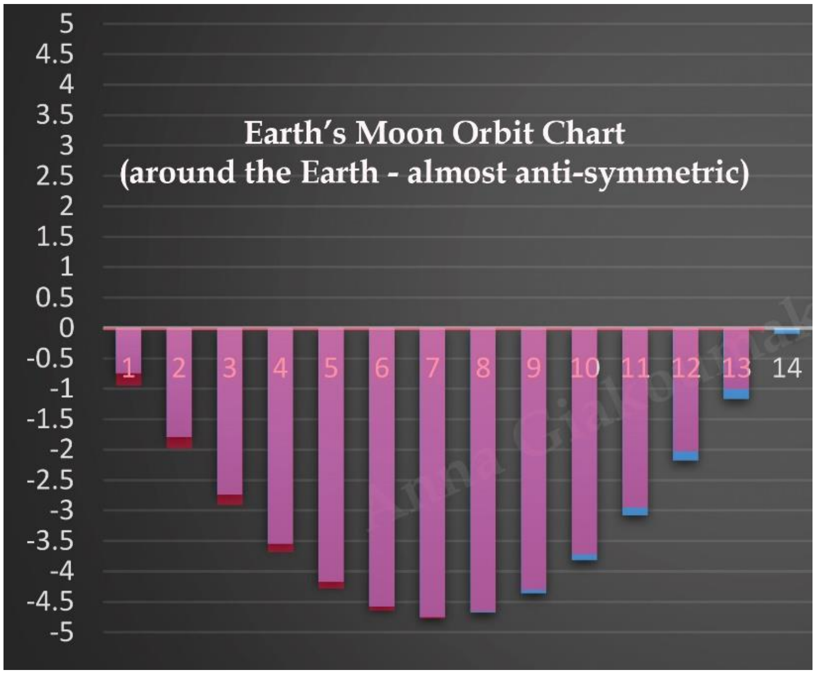
> *"…The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line…"*

***1st quadrant:*** **0**, -0.01, -0.02, -0.03, -0.04, **-0.05 (max)**

***2nd quadrant:*** **-0.05 (max)**, -0.04, -0.03, -0.02, -0.01, **0**

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, **0.05 (max)**

***4th quadrant:*** **0.05 (max)**, 0.04, 0.03, 0.02, 0.01, **0**




*And this is the chart with the Earth's Moon (almost) anti-symmetry*

With blue, the period from "Apogee" to "Perigee" and with red the period from "Perigee" to "Apogee"(the second half, flipped vertically and horizontally)

## *V) The Earth's Moon "Apogee" and "Perigee" has not huge difference*

The Perigee of Earth's Moon is about 0.36332359 million km.

The Apogee of Earth's Moon is about 0.40549247 million km

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 2nd quadrant and by this, we have to predict the Earth's Moon Full Orbit Pattern

***2nd quadrant:*** **-0.05 (max)**, -0.04, -0.03, -0.02, -0.01, **0**

***Predicting its Orbit Pattern based on the quadrant we have:***

-0.05 (max), -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC), 0.01, 0.02, 0.03, 0.04, 0.05 (max), 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC), 0, -0.01, -0.02, -0.03, -0.04, -0.05 (max).

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## ***VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Earth's Moon Pattern of Orbit these characteristics?***

j) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **Yes**. Are 0 both.

k) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.05 & 0.05.

l) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

m) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.05, we see the -0.04.

n) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

o) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.05, we see the 0.04.

p) The two extrema are equal but opposite in sign.

- **Yes**, -0.05 & 0.05.

q) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05 (max)
**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05 (max)

r) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.05 (max), -0.04, -0.03, -0.02, -0.01, 0
**4th quadrant:** 0.05 (max), 0.04, 0.03, 0.02, 0.01, 0

## *VIII. Checking by using the rule of 3 – comparison with Venus almost circular Orbit*

*"...If the natural satellite is at a smaller distance by this distance we found by the Rule of 3 (113.27 million km), then we must see a more circular orbit; as smaller the Peri-LAEC of the natural satellite than the distance we found by using the Rule of 3, such circular the Orbit around its "Sun"; as bigger, such elliptical its Orbit around its "Sun"..."*

- The Perihelion of Venus is about 108.94 million km and the Aphelion is about 107.48 million km. Percentage difference: 1.349228352278%

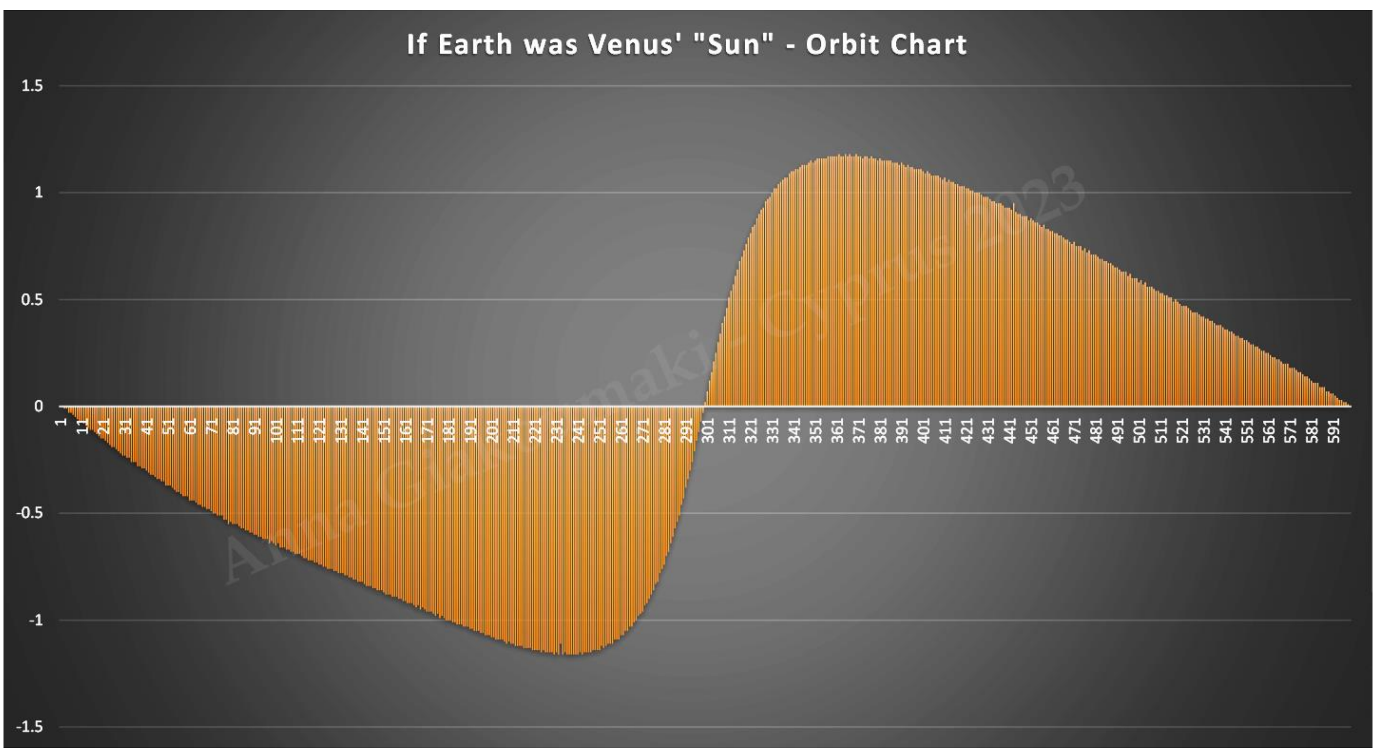
Let's see what is the Earth's Moon percentage difference between its Aphelion and its Perihelion – we must see bigger than 1.349228352278%, a more Elliptical Orbit.

- The Perihelion of Earth's Moon is about 0.36332359 million km and the Aphelion of Earth's Moon is about 0.40549247 million km. Percentage difference: 10.969822872847%

### *Additional criteria – Examples with objects that are NOT LAECsps (they are NOT natural Satellites in orbit around the* SUN*thatwe are observing)*

## 1) VENUS (*orbit around the Earth*)

## *I*) *The Venus Orbit Chart around the Earth*



## *II) Excluded because we check the Orbit around another object anyway – another "fake Sun"*

## *III) Venus' Orbit Pattern around the Earth*

**Pattern:** **0 (Aphe-LAEC – "Apogee")**, -0.01, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.1, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.2, -0.21, -0.22, -0.23, -0.24, -0.26, -0.28, -0.29, -0.3, -0.31, -0.32, -0.33, -0.34, -0.35, -0.37, -0.38, -0.39, -0.4, -0.4, -0.41, -0.42, -0.44, -0.45, -0.46, -0.47, -0.48, -0.49, -0.5, -0.51, -0.53, -0.55, -0.54, -0.55, -0.56, -0.57, -0.58, -0.59, -0.6, -0.61, -0.62, -0.64, -0.63, -0.64, -0.65, -0.64, -0.66, -0.67, -0.68, -0.69, -0.7, -0.71, -0.72, -0.73, -0.75, -0.76, -0.76, -0.77, -0.78, -0.79, -0.8, -0.81, -0.82, -0.83, -0.84, -0.85, -0.86, -0.87, -0.88, -0.89, -0.9, -0.91, -0.92, -0.93, -0.94, -0.93, -0.95, -0.94, -0.95, -0.96, -0.97, -0.98, -0.97, -0.99, -0.98, -0.99, -1, -1.01, -1.02, -1.03, -1.04, -1.05, -1.06, -1.07, -1.08, -1.09, -1.1, -1.11,-1.1, -1.11, -1.12, -1.13, -1.14, -1.15, -1.14, -1.15, -1.16, -1.15, -1.16, -1.11, -1.16, -1.15, -1.16, -1.15, **-1.16 (max)**, -1.15, -1.14, -1.12, -1.13, -1.12, -1.11, -1.09, -1.07, -1.05, -1.03, -1.01, -1, -0.98, -0.97, -0.96, -0.93, -0.92, -0.9, -0.88, -0.86, -0.83, -0.82, -0.78, -0.76, -0.74, -0.7, -0.68, -0.64, -0.61, -0.57, -0.54, -0.51, -0.46, -0.43, -0.38, -0.34, -0.3, -0.26, -0.21, -0.16, -0.12, -0.07, **-0.03 (Here is the Peri-LAEC –"Perigee"- on June 3, 2020 at 43.17 million km and it's NOT 0 –zero-)**, 0.02, 0.07, 0.12, 0.16, 0.21, 0.25, 0.3, 0.34, 0.39, ... (there is no sense to continue after so many anomalies on the pattern, such as difference bigger than 0.01 countless times on the sequences, at Peri-LAEC -"Perigee"- different number than 0 –zero-, non-symmetric the first 2 quadrants, etc.)

**Below is a direct comparison with the Venus' Orbit Pattern as it Orbits the Sun (its "real Sun").**

**Pattern:** **0 (Aphe-LAEC – "Aphelion")**, -0.01, -0.02, **-0.03 (max)**, -0.02, -0.01, **0** (Peri-LAEC), 0.01, 0.02, **0.03 (max)**, 0.02, 0.01, **0** (Aphe-LAEC).

# *IV) Venus' Four Quadrants on its Orbit around the Earth*

*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

***1st quadrant*:** **0 (Aphe-LAEC – "Apogee"),** -0.01, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.1, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.2, -0.21, -0.22, -0.23, -0.24, -0.26, -0.28, -0.29, -0.3, -0.31, -0.32, -0.33, -0.34, -0.35, -0.37, -0.38, -0.39, -0.4, -0.4, -0.41, -0.42, -0.44, -0.45, -0.46, -0.47, -0.48, -0.49, -0.5, -0.51, -0.53, -0.55, -0.54, -0.55, -0.56, -0.57, -0.58, -0.59, -0.6, -0.61, -0.62, -0.64, -0.63, -0.64, -0.65, -0.64, -0.66, -0.67, -0.68, -0.69, -0.7, -0.71, -0.72, -0.73, -0.75, -0.76, -0.76, -0.77, -0.78, -0.79, -0.8, -0.81, -0.82, -0.83, -0.84, -0.85, -0.86, -0.87, -0.88, -0.89, -0.9, -0.91, -0.92, -0.93, -0.94, -0.93, -0.95, -0.94, -0.95, -0.96, -0.97, -0.98, -0.97, -0.99, -0.98, -0.99, -1, -1.01, -1.02, -1.03, -1.04, -1.05, -1.06, -1.07, -1.08, -1.09, -1.1, -1.11,-1.1, -1.11, -1.12, -1.13, -1.14, -1.15, -1.14, -1.15, -1.16, -1.15, -1.16, -1.11, -1.16, -1.15, -1.16, -1.15, **-1.16 (max)**

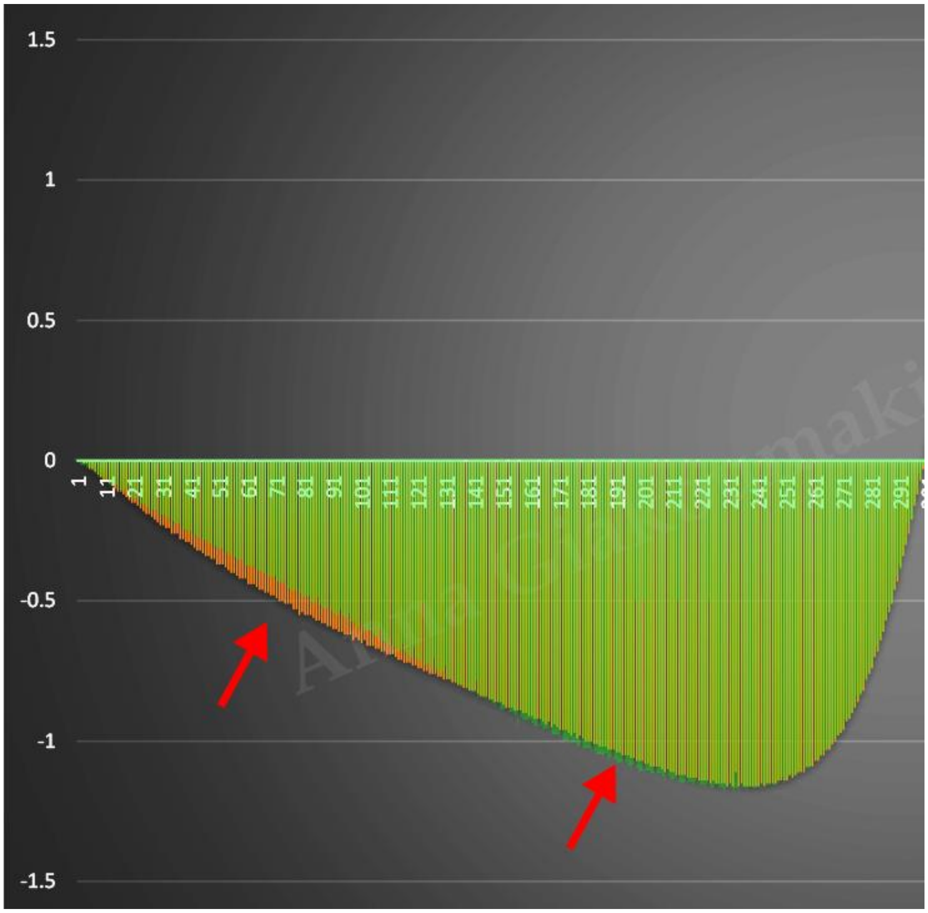
***2nd quadrant:*** **-1.16 (max),** -1.15, -1.14, -1.12, -1.13, -1.12, -1.11, -1.09, -1.07, -1.05, -1.03, -1.01, -1, -0.98, -0.97, -0.96, -0.93, -0.92, -0.9, -0.88, -0.86, -0.83, -0.82, -0.78, -0.76, -0.74, -0.7, -0.68, -0.64, -0.61, -0.57, -0.54, -0.51, -0.46, -0.43, -0.38, -0.34, -0.3, -0.26, -0.21, -0.16, -0.12, -0.07, **-0.03 (Here is the Peri-LAEC –"Perigee")**

**Below is a direct comparison with Venus' 2 first quadrants as it Orbits the Sun (its "real Sun").**

***1st quadrant*:** **0**, -0.01, -0.02, **-0.03 (max)**

***2nd quadrant:*** **-0.03 (max)**, -0.02, -0.01, **0**

*We don't see symmetry on Venus' 1st and 2nd quadrant (if the Earth was its "Sun", as we see on Venus' 1st and 2nd quadrant as it Orbits the Sun – its "natural Sun". Of course, we don't expect to see an (almost) anti-symmetry on Venus' Orbit Chart as it Orbits the Earth. See,*




## *V) Venus' "Apogee" and "Perigee" has not huge difference*

The Perihelion of Venus is about **257.92** million km.

The Aphelion of Venus is about **39.84** million km

It **has** huge difference.

**Below is a direct comparison with Venus' Aphe-LAEC and Peri-LAEC ("Aphelion" and "Perihelion") as it Orbits the Sun (its "real Sun").**

**With green colour the Aphe-LAEC and with pink the Peri-LAEC (all in million km)*

| | | | |
|---|---|---|---|
| 13 May 2014 | 108.94 | 1 Sept. 2014 | 107.48 |
| 23 Dec. 2014 | 108.94 | 13 Apr. 2015 | 107.48 |
| 04 Aug. 2015 | 108.94 | 24 Nov. 2015 | 107.48 |
| 17 Mar. 2016 | 108.94 | 6 Jul. 2016 | 107.48 |

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 2nd quadrant and by this, we have to predict the Venus' Full Orbit Pattern around the Earth (if the Earth was its "natural Sun").

***2nd quadrant:*** **-1.16 (max),** -1.15, -1.14, -1.12, -1.13, -1.12, -1.11, -1.09, -1.07, -1.05, -1.03, -1.01, -1, -0.98, -0.97, -0.96, -0.93, -0.92, -0.9, -0.88, -0.86, -0.83, -0.82, -0.78, -0.76, -0.74, -0.7, -0.68, -0.64, -0.61, -0.57, -0.54, -0.51, -0.46, -0.43, -0.38, -0.34, -0.3, -0.26, -0.21, -0.16, -0.12, -0.07, **-0.03 (Here is the Peri-LAEC –"Perigee")**

***Predicting its Orbit Pattern based on the quadrant we have:***

**-1.16 (max), -1.15, -1.14, -1.12, -1.13, -1.12, -1.11, -1.09, -1.07, -1.05, -1.03, -1.01, -1, -0.98, -0.97, -0.96, -0.93, -0.92, -0.9, -0.88, -0.86, -0.83, -0.82, -0.78, -0.76, -0.74, -0.7, -0.68, -0.64, -0.61, -0.57, -0.54, -0.51, -0.46, -0.43, -0.38, -0.34, -0.3, -0.26, -0.21, -0.16, -0.12, -0.07, -0.03 (Here is the Peri-LAEC –"Perigee"),** 0.07, 0.12, 0.16, 0.21, 0.26, 0.30, 0.34, 0.38, 0.43, 0.46, 0.51, 0.54, 0.57, 0.61, 0.64, 0.68, 0.70, 0.74, 0.76, 0.78, 0.82, 0.83, 0.86, 0.88, 0.90, 0.92, 0.93, 0.96, 0.97, 0.98, 1, 1.01, 1.03, 1.05, 1.07, 1.09, 1.11, 1.12, 1.13, 1.12, 1.14, 1.15, 1.16 (max), 1.15, 1.14, 1.12, 1.13, 1.12, 1.11, 1.09, 1.07, 1.05, 1.03, 1.01, 1, 0.98, 0.97, 0.96, 0.93, 0.92, 0.90, 0.88, 0.86, 0.83, 0.82, 0.78, 0.76, 0.74, 0.70, 0.68, 0.64, 0.61, 0.57, 0.54, 0.51, 0.46, 0.43, 0.38, 0.34, 0.30, 0.26, 0.21, 0.16, 0.12, 0.07, 0.03 (Aphe-LAEC – "Apogee"- and here starts the 1st quadrant), -0.07, -0.12, -0.16, -0.21, -0.26, -0.30, -0.34, -0.38, -0.43, -0.46, -0.51, -0.54, -0.57, -0.61, -0.64, -0.68, -0.70, -0.74, -0.76, -0.78, -0.82, -0.83, -0.86, -0.88, -0.90, -0.92, -0.93, -0.96, -0.97, -0.98, -1, -1.01, -1.03, -1.05, -1.07, -1.09, -1.11, -1.12, -1.13, -1.12, -1.14, -1.15, **-1.16 (max)**

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **No**; the prediction fails see the two 1st quadrants side by side;

***1<sup>st</sup> quadrant's prediction*:** **0.03 (Aphe-LAEC – "Apogee")**, -0.07, -0.12, -0.16, -0.21, -0.26, -0.30, -0.34, -0.38, -0.43, -0.46, -0.51, -0.54, -0.57, -0.61, -0.64, -0.68, -0.70, -0.74, -0.76, -0.78, -0.82, -0.83, -0.86, -0.88, -0.90, -0.92, -0.93, -0.96, -0.97, -0.98, -1, -1.01, -1.03, -1.05, -1.07, -1.09, -1.11, -1.12, -1.13, -1.12, -1.14, -1.15, **-1.16 (max)**

***1st quadrant in reality*:** **0 (Aphe-LAEC – "Apogee"),** -0.01, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.1, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.2, -0.21, -0.22, -0.23, -0.24, -0.26, -0.28, -0.29, -0.3, -0.31, -0.32, -0.33, -0.34, -0.35, -0.37, -0.38, -0.39, -0.4, -0.4, -0.41, -0.42, -0.44, -0.45, -0.46, -0.47, -0.48, -0.49, -0.5, -0.51, -0.53, -0.55, -0.54, -0.55, -0.56, -0.57, -0.58, -0.59, -0.6, -0.61, -0.62, -0.64, -0.63, -0.64, -0.65, -0.64, -0.66, -0.67, -0.68, -0.69, -0.7, -0.71, -0.72, -0.73, -0.75, -0.76, -0.76, -0.77, -0.78, -0.79, -0.8, -0.81, -0.82, -0.83, -0.84, -0.85, -0.86, -0.87, -0.88, -0.89, -0.9, -0.91, -0.92, -0.93, -0.94, -0.93, -0.95, -0.94, -0.95, -0.96, -0.97, -0.98, -0.97, -0.99, -0.98, -0.99, -1, -1.01, -1.02, -1.03, -1.04, -1.05, -1.06, -1.07, -1.08, -1.09, -1.1, -1.11,-1.1, -1.11, -1.12, -1.13, -1.14, -1.15, -1.14, -1.15, -1.16, -1.15, -1.16, -1.11, -1.16, -1.15, -1.16, -1.15, **-1.16 (max)**

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has Venus' Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **No**.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **No.**

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, …, max)

- **No**. Starts with -0.01 but the increment is not gradual. We see many "gaps" up to the max, e.g. -0.01 to -0.03 and it has and decrease on some points, such as this point "-0.62, -0.64, -0.63, -0.64, -0.65, -0.64, -0.66,…"

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -1.16, we see the -1.15.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, …, max)

- **No**. First of all, we don't have 0 on the Peri-LAEC but, -0.03. As for the increment is 0.05 (from -0.03 jumps to 0.02).

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **No sense to search for it as it has too many anomalies on the first 2 quadrants. It will fail 100% when you check.**

And I stop here because Venus is obvious that is not a natural satellite of the Earth, as it does not meet the most criteria.

You can check by yourself the rest celestial objects to see that they don't meet also the most of these criteria when they are not natural satellites of the "Sun" that you are observing.

# *PART VI*

## *My method to find fast and easy the 10 important Points*

Many times, when I needed to check an object with a large period of orbit, such as a 5-year period or more, I spent a lot of time entering thousands of data into a table (for example, five+ years roughly equates to a table with 2000 rows, as one row corresponds to one day each time). Also, since there was no automated system that could provide me with a ready-made list of data on the object's distance from the "Sun" on specific dates, whether by day, month, or even hour, I had to enter all these data one by one, which was time-consuming and tedious. Therefore, the need for a quick analysis of the data and reduction of time and effort led me to develop a method for quickly and easily finding the 10 significant points, which I will present to you step by step so that you can easily and quickly find the 10 points (if it is a natural satellite this celestial object of the "Sun" that you are observing).

### *Step* 1

Access the website "https://theskylive.com/planetarium"

### *Step* 2

Input the name of the celestial object you're interested in.

### *Step* 3

Click on the "clock" icon to open the window for selecting dates.

### *Step* 4

Input the date January 1, 2013 and time 00:00.

## Step 5

Start searching for the year of the object by year (e.g. 2013, 2014, 2015, etc.). If you suspect it's a sun's natural satellite, watch the "Sun distance". If you suspect it's an Earth's natural satellite, watch the "Earth distance". The first thing to find is the aphelion/apogee (Aphe-LAEC), which is indicated by an increase in distance. When you see the first decrease in distance, go back to the previous year with the maximum increase. The goal is to find the maximum distance of the object from its "Sun".

## Step 6

In this step, search by month (e.g. January 2023, February 2023, etc.). Observe an increase in distance. If you don't see an increase, search backward (e.g. January 2022, December 2021, November 2021, etc.) until you see the first decrease, where you'll stop and go back to the previous month with the maximum increase.

## Step 7

In this step, repeat the previous step, but this time search by day (1, 2, 3, 4, etc. or backwards, 1, 31, 30, 29, etc.). Observe an increase in distance. Stop at the first decrease, go back one day, and you'll have the aphelion/apogee (Aphe-LAEC) distance.

## Step 8

Once you have the Aphe-LAEC, create a table in Excel with three columns.

In the first column, insert the date of the Aphe-LAEC and fill the rows below with dates separated by a one-month interval (e.g. if your Aphe-LAEC was on April 17, 2022, insert dates such as May 17, 2022, June 17, 2022, July 17, 2022, etc.).

In the second column, insert the distance of the object from its "Sun" on that date.

In the third column, use the auto-sum function to automatically calculate the difference between the current and previous distances.

# *Step* 9

Start searching by month, beginning with the Aphe-LAEC's date, and insert the distances.

You will observe the following patterns in the third column:

**i) After the Aphe-LAEC**, there will be a negative sign pattern (e.g. -0.01 or -0.1, etc.) following the "Characteristics of a Natural Satellite's Orbit", increasing gradually until the maximum value (which can be very large, e.g. -5.3, etc.; *the -0.01 or -0.1 increment we will find it when we will search later day by day for Points No10, No1 and No2, on Step 11*)

**ii) After the 1st Max**, there will be a gradual decrease until the perihelion/perigee (Peri-LAEC).

**iii) At the Peri-LAEC**, a zero sequence is usually observed.

**iv) After the Peri-LAEC**, there will always be a positive sign pattern (e.g. 0.01 or 0.1, etc.) with a gradual increase until the second maximum. This pattern is equal to the pattern starting from the Aphe-LAEC until the first maximum, but with an opposite sign. (*the +0.01 or 0.1 increment we will find it when we will search later day by day for Points No10, No1 and No2, on Step 11*)

**v) After the 2nd Max**, there will be a gradual decrease until the Aphe-LAEC, and this pattern will be equal and have an opposite sign to the pattern from the first maximum to the Peri-LAEC.

**vi) We stop** only when we see on the third column a Negative Sign number fact that means, we just passed the second Aphe-LAEC and we entered into a new Orbital Period

The table we created makes it easy and efficient to locate the 10 important points. This table is extremely useful, as searching for these points through the traditional method (day-by-day examination, etc.) would require creating a table with 2000 rows for Ceres, but with this approach, we can locate the 10 important points using only about 10% of the data, saving us a considerable amount of time. I will demonstrate this using Ceres as an example, but first, I would like to outline the steps you need to take and the characteristics you should look for when searching for the 10 important points.

### i) Each orbital period of a LAECsp has four notable points:

**a) The Aphe-LAEC** (Aphelion/Apogee, etc.), which is the farthest distance of the object from its "Sun".

**b) The 1st Max**, which occurs between the Aphe-LAEC and the Peri-LAEC.

**c) The Peri-LAEC** (Perihelion/Perigee, etc.), which is the closest distance of the object from its "Sun".

**d) The 2nd Max**, which occurs between the Peri-LAEC and the Aphe-LAEC.

**ii) All 10 important points are accumulated at these 4 notable points, and they can be grouped as follows:**

**Group A (at Aphe-LAEC): Points No10, No1 (Aphe-LAEC), and No2.**

**- Point No10:** This point is always before the Aphe-LAEC - the last distance before the Aphe-LAEC. In the third column of the table, we will always see a positive sign number followed by the last increment, which is the Aphe-LAEC.

**- Point No1 (Aphe-LAEC):** This is the farthest distance of the object from its "Sun". It enters the Aphe-LAEC with +0.01 (or +0.1), followed by a 0 (zero) sequence during the Aphe-LAEC and exits the Aphe-LAEC with -0.01 (or -0.1). These sequences can be observed in the third column of the table. (*the +0.01 or 0.1 increment we will find it when we will search later day by day for Points No10, No1 and No2, on Step 11*)

**- Point No2:** This is the first distance after the Aphe-LAEC that is smaller than the Aphe-LAEC's distance. In the third column of the table, we will always see a number -0.01 (or -0.1). From Point No2, we will always see a gradual increment of the object's orbital speed by -0.01 (or -0.1) up to the 1st Max (*the -0.01 or -0.1 increment we will find it when we will search later day by day for Points No10, No1 and No2, on Step 11*)

*To visualise it, imagine a "Pyramid" where you see this pattern;

Focus to the **RED BOLD** numbers and read the comment (this is from Ceres table)

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 17/8/20 | **446.14** |
| No1 | 18/8/20 | **446.15** This one (the Aphe-LAEC) is always bigger +0.01 from |

| | | |
|---|---|---|
| | | the Point No10 and smaller -0.01 by the Point No2 |
| No2 | 22/8/20 | **446.14** |

See the "Pyramid" again: 446.14, 446.15, 446.14

**Group B (at the 1st Max): 1st Max and Points No3 and No4.**

**- 1st Max:** The characteristic of the 1st Max is that in the third column, we will always see the "1st Max's Pyramid" - one negative sign small number followed by the "big/1st Max" negative sign number, and then again a smaller negative sign number (which is Point No3 and usually has a -0.02 difference or a big sequence - equal or more than 12 on a row same numbers- with -0.01 difference by the 1st Max).

**- Point No3:** This is located immediately after the 1st Max and is characterized by a rapid decrease in orbital speed (a -0.02 difference from the max or a big sequence with difference -0.01 from the max)

**- Point No4:** This is located immediately after Point No3 and is the first different distance.

**Group C (at the Peri-LAEC): Points No5, No6 (Peri-LAEC) and No7. How to spot these Points on the table by month;**

**- Point No5:** It's the distance exactly before the Point No6 (before the Peri-LAEC) and is a Negative Sign number.

**- Point No6 (Peri-LAEC):** Is the last Negative Sign number (it enters into Peri-LAEC always with a -0.01 or -0.1 number) and the closest distance of the object from its "Sun". Follows a sequence of 0 (zero) and when the object exits from the Peri-LAEC, we always see a POSITIVE SIGN number (+0.01 or +0.1; *the +0.01 or 0.1 increment we will find it when we will search later day by day for Points No10, No1 and No2, on Step 11*)

**- Point No7:** Its exactly after the Peri-LAEC and it's the first Positive Sign number (+0.01 or +0.1; *the +0.01 or 0.1 increment we will find it when we will search later day by day for Points No10, No1 and No2, on Step 11*)

*To visualise it, imagine a "Pyramid" where you see this pattern;

Focus to the **RED BOLD** numbers and read the comment (this is from Ceres table)

| | | |
|---|---|---|
| No5 | 30/11/22 | **381.35** |
| No6 | 1/12/22 | **381.34** This one (the Peri-LAEC) is always smaller -0.01 from the Point No5 and Point No7 |
| No7 | 10/12/22 | **381.35** |

See the "Pyramid" again: 381.35, 381.34, 381.35

**Group D (at the 2nd max): Points No8 and No9. How to spot these Points on the table by month;**

**- 2nd Max:** The characteristic of the 2nd Max, is that on the 3rd Column we see always the "2ndMax's Pyramid" - one Positive Sign small number, follows the "big/2nd Max" Positive Sign number, and then again a smaller, Positive Sign number (which is the Point No8 and usually has a -0.02 difference or a big sequence -equal or more than 12 on a row same numbers- with -0.01 difference by the 2nd Max)

**- Point No8:** It's right after the 2nd Max - rapid change of the orbital speed (decrease; a 0.02 difference from the max or a big sequence with difference 0.01 from the max)

**- Point No9:** It's exactly after the Point No8 - the first different distance after the No8; from this Point and after we see gradual decrease. It's Positive Sign.

## *Step* 10

The next step is to mark these 4 groups in our table. Usually, it's enough to mark:

**i) 2 rows for the Points No10, No1 (Aphe-LAEC) and No2** (These two dates in the third column, one has a positive and the other a negative symbol)

**ii) 3 rows for the 1st Max and the Points No3 and No4** (These three dates in the third column, we will see the 1st Max's Pyramid with the Negative Sign numbers)

**iii) 3 rows for the Points No5, No6 (Peri-LAEC) and No7** (These three dates in the third column, two have a negative sign and the other has a positive sign)

**iv) 3 rows for the 2nd Max and the Points No8 and No9** (These three dates in the third column, we will see the 2nd Max's Pyramid with the Positive Sign numbers)

## *Step* 11

After marking these 10 dates, we will check the distances between them day by day in these 4 groups to find exactly where the 10 important points are and whether this object is a natural satellite of the "Sun" which we are observing.

Let me show you how i do it practically.

## *Example with Ceres' data*

As I have already the Aphe-LAEC of Ceres (it's on Aug., 18, 2020), I'll start from "Step 8" and I'll insert the data as commands the "Step 8", then I'll search for the 4 Groups based on the characteristics that we saw above on "Step 9" and at the end, I'll spot the 10 rows with the dates and the distances, as commands the "Step 10". But instead of 1 January 2013, I'll start from 18 January, 2020, as I know already the date of Ceres' Aphe-LAEC and we can compare later the findings with the classical table. I will create the table with the 3 columns. I'll add one more column just to make some helpful comments. I use also to add on the 4 Groups different colours because it's easier on the Step 11 to see on the table each Group.

So, this is the table I get when I follow the orders of "Step 8"

| | | | |
|---|---|---|---|
| January 18, 2020 | 437.55 | 437.55 | |

| | | | |
|---|---|---|---|
| February, 18 | 439.79 | 2.24 | |
| March, 18 | 441.60 | 1.81 | |
| April, 18 | 443.22 | 1.62 | |
| May, 18 | 444.45 | 1.23 | |
| June, 18 | 445.38 | 0.93 | |
| July, 18 | 445.94 | 0.56 | |
| August, 18 | 446.15 | **0.21** | Do you see this Pattern **+/-** ? The number with the **Positive Sign number** (0.21) **and** then the **Negative Sign number** (-0.18)? Here is always the Group A (Points No10, No1 –the Aphe-LAEC- and No2). |
| September, 18 | 445.97 | **-0.18** | |
| October, 18 | 445.45 | -0.52 | |
| November, 18 | 444.55 | -0.9 | |
| December, 18 | 443.33 | -1.22 | |
| January 18, 2021 | 441.73 | -1.6 | |
| February, 18 | 439.79 | -1.94 | |
| March, 18 | 437.77 | -2.02 | |
| April, 18 | 435.24 | -2.53 | |
| May, 18 | 432.52 | -2.72 | |
| June, 18 | 429.47 | -3.05 | |
| July, 18 | 426.31 | -3.16 | |
| August, 18 | 422.86 | -3.45 | |
| September, 18 | 419.26 | -3.6 | |
| October, 18 | 415.67 | -3.59 | Here is always the Group B (1st Max and Points No3 and No4) |
| November, 18 | 411.91 | **-3.76** | See the "1st Max's Pyramid" with the **Negative Sign** numbers, where -3.76 is the max and before and after the max, two smaller numbers. |
| December, 18 | 408.26 | **-3.65** | |
| January 18, 2022 | 404.53 | -3.73 | |
| February, 18 | 400.9 | -3.63 | |
| March, 18 | 397.74 | -3.16 | |
| April, 18 | 394.45 | -3.29 | |
| May, 18 | 391.51 | -2.94 | |
| June, 18 | 388.78 | -2.73 | |

| | | | |
|---|---|---|---|
| July, 18 | 386.49 | -2.29 | |
| August, 18 | 384.52 | -1.97 | |
| September, 18 | 383 | -1.52 | |
| October, 18 | 381.98 | -1.02 | |
| November, 18 | 381.43 | **-0.55** | |
| December, 18 | 381.38 | **-0.05** | Do you see this Pattern **- -/+** ? The first number with the **Negative Sign number** (-0.55), the second number with the **Negative Sign** (-0.05) **and** then the **Positive Sign number** (0.45)? Here is always the Group C (Points No5, No6 – the Peri-LAEC- and No7). |
| January 18, 2023 | 381.83 | **0.45** | |
| February, 18 | 382.8 | 0.97 | |
| March, 18 | 384.08 | 1.28 | |
| April, 18 | 385.94 | 1.86 | |
| May, 18 | 388.14 | 2.2 | |
| June, 18 | 390.79 | 2.65 | |
| July, 18 | 393.67 | 2.88 | |
| August, 18 | 396.91 | 3.24 | |
| September, 18 | 400.38 | 3.47 | |
| October, 18 | 403.89 | 3.51 | |
| November, 18 | 407.63 | 3.74 | |
| December, 18 | 411.3 | **3.67** | Here is always the Group D (2nd Max and Points No8 and No9) |
| January 18, 2024 | 415.09 | **3.79** | See the "2nd Max's Pyramid" with the **Positive Sign** numbers, where 3.79 is the max and before and after the max, two smaller numbers. |
| February, 18 | 418.83 | **3.74** | |
| March, 18 | 422.25 | 3.42 | |
| April, 18 | 425.76 | 3.51 | |
| May, 18 | 429 | 3.24 | |
| June, 18 | 432.14 | 3.14 | |
| July, 18 | 434.94 | 2.8 | |
| August, 18 | 437.56 | 2.62 | |
| September, 18 | 439.89 | 2.33 | |
| October, 18 | 441.84 | 1.95 | |

| | | | |
|---|---|---|---|
| November, 18 | 443.53 | 1.69 | |
| December, 18 | 444.82 | 1.29 | |
| January 18, 2025 | 445.81 | 0.99 | |
| February, 18 | 446.41 | 0.6 | |
| March, 18 | 446.64 | **0.23** | And between these two dates is the Second Aphe-LAEC – Ceres enters into a new orbital period. |
| April, 18 | 446.54 | **-0.1** | |
| **Total rows: 64** | | | |

As I have now the 4 Groups and their dates, I will ignore everything else and I will focus to the 4 Groups to find the Points that each Group has, searching day by day on this final Step. On Step 11, I create a table again with 3 columns but this time, on the first column I'll insert the first date that the Group I study has, I'll continue to fill the cells below day by day and I'll stop filling the cells below with dates on the last date that the Group I study has. Then I'll spot/find exactly where are the Points of this Group. I'll do the same for the 4 Groups and after this, I'll have all the 10 important Points. See how I do it.

## $I. Group\ A\ (Points\ No10, No1 - Aphe - LAEC -\ and\ No2)$

My dates to search for these 3 Points:

| | | |
|---|---|---|
| August, 18 | 446.15 | **0.21** |
| September, 18 | 445.97 | **-0.18** |

***Note:*** *I'll start 3 days before 18 August, 2020 to show you the No10 (because under normal conditions I would start from 1 August, 2020 if I didn't know the exact date of Ceres' Aphe-LAEC)*

Remember what we search for;

"**Group A (at Aphe-LAEC): Points No10, No1 (Aphe-LAEC), and No2.**

**- Point No10:** This point is always before the Aphe-LAEC - the last distance before the Aphe-LAEC. In the third column of the table, we will always see a positive sign number followed by the last increment, which is the Aphe-LAEC.

**- Point No1 (Aphe-LAEC):** This is the farthest distance of the object from its "Sun". It enters the Aphe-LAEC with +0.01 (or +0.1), **followed by a 0 (zero) sequence** during the Aphe-LAEC and **exits the Aphe-LAEC with -0.01** (or -0.1). These sequences can be observed in the third column of the table. (*the +0.01 or 0.1 increment we will find it when we will search later day by day for Points No10, No1 and No2, on Step 11*)

**- Point No2:** This is the first distance after the Aphe-LAEC that is smaller than the Aphe-LAEC's distance. In the third column of the table, we will always see a number -0.01 (or -0.1). From Point No2, we will always see a gradual increment of the object's orbital speed by -0.01 (or -0.1) up to the 1st Max (*the -0.01 or -0.1 increment we will find it when we will search later day by day for Points No10, No1 and No2, on Step 11*)

See how fast you can find the 3 Points.

| | | | |
|---|---|---|---|
| Aug. 15, 2020 | 446.14 | 446.14 | |
| 16 | 446.14 | 0 | |
| 17 | **446.14** | 0 | The **446.14** is the last distance before the Aphe-LAEC and here is always the **Point No10** – exactly before the Aphe-LAEC |
| 18 | 446.15 | **0.01** | Here enters into its Aphe-LAEC ("Aphelion") with the **+0.01**. This is the Point No1 (the Aphe-LAEC) |
| 19 | 446.15 | **0** | |
| 20 | 446.15 | **0** | This is **the 0 (zero) sequence** of the Aphe-LAEC |
| 21 | 446.15 | **0** | |
| 22 | **446.14** | -0.01 | And this is the Point No2, where the object exits the Aphe-LAEC with **-0.01** and starts going closer to its "Sun" again |
| **Total rows: 8** | | | |

So, we have got the first 3 Points;

**Point No10:** On 17 August, 2020 at 446.14 million km from the Sun

**Point No1 (Aphe-LAEC):** On 18 August, 2020 at 446.15 million km from the Sun

**Point No2:** On 22 August, 2020 at 446.14 million km from the Sun

## Comparison with the classical method (with the long list – See Proposition Θ, i)

| | | | | |
|---|---|---|---|---|
| August 17, '20 | 446.14 | - | | |
| August 18, '20 | 446.15 | 0.01 | | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 19 | 446.15 | 0 | | |
| 20 | 446.15 | 0 | | |
| 21 | 446.15 | 0 | | |
| 22 | 446.14 | -0.01 | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |

The table above, is a part of the huge table as we saw it on Proposition Θ, I and the table above is a direct comparison of the findings of the two different methods – the classical and the fast.

| | Date of Point **No10** | Distance of Point **No10** in million km | Date of Point **No1** (Aphe-LAEC) | Distance of Point **No1** (Aphe-LAEC) in million km | Date of Point **No2** | Distance of Point **No2** in million km |
|---|---|---|---|---|---|---|
| Classical Method | 17/8/20 | 446.14 | 18/8/20 | 446.15 | 22/8/20 | 446.14 |
| Fast Method | 17/8/20 | 446.14 | 18/8/20 | 446.15 | 22/8/20 | 446.14 |

**Did the fast method find the same results?**

**- Yes**

Let's check and the other 3 Groups

## *II. Group B (1st Max and Points No3 and No4)*

My dates to search for these 3 Points:

| | | |
|---|---|---|
| October, 18 | 415.67 | **-3.59** |
| November, 18 | 411.91 | **-3.76** |
| December, 18 | 408.26 | **-3.65** |

I will start searching by October 18, 2021 and I'll stop only when I'll see a -0.02 difference by the 1st Max on the numbers of the 3rd column. This way, I'm 100% sure that I've passed my 1st Max and from this point, I must see gradual decrease on the numbers of the 3rd column.

**"Group B (at the 1st Max): 1st Max and Points No3 and No4.**

**- 1st Max:** The characteristic of the 1st Max is that in the third column, we will always see the "1st Max's Pyramid" - one negative sign small number followed by the "big/1st Max" negative sign number, and then again a smaller negative sign number (which is Point No3 and usually has a -0.02 difference or a big sequence -equal or more than 12 on a row same numbers- with -0.01 difference by the 1st Max).

**<u>- Point No3:</u>** This is located immediately after the 1st Max and is characterized by a rapid decrease in orbital speed (a -0.02 difference from the max or a big sequence with difference -0.01 from the max)

**<u>- Point No4:</u>** This is located immediately after Point No3 and is the first different distance."

## See the table on Appendix K

So, we have got the 3 Points;

**1st Max:** On 5 January, 2022 at 406.08 million km from the Sun

**Point No3:** On 11 January, 2022 at 405.37 million km from the Sun

**Point No4:** On 12 January, 2022 at 405.25 million km from the Sun

## Comparison with the classical method (with the long list – See Proposition Θ, i)

| | | | | |
|---|---|---|---|---|
| 2022 Jan. 1 | 406.57 | -0.12 | | |
| 2 | 406.45 | -0.12 | | |
| 3 | 406.33 | -0.12 | | |
| 4 | 406.21 | -0.12 | | |
| 5 | 406.08 | **-0.13** | -0.13 **(max)** | |
| 6 | 405.96 | -0.12 | | |
| 7 | 405.84 | -0.12 | | |
| 8 | 405.72 | -0.12 | | |
| 9 | 405.6 | -0.12 | | |
| 10 | 405.48 | -0.12 | | |
| 11 | 405.37 | -0.11 | -0.11. Anomaly. It should be a sequence of -0.13 NOT -0.11 | **<u>Point No3 or rσ (on d3):</u>** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the |

| | | | | |
|---|---|---|---|---|
| | | | | "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 12 | 405.25 | -0.12 | Again a sequence of -0.12 | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 13 | 405.13 | -0.12 | | |
| 14 | 405.01 | -0.12 | | |
| 15 | 404.89 | -0.12 | | |

The table above, is a part of the huge table as we saw it on Proposition Θ, I and the table above is a direct comparison of the findings of the two different methods – the classical and the fast.

| | Date of 1st **Max** | Distance of **1st Max** in million km | Date of Point **No3** | Distance of Point **No3** in million km | Date of Point **No4** | Distance of Point **No4** in million km |
|---|---|---|---|---|---|---|
| Classical Method | 5/1/22 | 406.08 | 11/1/22 | 405.25 | 12/1/22 | 405.25 |
| Fast Method | 5/1/22 | 406.08 | 11/1/22 | 405.25 | 12/1/22 | 405.25 |

## Did the fast method find the same results?

**- Yes**

# $III. Group\ C\ (Points\ No5, No6 - Peri - LAEC -\ and\ No7)$

My dates to search for these 3 Points:

| | | |
|---|---|---|
| November, 18 | 381.43 | **-0.55** |
| December, 18 | 381.38 | **-0.05** |
| January 18, 2023 | 381.83 | **0.45** |

I'll create my table to check day by day starting from November 18, 2022 and I'll stop when I'll see the 0.01 on the 3rd Column (fact that means that Ceres exits the Peri-LAEC and it will move farthest from the Sun).

| | | | |
|---|---|---|---|
| November 18, 2022 | 381.43 | -0.01 | |
| 19 | 381.42 | -0.01 | |
| 20 | 381.41 | -0.01 | |
| 21 | 381.4 | -0.01 | |
| 22 | 381.39 | -0.01 | |
| 23 | 381.38 | -0.01 | |
| 24 | 381.38 | 0 | |
| 25 | 381.37 | -0.01 | |
| 26 | 381.36 | -0.01 | |
| 27 | 381.36 | 0 | |
| 28 | 381.35 | -0.01 | |
| 29 | 381.35 | 0 | |
| 30 | **381.35** | 0 | **Point No5** |
| Dec. 1 | **381.34** | -0.01 | Here is the **Point No6** (the Peri-LAEC, the closest distance of Ceres by the Sun) |
| 2 | 381.34 | 0 | |
| 3 | 381.34 | 0 | |
| 4 | 381.34 | 0 | See and the 0 (zero) sequence of the Peri-LAEC |
| 5 | 381.34 | 0 | |

| | | | |
|---|---|---|---|
| 6 | 381.34 | 0 | |
| 7 | 381.34 | 0 | |
| 8 | 381.34 | 0 | |
| 9 | 381.34 | 0 | |
| 10 | **381.35** | 0.01 | Point No7 (Ceres exits the Peri-LAEC) |
| 11 | 381.35 | 0 | |
| **Total rows: 24** | | | |

We have got the 3 Points;

**Point No5:** On 30 November, 2022 at 381.35 million km from the Sun

**Point No6:** On 1 December, 2022 at 381.34 million km from the Sun

**Point No7:** On 10 January, 2023 at 381.35 million km from the Sun

## Comparison with the classical method (with the long list – See Proposition Θ, i)

| | | | | |
|---|---|---|---|---|
| 18 | 381.43 | -0.01 | | |
| 19 | 381.42 | -0.01 | | |
| 20 | 381.41 | -0.01 | | |
| 21 | 381.4 | -0.01 | | |
| 22 | 381.39 | -0.01 | | |
| 23 | 381.38 | -0.01 | -0.01 | |
| 24 | 381.38 | 0 | | |
| 25 | 381.37 | -0.01 | | |
| 26 | 381.36 | -0.01 | | |
| 27 | 381.36 | 0 | | |
| 28 | 381.35 | -0.01 | | |
| 29 | 381.35 | 0 | | |
| 30 | 381.35 | 0 | | **Point No5 or LA (on d5):** Last point with attractive forces between the natural "Satellite" and its natural "Sun". |

| | | | | |
|---|---|---|---|---|
| Dec. 1 | 381.34 | -0.01 | | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | 381.34 | 0 | 0 | |
| 3 | 381.34 | 0 | | |
| 4 | 381.34 | 0 | | |
| 5 | 381.34 | 0 | | |
| 6 | 381.34 | 0 | | |
| 7 | 381.34 | 0 | | |
| 8 | 381.34 | 0 | | |
| 9 | 381.34 | 0 | | |
| 10 | 381.35 | 0.01 | | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 11 | 381.35 | 0 | | |

The table above, is a part of the huge table as we saw it on PropositionΘ, I and the table above is a direct comparison of the findings of the two different methods – the classical and the fast.

| | Date of **Point No5** | Distance of **Point No5** in million km | Date of Point **No6** | Distance of Point **No6** in million km | Date of Point **No7** | Distance of Point **No7** in million km |
|---|---|---|---|---|---|---|
| Classical Method | 30/11/22 | 381.35 | 1/12/22 | 381.34 | 10/12/22 | 381.35 |
| Fast Method | 30/11/22 | 381.35 | 1/12/22 | 381.34 | 10/12/22 | 381.35 |

**Did the fast method find the same results?**

**- Yes**

Let's see and the Group D.

## *IV. Group D* (*2nd Max and Points No8 and No9*)

My dates to search for these 3 Points:

| | | |
|---|---|---|
| December, 18 | 411.3 | **3.67** |
| January 18, 2024 | 415.09 | **3.79** |
| February, 18 | 418.83 | **3.74** |

I will start searching by December 18, 2023 and I'll stop only when I'll see the second smaller number after the 2nd Max – a -0.02 difference from the Max or, a big sequence (which will be the Point No8 and if it has a big sequence, this sequence must be equal or more than 12 on a row same numbers) with -0.01 difference by the 2nd Max on the numbers of the 3rd column. This way, I'm 100% sure that I've passed my 2nd Max and from this point, I must see gradual decrease on the numbers of the 3rd column.

**"Group D (at the 2nd max): Points No8 and No9. How to spot these Points on the table by month;**

**- 2nd Max:** The characteristic of the 2nd Max, is that on the 3rd Column we see always the "2ndMax's Pyramid" - one Positive Sign small number, follows the "big/2nd Max" Positive Sign number, and then again a smaller, Positive Sign number (which is the Point No8 and usually has a -0.02 difference or a big sequence -equal or more than 12 on a row same numbers- with -0.01 difference by the 2nd Max)

**- Point No8:** It's right after the 2nd Max - rapid change of the orbital speed (decrease; a 0.02 difference from the max or a big sequence with difference 0.01 from the max)

**- Point No9:** It's exactly after the Point No8 - the first different distance after the No8; from this Point and after we see gradual decrease. It's Positive Sign."

Now, I create my table (see Appendix L)

We have got the 3 Points;

**2nd Max:** On 29 January, 2024 at 416.42 million km from the Sun

**Point No8:** On 30 January, 2024 at 416.55 million km from the Sun

**Point No9:** On 25 February, 2024 at 419.67 million km from the Sun

## Comparison with the classical method (with the long list – See Proposition Θ, i)

| | | | | |
|---|---|---|---|---|
| 18 | 411.3 | 0.12 | | |
| 19 | 411.42 | 0.12 | | |
| 20 | 411.54 | 0.12 | | |
| 21 | 411.66 | **0.13** | | |
| 22 | 411.79 | 0.12 | | |
| 23 | 411.91 | 0.12 | | |
| 24 | 412.03 | 0.12 | | |
| 25 | 412.15 | **0.13** | | |
| 26 | 412.28 | 0.12 | | |
| 27 | 412.4 | 0.12 | | |
| 28 | 412.52 | 0.12 | | |
| 29 | 412.64 | **0.13** | | |

| | | | | |
|---|---|---|---|---|
| 30 | 412.77 | 0.12 | | |
| 31 | 412.89 | 0.12 | | |
| 2024 Jan. 1 | 413.01 | 0.12 | | |
| 2 | 413.13 | **0.13** | | |
| 3 | 413.26 | 0.12 | | |
| 4 | 413.38 | 0.12 | | |
| 5 | 413.5 | 0.12 | | |
| 6 | 413.62 | **0.13** | | |
| 7 | 413.75 | 0.12 | | |
| 8 | 413.87 | 0.12 | | |
| 9 | 413.99 | 0.12 | | |
| 10 | 414.11 | 0.12 | | |
| 11 | 414.23 | **0.13** | | |
| 12 | 414.36 | 0.12 | | |
| 13 | 414.48 | 0.12 | | |
| 14 | 414.6 | 0.12 | | |
| 15 | 414.72 | 0.12 | | |
| 16 | 414.84 | **0.13** | | |
| 17 | 414.97 | 0.12 | | |
| 18 | 415.09 | 0.12 | | |
| 19 | 415.21 | 0.12 | | |
| 20 | 415.33 | 0.12 | | |
| 21 | 415.45 | **0.13** | | |
| 22 | 415.58 | 0.12 | | |
| 23 | 415.7 | 0.12 | | |
| 24 | 415.82 | 0.12 | | |
| 25 | 415.94 | 0.12 | | |
| 26 | 416.06 | 0.12 | | |
| 27 | 416.18 | 0.12 | | |
| 28 | 416.3 | 0.12 | | |
| 29 | 416.42 | **0.13** | 0.13 (max) | |
| 30 | 416.55 | 0.12 | A huge sequence of 0.12. Anomaly. More than 12 same numbers on a row with -0.01 | **Point No8 or rε (on d8):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the |

| | | | | |
|---|---|---|---|---|
| | | | difference from the max 0.13 | "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 31 | 416.67 | 0.12 | | |
| Febr. 1 | 416.79 | 0.12 | | |
| 2 | 416.91 | 0.12 | | |
| 3 | 417.03 | 0.12 | | |
| 4 | 417.15 | 0.12 | | |
| 5 | 417.27 | 0.12 | | |
| 6 | 417.39 | 0.12 | | |
| 7 | 417.51 | 0.12 | | |
| 8 | 417.63 | 0.12 | | |
| 9 | 417.75 | 0.12 | | |
| 10 | 417.87 | 0.12 | | |
| 11 | 417.99 | 0.12 | | |
| 12 | 418.11 | 0.12 | | |
| 13 | 418.23 | 0.12 | | |
| 14 | 418.35 | 0.12 | | |
| 15 | 418.47 | 0.12 | | |
| 16 | 418.59 | 0.12 | | |
| 17 | 418.71 | 0.12 | | |
| 18 | 418.83 | 0.12 | | |
| 19 | 418.95 | 0.12 | | |
| 20 | 419.07 | 0.12 | | |
| 21 | 419.19 | 0.12 | | |
| 22 | 419.31 | 0.12 | | |
| 23 | 419.43 | 0.12 | | |
| 24 | 419.55 | 0.12 | | |
| 25 | 419.67 | 0.11 | | **Point No9 or NM (on d9):** Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 26 | 419.78 | 0.12 | | |
| 27 | 419.9 | 0.12 | | |

The table above, is a part of the huge table as we saw it on Proposition Θ, I and the table above is a direct comparison of the findings of the two different methods – the classical and the fast.

| | Date of $2^{nd}$ **Max** | Distance of $2^{nd}$ **Max** in million km | Date of Point **No8** | Distance of Point **No8** in million km | Date of Point **No9** | Distance of Point **No9** in million km |
|---|---|---|---|---|---|---|
| Classical Method | 29/1/24 | 416.42 | 30/1/24 | 416.55 | 25/2/24 | 419.67 |
| Fast Method | 29/1/24 | 416.42 | 30/1/24 | 416.55 | 25/2/24 | 419.67 |

**Did the fast method find the same results?**

**- Yes**

As observed, only 257 rows were necessary to accurately identify the 10 crucial points, in contrast to the extensive table of 1900+ rows described in Proposition Θ/i. This translates to a time-saving decrease of 86.473684210526% compared to 1900, with the percentage difference increasing with the growing size of the celestial object's orbital period.

This efficient method has been consistently yielding results and has been used extensively, with hundreds of successful applications. To assist others, some tips are being shared. For instance, when encountering a celestial object with a particularly lengthy orbital period (exceeding 30 years), the need arose to determine quickly if it was a natural satellite or not of the Sun or Earth. The procedure for identifying the 10 crucial points remained the same, with a slight modification. Instead of searching month by month, an additional month was added for every four years of the orbital period. For instance, for an object with a 12-year orbital period, the initial search was every 3 months (12/4 = 3). Similarly, for an object with a 43-year orbital period, a initial search was by 10 months to identify a smaller window of months with the characteristics outlined in "Step 9." Then, further searches were conducted on a monthly and daily basis to find the 10 crucial points. This approach reduced the need for a 15,695-row table (43 years x 365 = 15,695) to just 300 to 400 rows, enabling quick and effective examination of many different objects.

Another important tip, especially when examining any candidate "natural satellite" in elliptical orbit around a "sun," with a short Orbital Period, less than 6 months, to find the 10 important points, one must remember this phrase: "*The shorter the Orbital period of the object, the smaller the unit of time we must use.*" For example, when studying the Earth's Moon Orbital Period, which lasts 28 days, instead of searching by month, I started by searching by day, continued with searching by 6 hours, hour, minute, and finally, by searching by second, where I found exactly the 10 important points. If I had searched directly by second, I would have had to create a 2,419,200-line table, but I only created about 300 lines with the fast method. In this instance, I was able to find the 10 important points only with about 300 lines, resulting in a 99.9875% reduction from the original 2,400,000 lines. This method can be applied to any natural satellite with short orbital period that is in an elliptical orbit around its natural "sun", even the smallest ones, if we have the ability to observe its orbit at a small time scale.

# PART VII

## More exaples – Fast method

## Asteroid 3 Juno

We read, "...3 Juno is a large asteroid in the asteroid belt. Juno was the third asteroid discovered, in 1804, by German astronomer Karl Harding. It is one of the twenty largest asteroids and one of the two largest stony (S-type) asteroids, along with 15 Eunomia. It is estimated to contain 1% of the total mass of the asteroid belt...". Is Asteroid 3 Juno a LAECsp (a natural Satellite) of the Sun? Meets the criteria of Theorem 2?

I'll check using the fast method; I'll follow the seven first steps to find its Aphe-LAEC (Aphelion) and then I'll follow the same steps as I did before (without many comments this time because the process is the same. **See Appendix M**).

As we can see, the asteroid 3 Juno has the 10 important points that every other planet in our solar system possesses. Since it meets this extremely important criterion of the 10 points, it will certainly meet the second criterion of Theorem 2 (-100%) when we examine it for the difference of 0.0039 million km/1 million km of its Peri-LAEC. Does the asteroid 3 Juno meet criterion 2 of Theorem 2?

The Peri-LAEC of the "Asteroid" 3 Juno is at 296.71 million km.

The criterion 2 of the Theorem 2 states that, the natural satellite must have *"… An almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC**, each time that the first is at its Aphe-LAEC & its Peri-LAEC*

*** The smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC (of "perihelion/perigee", etc.)*

*Any LAECsp (any natural Satellite) that is on an Elliptical Orbit around its LAECs or its LAECsp(1) (its natural Sun), has an almost stable distance by its LAECs or its LAECsp(1), with smaller difference than ±0.0059 million km for every 1 million km of Peri-LAEC, each time that the first is at its Aphe-LAEC & its Peri-LAEC. To find the Peri-LAEC's distance (the "perihelion/perigee" etc.), it's enough to find just one Peri-LAEC of the LAECsp(2) and measure the difference…*"

Let's check.

## *Asteroid's 3 Juno Aphe – LAEC* & *Peri – LAEC* ("*aphelion*" & "*perihelion*")

Asteroid's 3 Juno Peri-LAEC on 22 Nov. 2018 at 296.71 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ± 1.750589 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ± 1.750589 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ± 1.750589 million km |
|---|---|---|---|
| 16 Sept. 2016 | 501.70 | 22 Nov. 2018 | 296.71 |
| 23 Jan. 2021 | 501.70 | 01 Apr. 2023 | 297.00 |
| 03 Jun. 2025 | 501.78 | 12 Aug. 2027 | 297.42 |
| 20 Oct. 2029 | 502.36 | 26 Dec. 2031 | 296.06 |
| 27 Feb. 2034 | 502.47 | 04 May 2036 | 295.50 |

### Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±1.750589 million km)?

- No.  The maximum difference is 1.36 million km.

It is evident that "Asteroid 3 Juno" satisfies the second criterion of Theorem 2, implying that we are dealing with a LAECsp (a natural satellite) of the Sun that is a "Planet" like Earth and any other planet in our solar system. If one were to examine the remaining criteria, it would become apparent that it satisfies the same requirements as any other "Planet" in our solar system. So, as the "asteroid 3 Juno" shares the same criteria as any other planet in our solar system, from now and on please call this celestial object "Kastri Planet".

Here, two issues arise. On the one hand, there are celestial objects that meet exactly the same criteria as a "Planet" in our solar system, and on the other hand, there is an enormous number of these celestial objects, which makes it impossible with current technology to check thousands of them for whether they meet criterion 1 of Theorem 2 (for the 10 significant points). Therefore, the need for an even faster method of determining whether an object is a LAECsp or not, and identifying it as such, led me to develop an even faster method. The Super-Fast Method for classification of a celestial object as a LAECsp or not is based on checking criterion 2 of Theorem 2, as "*when a celestial object meets one of the 3 criteria of Theorem 2, it usually meets the other 2*". Thus, we have the ability to quickly make an initial selection among the thousands of celestial objects and focus only on those that have an extremely high probability of being real LAECsps of the LAECs we are examining. See below for what I mean.

# *PART VIII*

## *POSTULATE 15* - The criterion 1 for the super-fast method.

If a celestial object satisfies the Criterion 2 of the Theorem 2, then it meets and the Criterion 1 of the Theorem 2.

## *Proposal Ξ − The Super − Fast Method to classify an object as a LAECsp or not*

The Super-Fast Method for classification of a celestial object as a LAECsp or not is based on checking criterion 2 of Theorem 2, as "when a celestial object meets one of the 3 criteria of Theorem 2, it usually meets the other 2". Let’s see some examples with some celestial objects that are not currently classified as "planets," but meet the same 3 criteria of Theorem 2 as any other planet in our solar system.

## $A$) $\boldsymbol{Asteroid's}$ $\mathbf{87}$ $\boldsymbol{Sylvia\ Aphe-LAEC}$ & $\boldsymbol{Peri-LAEC}$ ("$\boldsymbol{aphelion}$" & "$\boldsymbol{perihelion}$")

Sylvia (minor planet designation: 87 Sylvia) is the one of the largest asteroids (approximately tied for 7th place, to within measurement uncertainties). It is the parent body of the Sylvia family and member of Cybele group located beyond the main asteroid belt (see minor-planet groups). Sylvia was the first asteroid known to possess more than one moon.
Sylvia **has two orbiting satellites**. They have been named (87) Sylvia I Romulus and (87) Sylvia II Remus, after Romulus and Remus, the children of the mythological Rhea Silvia.

Romulus, the first moon, was discovered on February 18, 2001, from the Keck II telescope by Michael E. Brown and Jean-Luc Margot. Remus, the second moon, was discovered over three years later on August 9, 2004, by Franck Marchis of UC Berkeley, and Pascal Descamps, Daniel Hestroffer, and Jérôme Berthier of the Observatoire de Paris, France.

**Important note:** The reason why I choose to examine Asteroid 87 Sylvia for whether it meets Criterion 2 of Theorem 2 is not at all random, since Asteroid 87 Sylvia is a celestial object with **TWO MOONS** - two natural satellites, just like a Planet with Moons, e.g. Earth or Jupiter. If celestial objects that have not been classified as "Planets" so far meet the same strict criteria of Theorem 2, as objects that have been officially classified as Planets, **then we have the answer to the question "Why do these celestial objects - such as "asteroids" - have Moons or Rings just like a Planet"** – Because they are natural satellites (LAECsps) of their LAECs (their "Sun") and in this specific case, LAECsps (natural satellites) of the Sun of our solar system; Furthermore, we have the answer to the big question that troubles the scientific community, if we have to deal or not with celestial objects of the same nature, that should be classified as "Planets" - natural satellites of the sun - some of which, such as Ceres, 2 Pallas, Pluto, 3 Juno, etc., opinions are divided as to whether they should be classified as planets, dwarf planets, asteroids, etc., as they are occasionally re-classified. By providing an answer, this controversy can be put to rest.

The Asteroid's 87 Sylvia Peri-LAEC on 17 Aug. 2017 at 472.58 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±2.788222 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±2.788222 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±2.788222 million km |
|---|---|---|---|
| 24 May 2014 | 568.35 | 17 Aug. 2017 | 472.58 |
| 17 Nov. 2020 | 569.58 | 19 Feb. 2024 | 471.31 |
| 28 Jun. 2027 | 572.29 | 09 Oct. 2030 | 469.07 |
| 08 Jan. 2034 | 572.68 | 12 Apr. 2037 | 469.01 |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±2.788222 million km)?**

- No. The maximum difference is 2.71 million km.

**Is the "Asteroid" 87 Sylvia a LAECsp (a natural satellite) of the Sun, as any other "Planet" in our solar system?**

- Yes.

Given that asteroid 87 Sylvia satisfies Criterion 2 of Theorem 2, I will now demonstrate that it also satisfies Criterion 1 of Theorem 2, using the fast method for finding the 10 significant points, as we have seen in previous pages.

The Aphe-LAEC of 87 Sylvia occurred on May 24, 2014, which is where I will begin. However, as it takes almost 6 years for the asteroid to reach the Aphe-LAEC again (from May 24, 2014 to November 17, 2020), I will search for the 10 significant points by two-month intervals instead of searching by month (note that for every 4 years, we add 1 month to the search. **See Appendix N**).

As you can see, on the one hand, the super-fast method utilizing Criterion 2 of Theorem 2 can provide us with extremely rapid results regarding whether the celestial object we are observing could be a LAECsp or not. On the other hand, it makes sense now why the "Asteroid" 87 Sylvia has two moons, just like any other "Planet" in our solar system. This is because it is a celestial object of the same nature as the "Planets" in our solar system. From now and on, please call this celestial object “Lachanas Planet”. Let us apply Criterion 2 of Theorem 2 to some additional celestial objects that are not officially classified as "Planets", but possess "Moons, Rings, periodical orbit around the Sun", etc.

## ***B) Dwarf Planet Pluto Aphe – LAEC & Peri – LAEC ("aphelion" & "perihelion")***

Pluto, officially designated as 134340 Pluto, is a dwarf planet located in the Kuiper belt, which is a ring of celestial bodies beyond the orbit of Neptune. It is the ninth largest object and the tenth most massive object to directly orbit the Sun. Although Pluto has a slightly smaller mass than Eris, it is the largest known trans-Neptunian object by volume, albeit by a small margin. As with other objects in the Kuiper belt, Pluto is primarily composed of ice and rock and is much smaller than the inner planets, with only one sixth the mass of Earth's moon and one third its volume.

Pluto's orbit is moderately eccentric and inclined, ranging from 30 to 49 astronomical units (4.5 to 7.3 billion kilometers; 2.8 to 4.6 billion miles) from the Sun. At its orbital distance of 39.5 AU (5.91 billion km; 3.67 billion mi), it takes 5.5 hours for light from the Sun to reach Pluto. While Pluto's eccentric orbit occasionally brings it closer to the Sun than Neptune, its stable orbital resonance with Neptune prevents them from colliding.

Pluto has **<u>five</u>** known **<u>moons</u>**: Charon, which is the largest and has a diameter just over half that of Pluto; Styx; Nix; Kerberos; and Hydra. Pluto and Charon are sometimes considered a binary system due to the barycenter of their orbits not lying within either body, and they are tidally locked. In 2015, the New Horizons spacecraft conducted the first flyby of Pluto and its moons, providing detailed measurements and observations.

Pluto was discovered in 1930 as the first object in the Kuiper belt and <u>was initially considered the ninth **planet**</u>. However, its planetary status was questioned due to being smaller than expected, and these doubts increased with the discovery of additional Kuiper belt objects in the 1990s and the more massive scattered disk object Eris in 2005. <u>In 2006, the International Astronomical Union (IAU) redefined the term "planet" to exclude dwarf planets such as Pluto. Despite this, many planetary astronomers still consider Pluto and other dwarf planets to be planets</u>.

Dwarf Planet Pluto Peri-LAEC on 23 Jul. 1741 at 4435.47 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±26.165733 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, |
|---|---|---|---|

| | over ±26.165733 million km | | over ±26.165733 million km |
|---|---|---|---|
| 3 Jul. 1618 | 7372.56 | 23 Jul. 1741 | 4435.47 |
| 02 Apr. 1866 | 7375.50 | 06 Aug. 1989 | 4436.41 |
| 15 Dec. 2113 | 7378.06 | 14 Aug. 2237 | 4434.87 |
| 10 Jun. 2361 | 7382.74 | 12 Nov. 2485 | 4436.74 |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±26.165733 million km)?**
- No. The maximum difference is 4.68 million km.

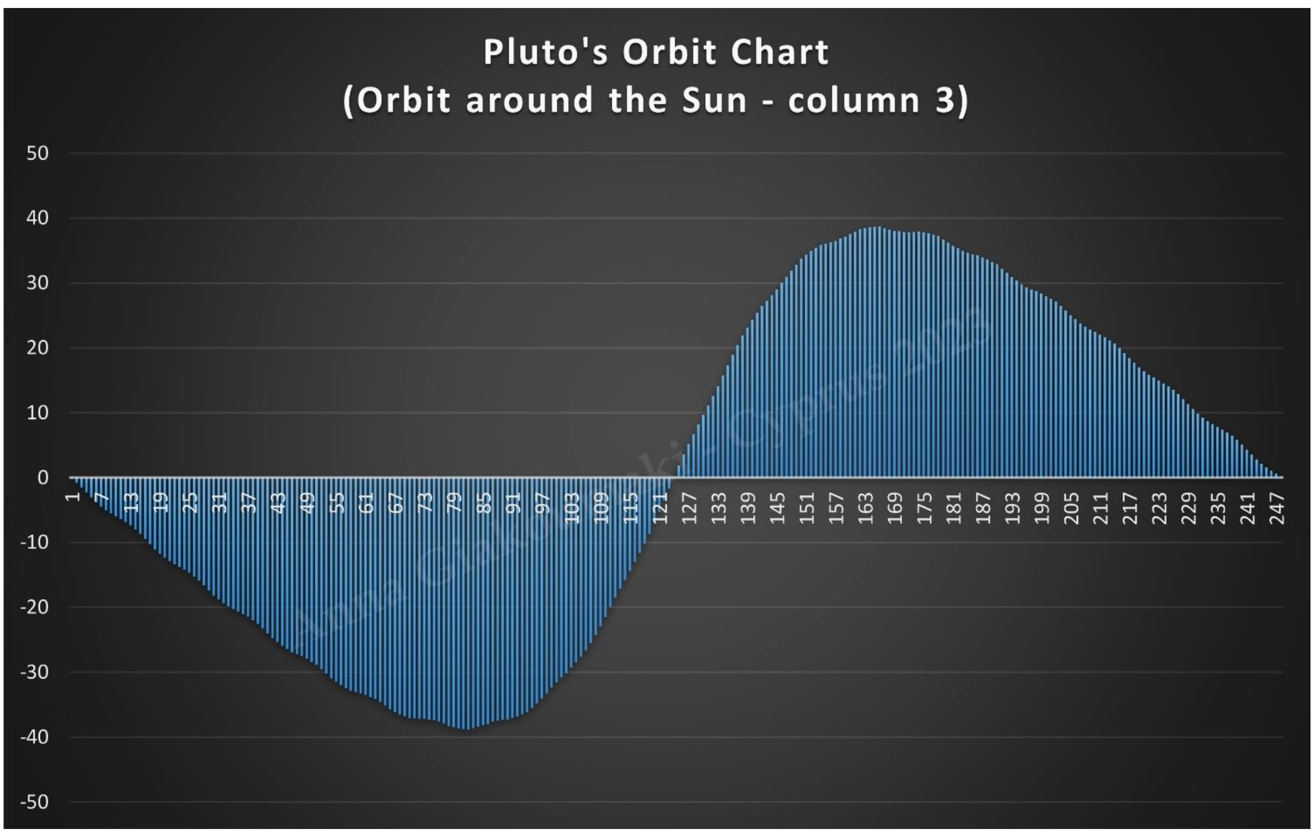
**Is the “Dwarf Planet” Pluto a LAECsp (a natural satellite) of the Sun, as any other “Planet” in our solar system?**
- Yes.

Since Pluto satisfies Criterion 2 of Theorem 2, which means it is "of the same nature" as the other "Planets" in our solar system, and given that there is currently no strict criterion for its classification as a "dwarf planet" or a "Planet," I wanted to check this celestial object to see if it meets Criterion 1 of Theorem 2 for the 10 points. Pluto had the 10 important Points – yes, it is of the same nature as any “Planet” in our solar system. However, Pluto has an extremely long orbital period (it takes about 250 years from "Aphelion" to "Aphelion"). That’s why, I’ll not present you the tables but directly the results to check it out by yourself if you wish. Furthermore, I will further investigate Pluto to determine whether it meets any of the additional strict criteria that any celestial object must satisfy to be considered a LAECsp– a natural satellite of the Sun that we study, such as the "almost anti-symmetric orbit," the "scalar/smooth pattern" up to the maximum, its "extremes" that must be the same with opposite signs, and so on. By providing some strictly numerical and mathematical data on this celestial object, we can finally answer the question of whether it "is or is not a planet" or, more accurately, whether it is or is not a natural satellite of our Sun, like any other "planet" within our solar system. Let us examine this celestial object (**see Appendix O**).

As you can see on Appendix O, on the one hand, the super-fast method utilizing Criterion 2 of Theorem 2 can provide us with extremely rapid results regarding whether the celestial object we are observing could be a LAECsp or not. On the other hand, it makes sense now why the "Asteroid" 87 Sylvia has two moons, just like any other "Planet" in our solar system. This is because it is a celestial object of the same nature as the "Planets" in our solar system. Let us apply Criterion 2 of Theorem 2 to some additional celestial objects that are not officially classified as "Planets", but possess "Moons, Rings, periodical orbit around the Sun", etc.

## 1) PLUTO PLANET (*ex – Dwarf Planet Pluto – orbit around the Sun*)

### *I*) *Pluto's Orbit Chart around the Sun*



## *II*) *Pluto's Orbit Chart around another "Sun"* (*excluded*)

## *III*) *Pluto's Orbit Pattern around the Sun*

**Pattern:** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, **-0.11 (max)**, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, **0.11 (max)**, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**.

## *IV*) *Pluto's Four Quadrants on its Orbit around the Sun*

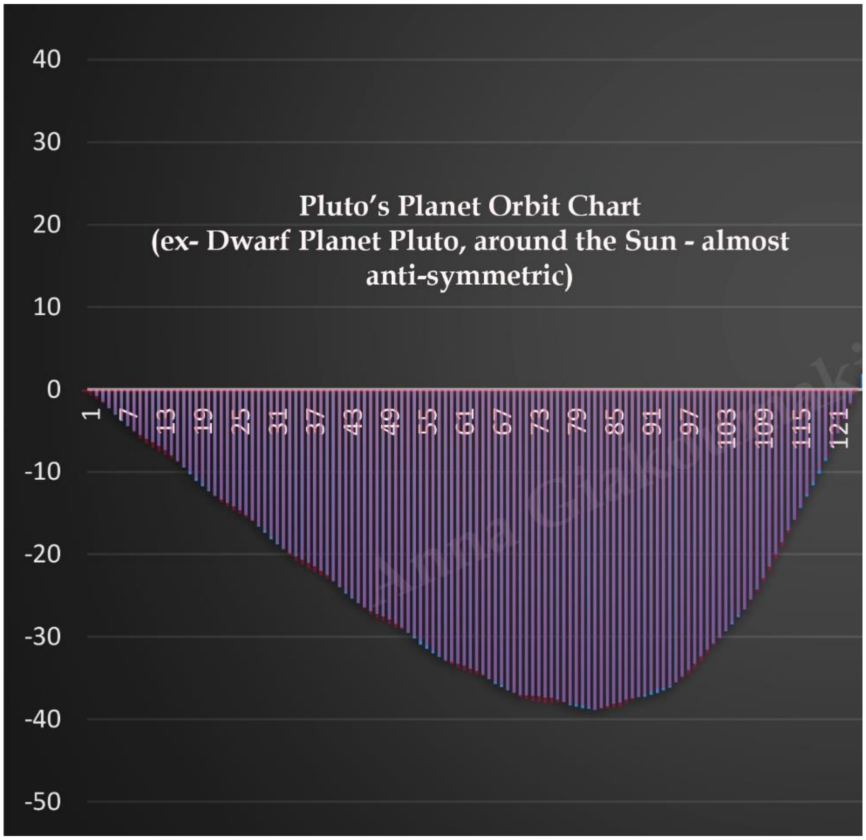
*"…The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line…"*

***1st quadrant:*** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, **-0.11 (max)**

***2nd quadrant:*** **-0.11 (max)**, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, **0.11 (max)**

***4th quadrant:*** **0.11 (max)**, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**




*And this is the chart with the Pluto's (almost) anti-symmetry*

With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion"(the second half, flipped vertically and horizontally)

## *V) Pluto's "Aphelion" and "Perihelion" has not huge difference*

The Perihelion of Pluto is about 4435.47 million km.

The Aphelion of Pluto is about 7372.56 million km

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 3rd quadrant and by this, we have to predict the AG's Full Orbit Pattern

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, **0.11 (max)**

***Predicting its Orbit Pattern based on the quadrant we have:***

**0 (Peri-LAEC), 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11 (max),** 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC), -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11 (max), -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC)

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

## *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has AG's Pattern of Orbit these characteristics?*

a) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **Yes**. Are 0 both.

b) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.11 & 0.11.

c) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

d) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.11, we see the -0.10.

e) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

f) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.11, we see the 0.10.

g) The two extrema are equal but opposite in sign.

- **Yes**, -0.11 & 0.11.

h) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11 (max)
**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11 (max)

i) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.11 (max), -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0
**4th quadrant:** 0.11 (max), 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0

etc...

So, ladies and gentlemen, Pluto is classified as a "Planet" (or more correctly, a LAECsp – a natural satellite of our Sun) as it satisfies the same rigorous criteria as Earth, Saturn, and any other planet in our solar system. Let's quickly examine whether some other celestial objects meet Criterion 2 of Theorem 2, and then we will decide.

## $\boldsymbol{C}$) $\boldsymbol{Asteroid's\ 3122\ Florence\ Aphe - LAEC}$ & $\boldsymbol{Peri - LAEC}$ ("$\boldsymbol{aphelion}$" & "$\boldsymbol{perihelion}$")

3122 Florence, a stony trinary asteroid of the Amor group, is classified as a near-Earth object and a potentially hazardous asteroid. It has a diameter of approximately 5 kilometers and orbits the Sun at a distance of 1.0–2.5 astronomical units (AU) once every 2 years and 4 months (859 days). The orbit of Florence is characterized by an eccentricity of 0.42 and an inclination of 22° with respect to the ecliptic. In addition, **Florence has two moons**.

Discovered by American astronomer Schelte J. "Bobby" Bus at Siding Spring Observatory on 2 March 1981, Florence was provisionally designated as 1981 ET3. In honor of Florence Nightingale, the founder of modern nursing, the asteroid was named Florence, and its naming citation was published on 6 April 1993 (M.P.C. 21955).

Florence is classified as a potentially hazardous object because its minimum orbit intersection distance (MOID ≤ 0.05 AU) suggests that it could make close approaches to Earth. Furthermore, measurements of its absolute magnitude (H ≤ 22) indicate that it is large enough to cause serious damage if it were to impact Earth.

Radar observations during a 2017 flyby have revealed that Florence has two moons. The inner moon is estimated to have a diameter of 180 to 240 meters, while the outer moon is between 300 and 360 meters across. Both moons are tidally locked to the main body and are thought to have formed from loose material that spun away from the asteroid as its rotation accelerated due to the YORP effect. The inner moon has the shortest orbital period of any of the moons of the 60 known near-Earth asteroids with moons.

Florence is only the third known trinary asteroid in the near-Earth asteroid population, following (153591) 2001 SN263 and (136617) 1994 CC.

Asteroid's 3122 Florence Peri-LAEC on 18 May 2015 at 152.70 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ± 0.90093 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±0.90093 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±0.90093 million km |
|---|---|---|---|
| 14 Mar. 2014 | 376.35 | 18 May 2015 | 152.70 |
| 19 Jul. 2016 | 376.48 | 23 Sept. 2017 | 152.63 |
| 26 Nov. 2018 | 376.56 | 31 Jan. 2020 | 152.71 |
| 03 Apr. 2021 | 376.59 | 09 Jun. 2022 | 152.61 |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.90093 million km)?**

- No. The maximum difference is 0.13 million km.

## $D$) $Comet's\ 103P/Hartley\ 2\ Aphe-LAEC\ \&\ Peri-LAEC$ $("aphelion"\ \&\ "perihelion")$

Comet 103P/Hartley 2 Peri-LAEC on 05 Jan. 2021 at 248.78 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±1.467802 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±1.467802 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±1.467802 million km |
|---|---|---|---|
| 18 Apr. 2017 | 888.44 | 05 Jan. 2021 | 248.78 |
| 07 Sep. 2024 | 885.92* | 27 Apr. 2028 | 211.35* |
| 07 Sep. 2031 | 856.18* | 23 Jan. 2035 | 210.85 |
| 24 Jun. 2038 | 863.87* | 09 Dec. 2041 | 222* |
| 25 May 2045 | 866.01* | 17 Nov. 2048 | 223.23 |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±1.467802 million km)?**

- Yes. The maximum difference is 29.74 million km. Comet 103P/Hartley 2 is not a LAECsp (a natural satellite) of the Sun as it does not meet the criterion 2 of the Theorem 2. See also the "Huge difference between its Aphe-LAEC and Peri-LAEC" which is the criterion V of the additional criteria for classification. But, what the scientists say about Comet 103P/Hartley 2?

"*...Comet 103P/Hartley (Hartley 2) is a small, oval (or peanut) shaped comet -- its nucleus measures approximately one mile (1.6 kilometers) in diameter. It takes Hartley 2 about 6.47 years* ***to orbit the Sun*** *once. Hartley 2 last reached perihelion (closest approach to the Sun) in 2017.*

*Hartley 2 orbits the Sun within the asteroid belt, which lies between the orbits of Mars and Jupiter. Hartley 2 is a Jupiter-family comet. A Jupiter-family comet is defined as having an orbital period of less than 20 years and one that has been modified by close passages with the gas giant…"*

(https://solarsystem.nasa.gov/asteroids-comets-and-meteors/comets/103p-hartley-hartley-2/in-depth/)

**Comment:** Comet 103P/Hartley (Hartley 2) is not considered a LAECsp (a natural satellite) of the Sun because it does not meet criterion 2 of Theorem 2. Similarly, the "Asteroid 2020 CD3" (Earth's Minimoon) is not a LAECsp of the Earth but rather a LAECsp of the Sun, as it orbits the Sun instead of the Earth. Similarly, the Comet 103P/Hartley (Hartley 2) does not orbit the Sun, but rather another planet. We will need to identify which planet it is."

## $E$) $\boldsymbol{Asteroid's\ 2020\ DK\ Aphe - LAEC\ \&\ Peri - LAEC}$ ("$\boldsymbol{aphelion}$" & "$\boldsymbol{perihelion}$")

Asteroid's 2020 DK Peri-LAEC on 04 Jan. 2018 at 51.66 million km, so, the maximum difference between its Aphe-LAEC (from Aphe-LAEC to Aphe-LAEC) & its Peri-LAEC (from Peri-LAEC to Peri-LAEC), must not be greater than ±0.304794 million km.

| Date that LAECsp was on its Aphe-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Aphe-LAEC, over ±0.304794 million km | Date that LAECsp was on its Peri-LAEC | Distance of the LAECsp from its LAECs in million km * huge difference with previous Peri-LAEC, over ±0.304794 million km |
|---|---|---|---|
| | | 04 Jan. 2013 | 51.66 |
| 18 Apr. 2013 | 154.61 | 01 Aug. 2013 | 51.66 |
| 14 Nov. 2013 | 154.60 | 26 Feb. 2014 | 51.67 |
| 11 Jun. 2014 | 154.62 | 23 Sep. 2014 | 51.67 |

**Is there a big difference between two Aphe-LAEC or Peri-LAEC (over ±0.304794 million km)?**
- No. The maximum difference is 0.02 million km.

Comment: This celestial object is a candidate for being classified as a "Planet," and I intend to investigate further to determine if it meets the remaining criteria. If it does, it will be the "Planet" (or more precisely, the LAECsp - the natural satellite of the Sun) that orbits at the closest distance to the Sun. This hypothesis is significant enough to warrant further examination of the object's qualifications based on the remaining criteria.

## 1) *Checking for the* 10 *Points* (*every* 3 *hours*)

**Note:** The tables were long so, I'll present you only the results to check them later by yourself if you wish.

### *I. Group A* (*Points No*10, *No*1 – *Aphe* − *LAEC* − *and No*2)

| Points | Date | Time | Distance from the Sun in million km |
|---|---|---|---|
| No10 | 18/4/13 | 03:00:00 | 154.60 |
| No1 | 18/4/13 | 06:00:00 | 154.61 |
| No2 | 19/4/13 | 18:00:00 | 154.60 |

### *II. Group B* (1*st Max and Points No*3 *and No*4)

| Points | Date | Time | Distance from the Sun in million km |
|---|---|---|---|

| | | | |
|---|---|---|---|
| 1st Max<br><br>(-0.23 on the 3rd column) | 14/7/13 | 15:00:00 | 72.71 |
| No3<br><br>(Here manifests the rapid decrease; from -0.23 goes to -0.21 – which is the -0.02 difference that we expect to see after the 1st Max) | 16/7/13 | 03:00:00 | 70.08 |
| No4 | 16/7/13 | 06:00:00 | 69.86 |

## *III. Group C (Points No5, No6 – Peri – LAEC – and No7)*

| Points | Date | Time | Distance from the Sun in million km |
|---|---|---|---|
| No5 | 01/8/13 | 03:00:00 | 51.67 |
| No6 | 1/8/13 | 06:00:00 | 51.66 |
| No7 | 5/10/89 | 18:00:00 | 51.67 |

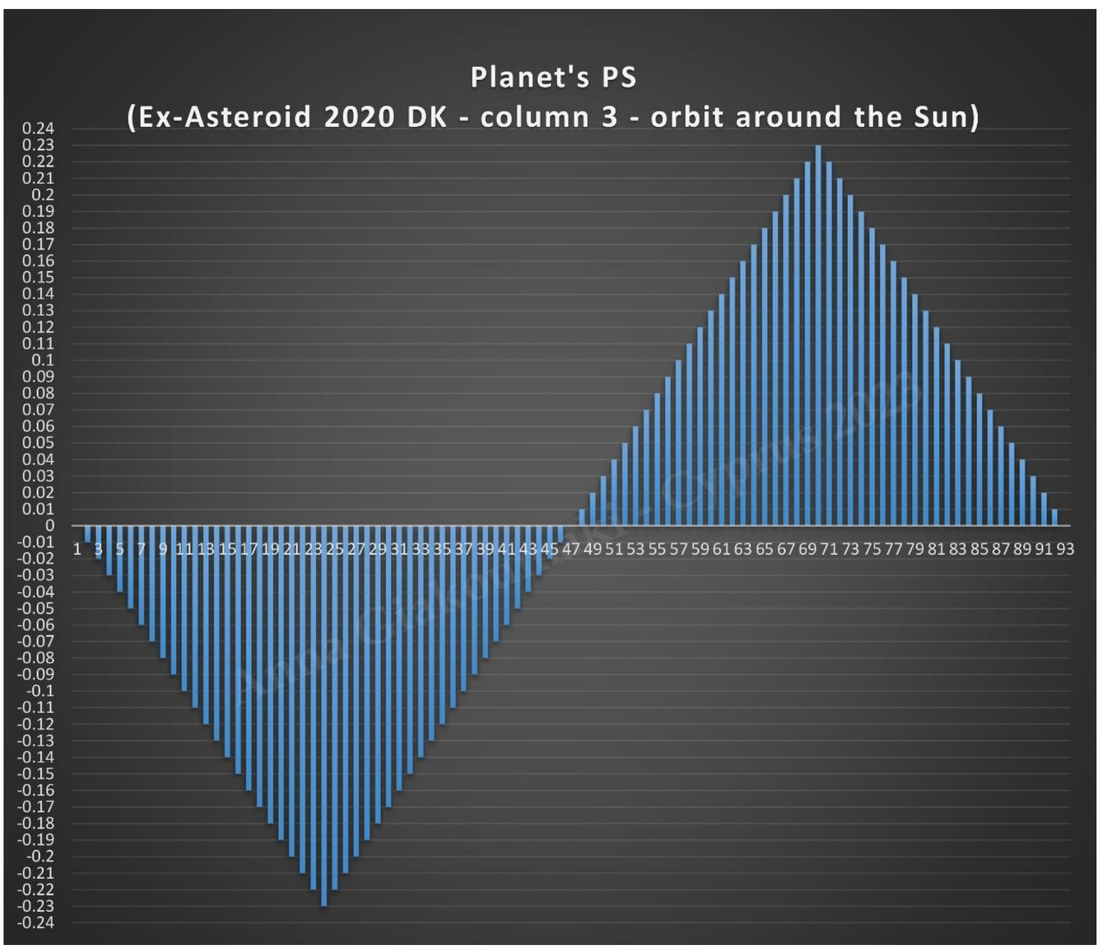
## *IV. Group D (2nd Max and Points No8 and No9)*

| Points | Date | Time | Distance from the Sun in million km |
|---|---|---|---|
| 2nd Max<br><br>(+0.23 on the 3rd column) | 25/8/13 | 18:00:00 | 84.20 |
| No8 | 26/8/13 | 06:00:00 | 85.07 |

| | | | |
|---|---|---|---|
| (Here manifests the rapid decrease; from +0.23 goes to +0.21 – which is the -0.02 difference that we expect to see after the 2nd Max) | | | |
| No9 | 26/8/20 | 09:00:00 | 85.29 |

## 1) PS PLANET (*ex – Asteroid* 2020 *DK – orbit around the Sun*)

### *I*) *PS's Orbit Chart around the Sun*



## ***II) PS's Orbit Chart around another"Sun" (excluded)***

## ***III) PS's Orbit Pattern around the Sun***

**Pattern:** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, **-0.23 (max)**, -0.22, -0.21, -0.20, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, **0.23 (max)**, 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**.

## ***IV) PS's Four Quadrants on its Orbit around the Sun***

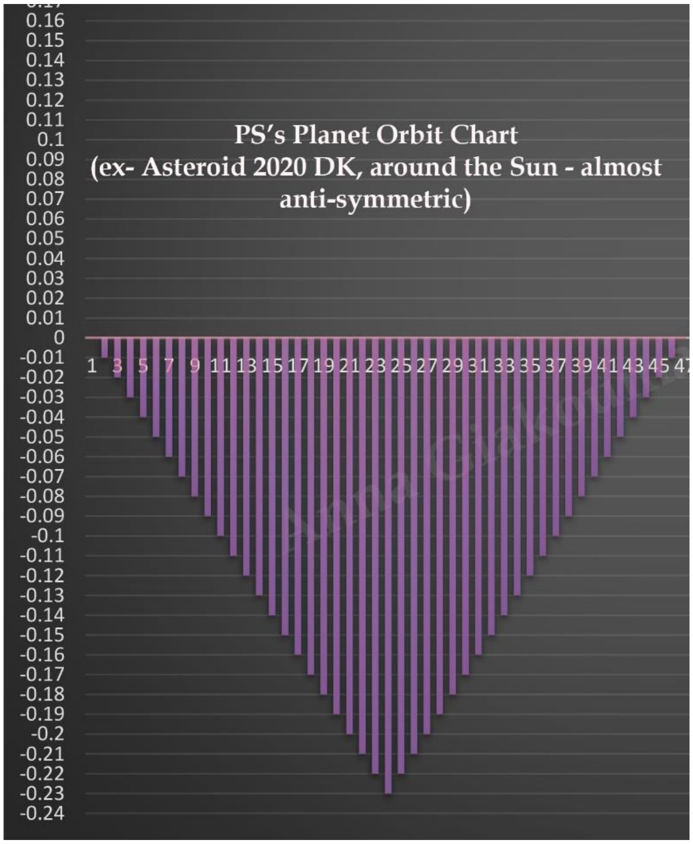
*"...The orbit of a natural "Satellite" around its natural "Sun", is divided into four quadrants, where the first and third, and the second and fourth (in the case of anti-symmetry) are the same and have the same values on the number line..."*

***1st quadrant*:** **0**, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, **-0.23 (max)**

***2nd quadrant:*** **-0.23 (max)**, -0.22, -0.21, -0.20, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, **0**

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, **0.23 (max)**

***4th quadrant:*** **0.23 (max)**, 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, **0**




*And this is the chart with the PS's (almost) anti-symmetry*

With blue, the period from "Aphelion" to "Perihelion" and with red the period from "Perihelion" to "Aphelion"(the second half, flipped vertically and horizontally)

## *V) PS's "Aphelion" and "Perihelion" has not huge difference*

The Perihelion of PS is about 51.66 million km.

The Aphelion of PS is about 154.61 million km

## *VI) The Prediction of the full Orbit Pattern just by one quadrant*

Let's say that we have the 3rd quadrant and by this, we have to predict the AG's Full Orbit Pattern

***3rd quadrant:*** **0**, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, **0.23 (max)**

***Predicting its Orbit Pattern based on the quadrant we have:***

**0 (Peri-LAEC), 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23 (max),** 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0 (Aphe-LAEC), -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, -0.23 (max), -0.22, -0.21, -0.20, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0 (Peri-LAEC).

***Are same the results of this prediction with the Pattern we found on additional criterion iii?***

- **Yes**.

### *VII. Checking the 9 more additional criteria about the LAECsp's Pattern of Orbit for more detailed analysis. Has AG's Pattern of Orbit these characteristics?*

---

j) A 0 (zero) sequence when the natural satellite is at its Aphe-LAEC and its Peri-LAEC.

- **Yes**. Are 0 both.

k) Nearly always before entering the sequences of the Aphe-LAEC and the Peri-LAEC, we observe a noticeable decrease in speed - when we examine it under smaller units of time, we see in the third column a decrease of 0.01 even if at the max of the orbit, had a difference of 5.43.

- **Yes.** Are 0.01 and 0 (the previous and the Aphe-LAEC) & -0.01 and 0 (the previous and the Peri-LAEC sequences), when its extrema are -0.23 & 0.23.

l) After the 0 sequence at Aphe-LAEC, we see a -0.01 or -0.1 sequence (with negative sign) that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, -0.01, -0.02, -0.03, ..., max)

- **Yes**. Is -0.01.

m) After the 1st max and up to 0 (zero of Peri-LAEC), we see gradual decrease by 0.01 again (e.g. -0.03, -0.02, -0.01, 0)

- **Yes**. After the 1st max -0.23, we see the -0.22.

n) From 0 (zero) of Peri-LAEC, we see a 0.01 or a 0.01 sequence again but this time has positive sign that it will have a gradual increment by 0.01 (or 0.1) up to the max (e.g. 0, 0.01, 0.02, 0.03, ..., max)

- **Yes**. Is 0.01.

o) After the 2nd max and up to 0 (zero of Aphe-LAEC), we see gradual decrease by 0.01 again (e.g. 0.03, 0.02, 0.01, 0)

- **Yes**. After the 2nd max 0.23, we see the 0.22.

p) The two extrema are equal but opposite in sign.

- **Yes**, -0.23 & 0.23.

q) The 1st and the 3rd quadrant are equal but opposite in sign. They both start from 0 (zero) and end up to the max with same gradual increment of the Orbital Speed.

- **Yes**.

**1st quadrant:** 0, -0.01, -0.02, -0.03, -0.04, -0.05, -0.06, -0.07, -0.08, -0.09, -0.10, -0.11, -0.12, -0.13, -0.14, -0.15, -0.16, -0.17, -0.18, -0.19, -0.20, -0.21, -0.22, -0.23 (max)
**3rd quadrant:** 0, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.20, 0.21, 0.22, 0.23 (max)

r) The 2nd and the 4th quadrant are equal but opposite the sign. They both start from the max and end up to the 0 (zero) with same gradual decrease of the Orbital Speed.

- **Yes**.

**2nd quadrant:** -0.23 (max), -0.22, -0.21, -0.20, -0.19, -0.18, -0.17, -0.16, -0.15, -0.14, -0.13, -0.12, -0.11, -0.10, -0.09, -0.08, -0.07, -0.06, -0.05, -0.04, -0.03, -0.02, -0.01, 0

**4th quadrant:** 0.23 (max), 0.22, 0.21, 0.20, 0.19, 0.18, 0.17, 0.16, 0.15, 0.14, 0.13, 0.12, 0.11, 0.10, 0.09, 0.08, 0.07, 0.06, 0.05, 0.04, 0.03, 0.02, 0.01, 0

etc...

The PS Planet, formerly known as asteroid 2020 DK, is LAECsp (a natural satellite) of the Sun that satisfies the criteria for celestial objects classified as "planets" within our solar system. As such, it can be considered a "planet." It is now the second closest "planet" to the Sun, after Mercury, with a perihelion of approximately 51.67 million km. This discovery raises important questions regarding the number of such objects that meet the strict criteria for "planets" within our solar system, and how we can accurately classify them.

One significant question is how many celestial objects within our solar system strictly meet the criteria for classification as a "planet." This includes asteroids, dwarf planets, comets, and others. In order to gain a comprehensive understanding of the composition of our solar system, it is imperative to identify all celestial objects that meet the strict criteria of Theorem 2 and the supplementary criteria for the classification of celestial objects as LAECsps. However, this is no small feat, as it is likely that there exists a vast number of such objects. Therefore, it is necessary to apply the rigorous criteria of Theorem 2 to determine just how many of these objects exist and to endeavor to create an accurate list of them.

Another critical question is how identifying these celestial objects as LAECsps of the Sun will shape the new map of our solar system. Once classified, we must determine how to classify these objects without creating a chaotic situation.

Finally, we must consider the impact of classifying all these celestial objects that meet the strict criteria for "planets" within our solar system. If we do so, **what impact** will it have on our understanding of the solar system, and **why is this knowledge necessary**?

# *PART IX*

## *Reasons why the identification and classification, as well as the taxonomy, of celestial objects is considered urgent.*

There are many reasons why the identification, classification, and taxonomy of celestial objects in our solar system are urgently needed, but the following two are the most important. We need to identify "what" we are dealing with for:

## 1) *Safety reasons*

Given that all celestial objects that meet the strict criteria of Theorem 2 and the additional criteria are of the same nature (in other words, they can become a "moon" of a "planet" or attract smaller celestial objects that will come into their path and acquire "moons", rings, etc.), their identification as LAECsp (as a natural satellite) of the Sun or another "Sun" (e.g., another planet) is necessary, as it can provide more accurate information about the orbits that these celestial objects will follow and the potential gravitational interactions they will have with other celestial bodies, as well as the potential impacts on another celestial object. This identification is crucial for understanding the dynamics of the solar system and other planetary systems.

## 2) *Better understanding*

Understanding the structure and function of a system such as our solar system helps us to gain a broader understanding of nature itself, as well as our own nature, and expands the horizons of research. In my next book, I will analyze strictly and with numerous examples how the critical Point No3 (the 1 Point out of the 10 important Points) is directly related to the development of a "habitable atmosphere," the development of a "magnetosphere," the distance at which "moons" orbit around a "planet," the distance of rings, the orbit of a "planet/moon/satellite" around its "sun," etc., about which I could not have spoken earlier if I did not first prove to you that "these 10 important points exist." As this observation has shown, these 10 important points exist, as do very specific patterns and strict criteria based on numbers and mathematics that we can use to examine the nature of celestial objects and classify them - to give them their real position in our solar system. All these celestial objects that belong to the category "LAECsp" - which are "natural satellites" in orbit around a "sun" - follow the same strict rules and this knowledge is of utmost importance for our safety and survival as a species.

On March 26, 2023, we read an article by Ben Morris in BBC News reporting that an asteroid capable of destroying a city passed between the orbits of Earth and the Moon, fortunately missing both. This asteroid, named 2023 DZ2, was discovered one month prior. As predicted by scientists, it passed within 175,000km of Earth on Saturday after flying past the Moon. It is uncommon for such a large asteroid, estimated to be between 40 and 90 meters in diameter, to come so close to the planet. Astronomers consider it a once-in-a-decade event. Although there is no chance of this "city killer" striking Earth, its close approach provides a valuable opportunity for astronomers to increase their knowledge of asteroids. Richard Moissl, the European Space Agency's planetary defense chief, stated that preliminary data suggested 2023 DZ2 was "a scientifically interesting object," but more data is needed to determine its composition. Despite the asteroid's close pass of Earth, scientists have ruled it out as a threat to the planet during its expected return towards Earth's orbit in 2026. Additionally, a similarly sized asteroid, 2023 DW, was briefly given a one-in-432 chance of hitting Earth on Valentine's Day 2046. However, Moissl said 2023 DW is now expected to miss Earth by approximately 4.3 million km. Even if such an asteroid was determined to be heading towards Earth, we are no longer defenseless. NASA's Dart (Double Asteroid Redirection Test) spacecraft deliberately slammed into the pyramid-sized asteroid Dimorphos, altering its orbit around its parent asteroid, Didymos.

An intriguing question arises: to whose "sun" do the 2023 DZ2 and 2023 DW asteroids serve as natural satellites, and what happens if the orbit of the celestial body they orbit is disturbed? Will their own orbit remain unaffected, potentially causing a failure in the planetary defense prediction of the European Space Agency and posing significant risks?As we saw similarly in the case of Comet 103P/Hartley (Hartley 2), when we checked it against the strict criterion 2 of Theorem 2, it failed. This means that this celestial object is not a natural satellite of the Sun, but of another celestial object, presumably another planet, which it is gravitationally bound to and occasionally passes near the Sun. In simple terms, Comet 103P/Hartley (Hartley 2) "follows" another planet, as this "other planet" is in orbit around the

Sun, Comet 103P/Hartley (Hartley 2) is a natural satellite (or a "moon" as you could call it) of another planet. And the question is the same. If this "other planet" for any reason gets its orbit disturbed, won't it drag Comet 103P/Hartley (Hartley 2) along with it? And how can we know if the orbit of Comet 103P/Hartley (Hartley 2) will be affected if we believe that it orbits the Sun?

It cannot be disputed that a better understanding of the celestial objects we are dealing with will result in safer predictions. So, let us turn to the present.

So far, we have been accustomed to seeing "planets with moons and/or rings", "dwarf planets with moons", "asteroids with moons", "asteroids with rings", "moons with moons", "comets with periodic orbit", etc., and all these celestial objects should be emphasized as having significant differences in shape, size, composition, etc. However, they are all proven, and no one gives us a strict scientific explanation, mainly based on mathematics, about "how is it possible for a moon to have a moon? How is it possible for an asteroid to have moons or rings? Why do these celestial objects have the same characteristics since they are not planets?" The answer is simple. As it emerges from this observation, there are many celestial objects in our solar system that are exactly of the same nature as the official "Planets", and which share with them 100% the strict criteria of Theorem 2. If you want to refer to the natural satellites of the Sun as "Planets", then these celestial objects that I have shown you above, which are natural satellites of the Sun and share the strict criteria of Theorem 2 like all Planets, please call them "Planets" too, and indeed with the names I suggested to you. I know..., now I sound like the scientists and researchers who raised their voices in the past shouting "This is a Planet!" No gentlemen, that is not my goal. At the moment, I am more concerned than the scientists of the IAU, about whether so many celestial objects should be categorized as "planets" primarily of the Sun, or as "moons" of "planets", knowing that if a celestial object is categorized with its existing name as a "planet", or even if we give it a new name as I did above, it will create an absolutely chaotic and lengthy list, which will not be functional as we will not be able to find the celestial object within this list.

So, what do we do? This question tormented me for a long time. On the one hand, it is dangerous to ignore a celestial object that is of the same nature as a 'planet' for the reasons mentioned above. On the other hand, there are possibly hundreds - if not thousands - of such objects out there, and even if we gather a group of 1000 people to check them one by one for whether they meet the strict criteria of Theorem 2 and the supplementary criteria of classification, we will lose valuable time and there may be human errors - something very common due to the fatigue caused by analyzing long orbital periods. Also, even if we classify a celestial object as a LAECsp (e.g. of the Sun), will we leave it with its existing name - for example, those officially classified as 'asteroids' such as Ceres, Vesta, Pallas, etc., when we officially know that this celestial object is LAECsp, will we continue to call it an 'asteroid'? Logic says no. Is it necessary to identify these celestial objects as quickly as possible? Yes. How could we achieve this quickly, since even if we gather 1000 people to check all these celestial objects day and night for whether they meet the strict criteria of Theorem 2, we would still need thousands of hours to examine all celestial objects?

The only solution that comes to mind is to leverage technology by developing an artificial intelligence program that can take in all the data from the three stringent criteria of Theorem 2, as well as the supplementary criteria required for a celestial object to be classified as a LAECsp. Within a short time frame, we could verify every known celestial object and automatically check any newly discovered celestial objects for these criteria. Once we have identified which celestial objects are LAECsps, I suggest using a numerical system based on their size to classify them, which will prevent chaotic categorization while ensuring ease of use. Below is my proposed approach for taxonomy of celestial objects that meet the strict criteria of Theorem 2. In this way, large planets such as Jupiter, Saturn, Earth, Neptune, Venus, etc., will remain at the top of the list and will not be "lost" among the thousands of other objects - as would happen now, for example, with Saturn if celestial objects were classified based on names that start with the letter "S", a letter that is very common in the names of asteroids.

# *PART X*

## *Proposal O – Taxonomy of Celestial Objects*

Up to this moment, there exist dozens of lists with celestial objects that have specific (and often very complex) names, and from time to time we see re-classification of these objects, leading to their removal from one list and addition to another. This fact alone shows that the criteria for their classification so far are not strict, and that these chaotic lists we have today will continue to change, not because they will be enriched with NEW celestial objects being discovered, but because old celestial objects will be re-classified as something different from what we "thought" they were. Reducing the number of lists and tightening the criteria are considered necessary in order to easily classify and subsequently locate a celestial object within the list, as well as to prevent the need for reassessment and re-classification - to ensure that there is no doubt that it has been properly classified. Using the three strict criteria of Theorem 2, as well as the nine supplementary criteria (the additional criterion VII has nine sub-criteria, making a total of 21 very strict criteria based purely on numbers and mathematics), we can create a list whose celestial objects will almost never need to be re-classified, unless a LAECsp becomes gravitationally trapped in the field of another LAECsp. In simpler terms, if a smaller celestial object becomes a "moon" of a larger celestial object.

Given that the celestial objects that meet these strict criteria are numerous - something that you will observe for yourself - unfortunately, this list cannot include the existing names of these celestial objects. It certainly sounds more euphonious to refer to these celestial objects as Earth, Saturn, Jupiter, etc., but practically it would cause chaos, as dozens or hundreds of objects that meet the criteria of Theorem 2 (and are therefore of the same nature as a "planet") begin their names with the initials of our major planets, resulting in the "loss" of our major planets in this list. So, utilizing my gift for pattern recognition, I will tell you what I see when I look at our solar system.

When I look at our solar system, the first thing I notice is the celestial objects that orbit (e.g. the Sun, planets, moons, asteroids, dwarf planets, planetoids, submoons, comets) and exist within it for extended periods of time. On the other hand, there are celestial objects that do not orbit (e.g. meteors, etc.) and are only occasionally visible. The objects that we are able to classify (as we currently do) are those that belong to the first category of orbiting objects.

Focusing on the celestial objects within our solar system that interact with other celestial objects, I see only two categories. There is only one object that is a LAECs (which is the "sun" of the solar system and the largest celestial object in our solar system) and it does not orbit around any other celestial object in the solar system, but rather interacts directly with the core of our galaxy. The other category includes countless LAECsps (natural satellites) in orbit around either the LAECs or another LAECsp with a greater mass than itself (such as planets, asteroids, comets, dwarf planets, etc. orbiting around the sun, moons orbiting around planets, submoons orbiting around moons, etc.) and all of them meet the strict criteria of the Theorem 2. So, to summarize, we have only two categories of objects that orbit within a solar system: Only 1 LAECs which interacts directly with the core of the galaxy, and countless LAECsps that orbit either around the LAECs or around a larger LAECsp.

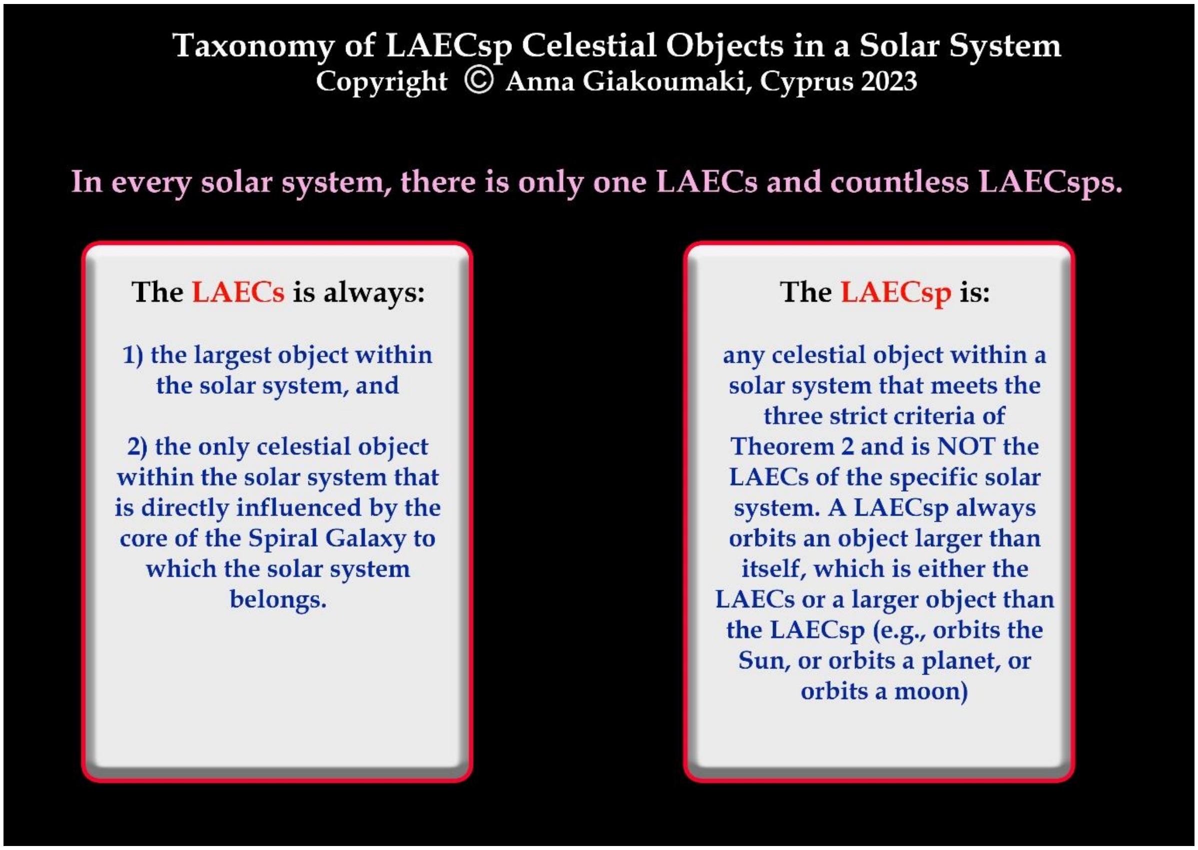
Therefore, since LAECs (the Sun) is the largest celestial object and does not orbit around any other celestial body, I will assign it the number **0** and focus on the second category of LAECsps that orbit around another celestial body in our solar system. The pattern I see in these celestial objects leads me to categorize them into three major categories:

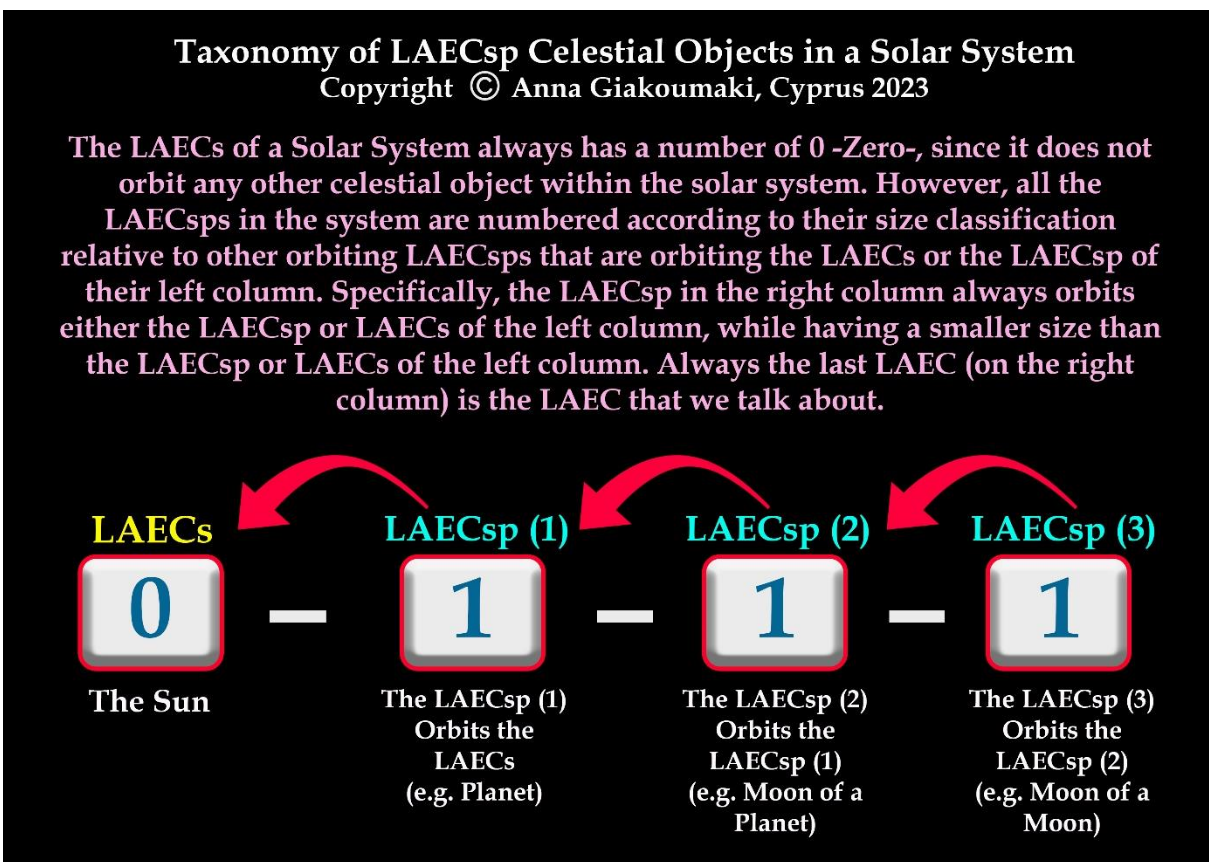
**1) LAECsp (1)** - all celestial objects that meet the strict 3 criteria of Theorem 2 and orbit around LAECs (e.g. planets, asteroids, comets, dwarf planets, etc.)

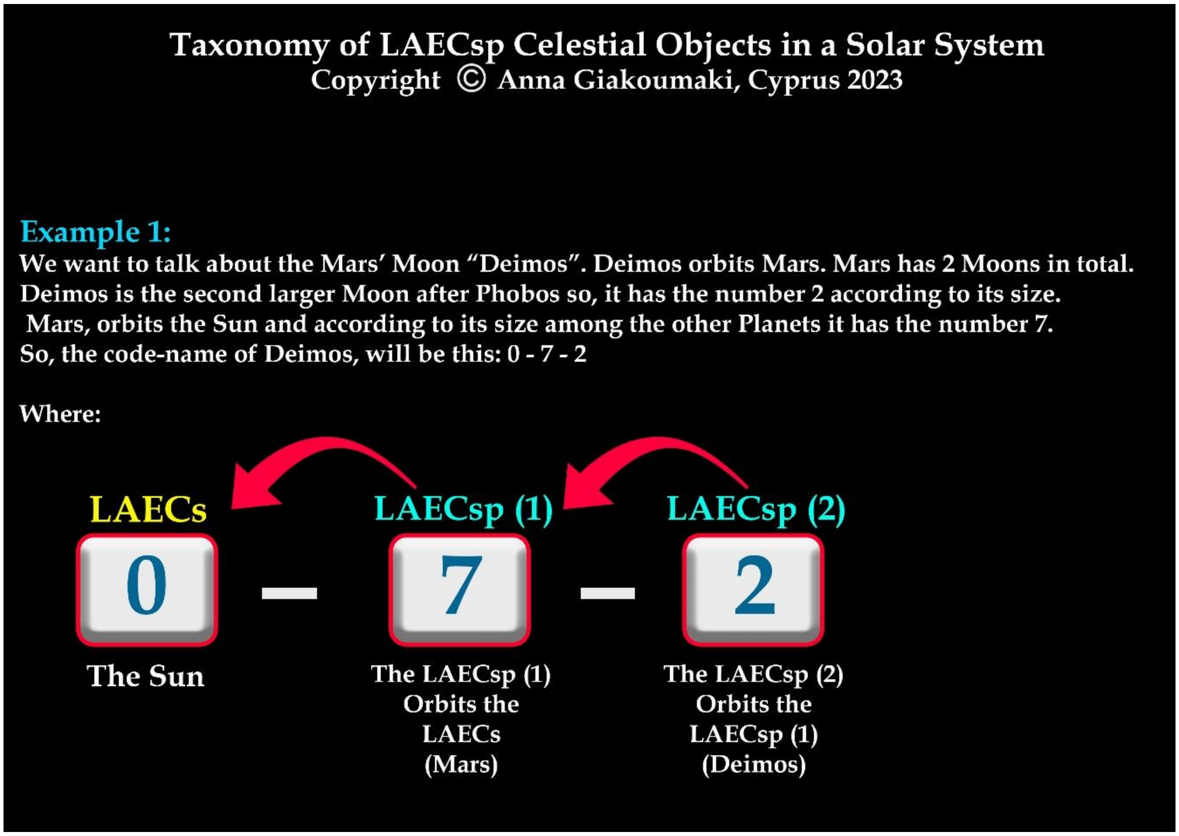
**2) LAECsp (2)** - all celestial objects that meet the strict 3 criteria of Theorem 2 and orbit around LAECsp (1) (e.g. moons that orbit around planets), and

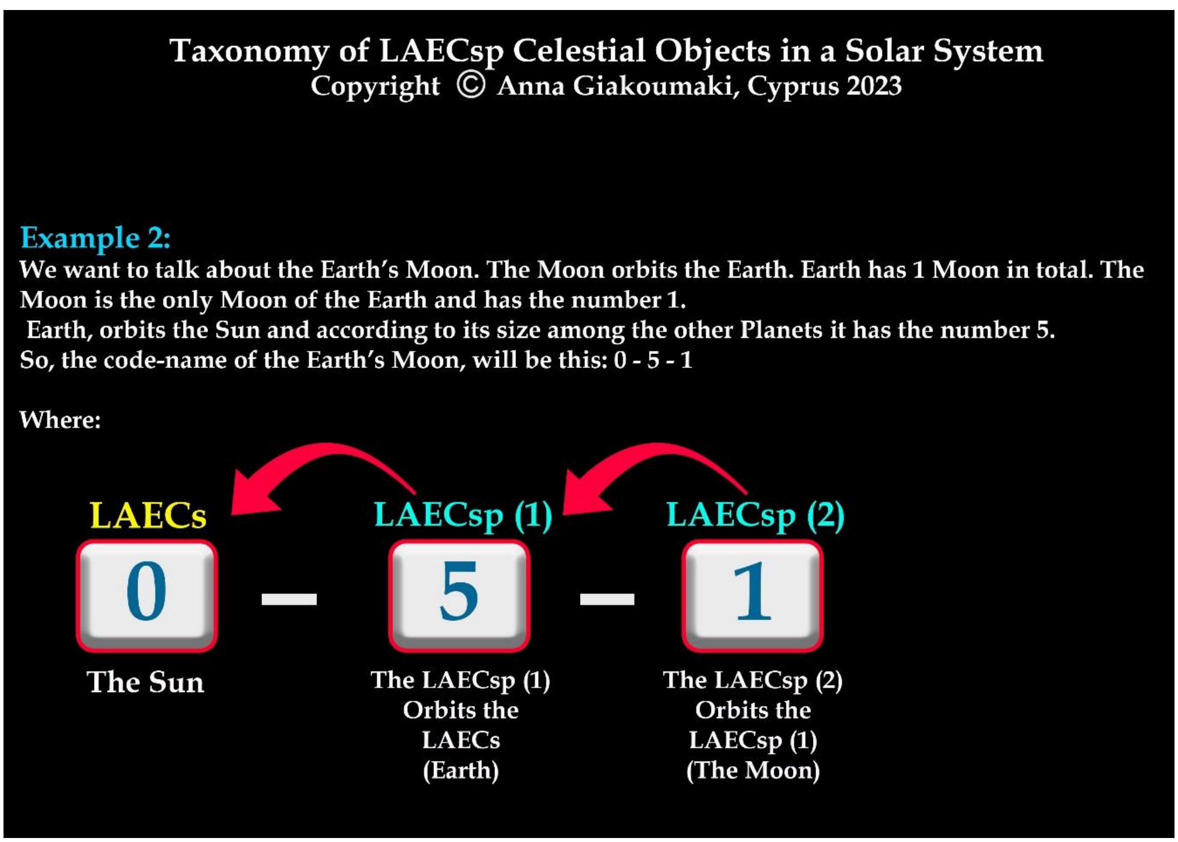
**3) LAECsp (3)** - all celestial objects that meet the strict 3 criteria of Theorem 2 and orbit around LAECsp (2) (e.g. submoons that orbit around moons, etc.).

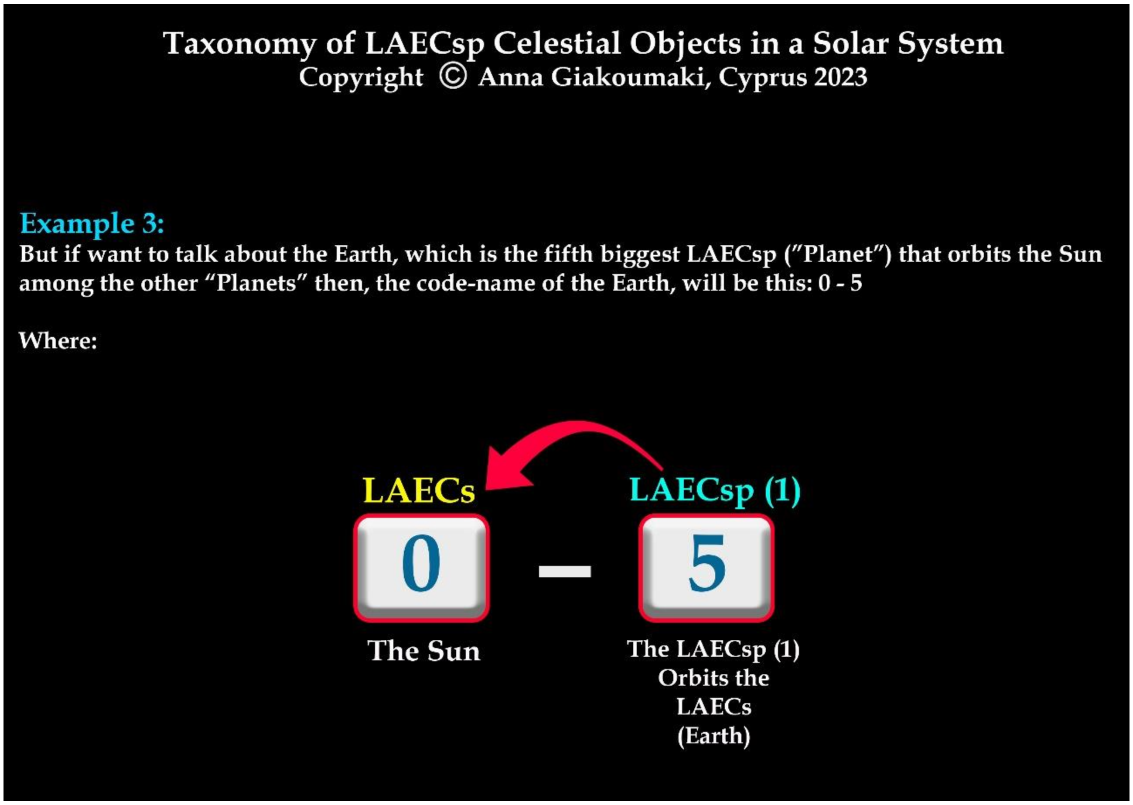
Each celestial object has a specific size that places it as $1^{st}$, $2^{nd}$, $3^{rd}$, etc. in its category. Therefore, for practical reasons, I replace the names with numbers based on the size of each celestial object. I present to you the following graphs on how an infinite number of celestial objects could be classified with absolute order and without "losing" our major planets within a chaotic list.

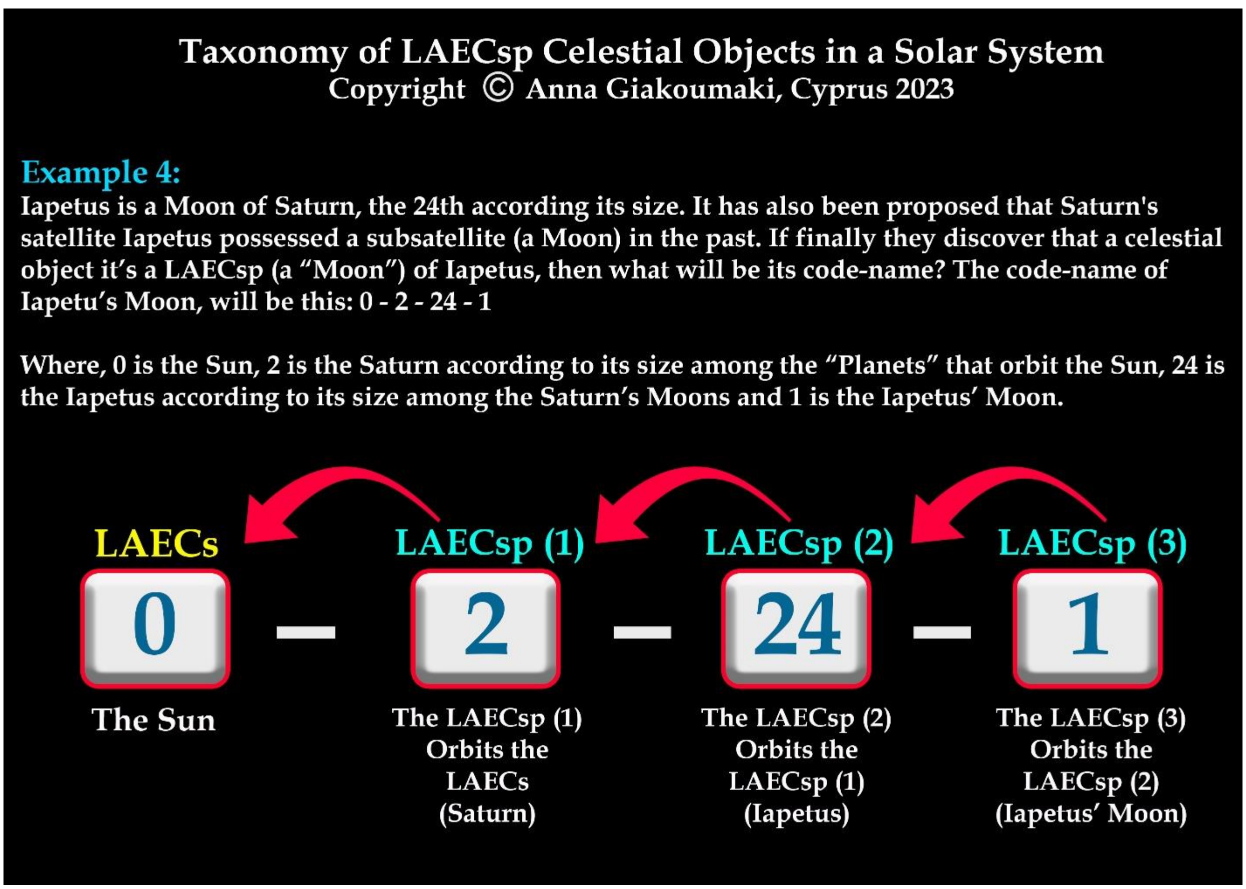

Taxonomy of LAECsp Celestial Objects in a Solar System
Copyright © Anna Giakoumaki, Cyprus 2023
In every solar system, there is only one LAECs and countless LAECsps.
The LAECs is always:
1) the largest object within the solar system, and
2) the only celestial object within the solar system that is directly influenced by the core of the Spiral Galaxy to which the solar system belongs.
The LAECsp is:
any celestial object within a solar system that meets the three strict criteria of Theorem 2 and is NOT the LAECs of the specific solar system. A LAECsp always orbits an object larger than itself, which is either the LAECs or a larger object than the LAECsp (e.g., orbits the Sun, or orbits a planet, or orbits a moon)


Taxonomy of LAECsp Celestial Objects in a Solar System
Copyright © Anna Giakoumaki, Cyprus 2023
The LAECs of a Solar System always has a number of 0 -Zero-, since it does not orbit any other celestial object within the solar system. However, all the LAECsps in the system are numbered according to their size classification relative to other orbiting LAECsps that are orbiting the LAECs or the LAECsp of their left column. Specifically, the LAECsp in the right column always orbits either the LAECsp or LAECs of the left column, while having a smaller size than the LAECsp or LAECs of the left column. Always the last LAEC (on the right column) is the LAEC that we talk about.
LAECs
LAECsp (1)
LAECsp (2)
LAECsp (3)
0
1
1
1
The Sun
The LAECsp (1) Orbits the LAECs (e.g. Planet)
The LAECsp (2) Orbits the LAECsp (1) (e.g. Moon of a Planet)
The LAECsp (3) Orbits the LAECsp (2) (e.g. Moon of a Moon)


Taxonomy of LAECsp Celestial Objects in a Solar System
Copyright © Anna Giakoumaki, Cyprus 2023
Example 1:
We want to talk about the Mars' Moon "Deimos". Deimos orbits Mars. Mars has 2 Moons in total.
Deimos is the second larger Moon after Phobos so, it has the number 2 according to its size.
Mars, orbits the Sun and according to its size among the other Planets it has the number 7.
So, the code-name of Deimos, will be this: 0 - 7 - 2
Where:
LAECs
LAECsp (1)
LAECsp (2)
0
7
2
The Sun
The LAECsp (1) Orbits the LAECs (Mars)
The LAECsp (2) Orbits the LAECsp (1) (Deimos)


Taxonomy of LAECsp Celestial Objects in a Solar System
Copyright © Anna Giakoumaki, Cyprus 2023
Example 2:
We want to talk about the Earth's Moon. The Moon orbits the Earth. Earth has 1 Moon in total. The
Moon is the only Moon of the Earth and has the number 1.
Earth, orbits the Sun and according to its size among the other Planets it has the number 5.
So, the code-name of the Earth's Moon, will be this: 0 - 5 - 1
Where:
LAECs
LAECsp (1)
LAECsp (2)
0
5
1
The Sun
The LAECsp (1) Orbits the LAECs (Earth)
The LAECsp (2) Orbits the LAECsp (1) (The Moon)


Taxonomy of LAECsp Celestial Objects in a Solar System
Copyright © Anna Giakoumaki, Cyprus 2023
Example 3:
But if want to talk about the Earth, which is the fifth biggest LAECsp ("Planet") that orbits the Sun among the other "Planets" then, the code-name of the Earth, will be this: 0 - 5
Where:
LAECs
LAECsp (1)
0
5
The Sun
The LAECsp (1) Orbits the LAECs (Earth)


Taxonomy of LAECsp Celestial Objects in a Solar System
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Example 4:
Iapetus is a Moon of Saturn, the 24th according its size. It has also been proposed that Saturn's satellite Iapetus possessed a subsatellite (a Moon) in the past. If finally they discover that a celestial object it's a LAECsp (a "Moon") of Iapetus, then what will be its code-name? The code-name of Iapetu's Moon, will be this: 0 - 2 - 24 - 1
Where, 0 is the Sun, 2 is the Saturn according to its size among the "Planets" that orbit the Sun, 24 is the Iapetus according to its size among the Saturn's Moons and 1 is the Iapetus' Moon.
LAECs
LAECsp (1)
LAECsp (2)
LAECsp (3)
0
2
24
1
The Sun
The LAECsp (1) Orbits the LAECs (Saturn)
The LAECsp (2) Orbits the LAECsp (1) (Iapetus)
The LAECsp (3) Orbits the LAECsp (2) (Iapetus' Moon)

## *Advantages of such a taxonomical system*

Advantages of such a taxonomical system are numerous. First and foremost, it provides a clear and organized way to categorize celestial objects within our solar system based on their size and orbit. A clear and organized classification system such as the one described can greatly aid astronomers and scientists in their study and understanding of the celestial objects in our solar system. By providing a consistent and logical framework for categorizing these objects based on size and orbit, it can help identify patterns and relationships between them and avoid confusion caused by different naming conventions.

Furthermore, the classification system can facilitate safer predictions about potentially hazardous objects, which is essential for protecting the Earth from possible impacts. It is a valuable tool for advancing our knowledge and exploration of the solar system, and for ensuring that no significant celestial object goes unnoticed or overlooked.

## Epilogue

In conclusion, the classification and taxonomy of celestial objects is crucial for our understanding of the universe and the relationships between its many components. With the development of new technologies and the refinement of observation methods, we continue to discover and study celestial objects that challenge our current understanding and expand our knowledge.

The establishment of a clear and organized classification system, such as the one proposed here, allows us to better categorize and study these objects, as well as identify patterns and relationships between them. This is particularly important for the study of our own solar system, where a consistent naming convention and classification system is essential for safe and accurate predictions about potential hazards.

As we continue to explore and study the universe, it is important to remember that our classification and taxonomy systems are not static, but rather must evolve and adapt to new discoveries and insights. By remaining open to new ideas and observations, we can continue to expand our knowledge and deepen our understanding of the universe around us.

## Acknowledgements

I would like to thank Prof. G. E. Karniadakis of Brown University for helpful discussions and for editing parts of the book.

## Summary

This groundbreaking book challenges conventional wisdom by uncovering and revealing the extraordinary similarities among diverse celestial objects within our solar system. Through a meticulous examination of various planets, moons, asteroids, and more, it unveils a new paradigm that redefines our understanding of solar system classification.

By subjecting numerous celestial objects to rigorous analysis, the book demonstrates that they are all "Natural Satellites" of a "Natural Sun" and all adhere to the same three fundamental criteria established by Theorem 2. In addition, it identifies 18 additional strict conditions that these objects must meet, akin to the criteria applied to known planets. These findings prompt a reevaluation of existing classifications and highlight the need to recognize the shared nature of these celestial entities.

The implications of these discoveries are profound. The conventional approach of classifying celestial objects based solely on their mass, size, or composition, etc. fails to capture the underlying similarities among them. Through this revolutionary work, the book challenges this outdated perspective and paves the way for a new

classification system that accurately reflects the intrinsic connections between these diverse objects.

Drawing on the remarkable similarities revealed by the research, the book proposes a novel taxonomical framework that categorizes celestial objects based on their specific characteristics. It introduces three major categories: LAECsp (1), encompassing celestial objects directly orbiting the Sun; LAECsp (2), comprising objects orbiting LAECsp(1); and LAECsp (3), representing objects orbiting LAECsp (2). Within each category, objects are assigned numerical designations based on their size, ensuring a logical and organized classification system.

By embracing this groundbreaking classification system, astronomers and researchers can deepen their understanding of the solar system and unlock new insights into celestial dynamics. The book underscores the importance of recognizing these shared characteristics for advancing scientific exploration and making accurate predictions about potential hazards.

In conclusion, this pioneering book challenges established notions and brings to light the extraordinary similarities among celestial objects within our solar system. By revealing these hidden connections and proposing a revised classification system, it revolutionizes our understanding of the universe and opens up new avenues for scientific exploration.

## Discussion

The revelations presented in this book regarding the remarkable similarities among celestial objects within our solar system have profound implications for our understanding of the universe. The discovery that diverse celestial entities, despite their differences in mass, size, and composition, conform to the same set of rigorous criteria challenges existing classification systems and calls for a paradigm shift in our approach to solar system taxonomy.

The traditional method of categorizing celestial objects based solely on observable features fails to capture the fundamental connections between these entities. By examining numerous celestial objects and subjecting them to rigorous analysis, this research highlights the necessity of revising our current classification system to reflect the shared nature of these objects. The proposed taxonomical framework, based on specific criteria and numerical designations, provides a logical and organized approach that preserves the intrinsic relationships between these entities.

The implications of this work extend beyond the realm of taxonomy. Understanding the shared characteristics among celestial objects enhances our ability to make safer predictions about potential hazards, such as the trajectory of asteroids and the potential for collisions with Earth. By recognizing the underlying patterns and relationships between celestial objects, astronomers and scientists can refine their models and improve our ability to mitigate the risks posed by these objects.

## Appendices

## Appendix A

**Step 1:**

I'll create a table with 5 columns for **Venus**. In the first two columns, I'll insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Venus' distance from the Sun in million km

**Step 2:**

I'll find these data for the next 3 columns:

- Column N03: The difference of the Venus' distance from the Sun from the previous day
- Column No4: The Sequence of the difference (it's also related to the Orbital Speed)
- Column N05: The 10 Points & comments

| Date 2020 | The Venus' distance from the Sun in million km | The difference of the Venus' distance from the Sun from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| July | | | | |
| 1 | | - | | |
| 2 | 108.92 | - | | |
| **3** | **108.93** | **+0.01 (Enters into Aphelion Zone)** | | |
| 4 | 108.93 | 0 | | |
| 5 | 108.93 | 0 | | |
| **6** | **108.94** | **+0.01 (Aphelion)** | | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 7 | 108.94 | 0 | 0 | |

| | | | | |
|---|---|---|---|---|
| 8 | 108.94 | 0 | | |
| 9 | 108.94 | 0 | | |
| 10 | 108.94 | 0 | | |
| 11 | 108.94 | 0 | | |
| 12 | 108.94 | 0 | | |
| 13 | 108.94 | 0 | | |
| 14 | 108.94 | 0 | | |
| 15 | 108.94 | 0 | | |
| **16** | **108.93** | **-0.01 (Exits the Aphelion Zone)** | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 17 | 108.93 | 0 | | |
| 18 | 108.92 | -0.01 | | |
| 19 | 108.92 | 0 | | |
| 20 | 108.91 | -0.01 | | |
| 21 | 108.91 | 0 | | |
| 22 | 108.90 | -0.01 | | |
| 23 | 108.90 | 0 | | |
| 24 | 108.89 | -0.01 | -0.01 | |
| 25 | 108.88 | -0.01 | | |
| 26 | 108.87 | -0.01 | | |
| 27 | 108.86 | -0.01 | | |
| 28 | 108.85 | -0.01 | | |

| | | | | |
|---|---|---|---|---|
| 29 | 108.84 | -0.01 | | |
| 30 | 108.83 | -0.01 | | |
| 31 | 108.82 | -0.01 | | |
| August | | | | |
| 1 | 108.81 | -0.01 | | |
| 2 | 108.80 | -0.01 | | |
| 3 | 108.79 | -0.01 | | |
| 4 | 108.78 | -0.01 | | |
| 5 | 108.76 | -0.02 | | |
| 6 | 108.75 | -0.01 | | |
| 7 | 108.74 | -0.01 | | |
| 8 | 108.72 | -0.01 | | |
| 9 | 108.71 | -0.01 | | |
| 10 | 108.69 | -0.02 | | |
| 11 | 108.68 | -0.01 | | |
| 12 | 108.66 | -0.02 | | |
| 13 | 108.64 | -0.02 | | |
| 14 | 108.63 | -0.01 | | |
| 15 | 108.61 | -0.02 | | |
| 16 | 108.59 | -0.02 | | |
| 17 | 108.57 | -0.02 | | |
| 18 | 108.56 | -0.01 | | |
| 19 | 108.54 | -0.02 | -0.02 | |
| 20 | 108.52 | -0.02 | | |
| 21 | 108.50 | -0.02 | | |
| 22 | 108.48 | -0.02 | | |
| 23 | 108.46 | -0.02 | | |
| 24 | 108.44 | -0.02 | | |
| 25 | 108.42 | -0.02 | | |
| 26 | 108.41 | -0.01 | | |

| | | | | |
|---|---|---|---|---|
| 27 | 108.39 | -0.02 | | |
| 28 | 108.37 | -0.02 | | |
| 29 | 108.35 | -0.02 | | |
| 30 | 108.33 | -0.02 | | |
| 31 | 108.30 | **-0.03** | (max) | |
| September | | | | |
| 1 | 108.28 | -0.02 | -0.02 again | |
| 2 | 108.26 | -0.02 | | |
| 3 | 108.24 | -0.02 | | |
| 4 | 108.22 | -0.02 | | |
| 5 | 108.20 | -0.02 | | |
| 6 | 108.18 | -0.02 | | |
| 7 | 108.16 | -0.02 | | |
| 8 | 108.14 | -0.02 | | |
| 9 | 108.12 | -0.02 | | |
| 10 | 108.10 | -0.02 | | |
| 11 | 108.08 | -0.02 | | |
| 12 | 108.06 | -0.02 | | |
| 13 | 108.04 | -0.02 | | |
| 14 | 108.02 | -0.02 | | |
| 15 | 108.00 | -0.02 | | |
| 16 | 107.98 | -0.02 | | |
| 17 | 107.96 | -0.02 | | |
| 18 | 107.94 | -0.02 | | |
| 19 | 107.92 | -0.02 | | |
| 20 | 107.90 | -0.02 | | |
| 21 | 107.88 | -0.02 | | |
| 22 | 107.87 | -0.01 | **Here is the Anomaly, the rσ point. It should be** | **Point No3 or rσ (on d3):** Rapid |

| | | | | |
|---|---|---|---|---|
| | | | **a -0.03 sequence NOT -0.01** | change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 23 | 107.85 | -0.02 | | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 24 | 107.83 | -0.02 | -0.02 | |
| 25 | 107.81 | -0.02 | | |
| 26 | 107.79 | -0.02 | | |
| 27 | 107.78 | -0.01 | | |
| 28 | 107.76 | -0.02 | | |
| 29 | 107.74 | -0.02 | | |
| 30 | 107.73 | -0.01 | | |
| | | | | |
| October | | | | |
| 1 | 107.71 | -0.02 | | |
| 2 | 107.70 | -0.01 | | |
| 3 | 107.68 | -0.02 | | |
| 4 | 107.67 | -0.01 | | |
| 5 | 107.65 | -0.02 | | |
| 6 | 107.64 | -0.01 | | |
| 7 | 107.63 | -0.01 | | |
| 8 | 107.62 | -0.01 | | |

| | | | | |
|---|---|---|---|---|
| 9 | 107.60 | -0.02 | | |
| 10 | 107.59 | -0.01 | -0.01 | |
| 11 | 107.58 | -0.01 | | |
| 12 | 107.57 | -0.01 | | |
| 13 | 107.56 | -0.01 | | |
| 14 | 107.55 | -0.01 | | |
| 15 | 107.54 | -0.01 | | |
| 16 | 107.53 | -0.01 | | |
| 17 | 107.53 | 0 | | |
| 18 | 107.52 | -0.01 | | |
| 19 | 107.51 | -0.01 | | |
| 20 | 107.51 | 0 | | |
| 21 | 107.50 | -0.01 | | |
| 22 | 107.49 | -0.01 | | |
| 23 | 107.49 | 0 | | |
| 24 | 107.49 | 0 | | |
| 25 | 107.48 | -0.01 | | |
| 26 | 107.48 | 0 | | |
| 27 | 107.48 | 0 | | |
| 28 | 107.48 | 0 | | **Point No5 or LA (on d5):** Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| **29** | **107.47** | **-0.01 (Perihelion)** | | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun". |

| | | | | |
|---|---|---|---|---|
| | | | | Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 30 | 107.47 | 0 | | |
| 31 | 107.47 | 0 | | |
| November | | | | |
| 1 | 107.47 | 0 | | |
| 2 | 107.48 | +0.01 | | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 3 | 107.48 | 0 | | |
| 4 | 107.48 | 0 | | |
| 5 | 107.48 | 0 | | |
| 6 | 107.49 | +0.01 | | |
| 7 | 107.49 | 0 | | |
| 8 | 107.49 | 0 | | |
| 9 | 107.50 | +0.01 | | |
| 10 | 107.50 | 0 | | |
| 11 | 107.51 | +0.01 | | |
| 12 | 107.52 | +0.01 | | |
| 13 | 107.53 | +0.01 | | |
| 14 | 107.53 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 15 | 107.54 | +0.01 | +0.01 | |
| 16 | 107.55 | +0.01 | | |
| 17 | 107.56 | +0.01 | | |
| 18 | 107.57 | +0.01 | | |
| 19 | 107.58 | +0.01 | | |
| 20 | 107.59 | +0.01 | | |
| 21 | 107.60 | +0.01 | | |
| 22 | 107.61 | +0.01 | | |
| 23 | 107.63 | +0.02 | | |
| 24 | 107.64 | +0.01 | | |
| 25 | 107.65 | +0.01 | | |
| 26 | 107.67 | +0.02 | | |
| 27 | 107.68 | +0.01 | | |
| 28 | 107.70 | +0.02 | | |
| 29 | 107.71 | +0.01 | | |
| 30 | 107.73 | +0.02 | | |
| December | | | | |
| 1 | 107.74 | +0.01 | | |
| 2 | 107.76 | +0.02 | | |
| 3 | 107.77 | +0.01 | | |
| 4 | 107.79 | +0.02 | | |
| 5 | 107.81 | +0.02 | | |
| 6 | 107.83 | +0.02 | | |
| 7 | 107.84 | +0.01 | | |
| 8 | 107.86 | +0.02 | +0.02 | |
| 9 | 107.88 | +0.02 | | |
| 10 | 107.90 | +0.02 | | |
| 11 | 107.92 | +0.02 | | |
| 12 | 107.94 | +0.02 | | |
| 13 | 107.96 | +0.02 | | |

| | | | | |
|---|---|---|---|---|
| 14 | 107.98 | +0.02 | | |
| 15 | 107.99 | +0.01 | | |
| 16 | 108.01 | +0.02 | | |
| 17 | 108.03 | +0.02 | | |
| 18 | 108.05 | +0.02 | | |
| 19 | 108.07 | +0.02 | | |
| 20 | 108.10 | **+0.03** | (max) | |
| 21 | 108.12 | +0.02 | +0.02 | |
| 22 | 108.14 | +0.02 | | |
| 23 | 108.16 | +0.02 | | |
| 24 | 108.18 | +0.02 | | |
| 25 | 108.20 | +0.02 | | |
| 26 | 108.22 | +0.02 | | |
| 27 | 108.24 | +0.02 | | |
| 28 | 108.26 | +0.02 | | |
| 29 | 108.28 | +0.02 | | |
| 30 | 108.30 | +0.02 | | |
| 31 | 108.32 | +0.02 | | |
| **January '21** | | | | |
| 1 | 108.34 | +0.02 | | |
| 2 | 108.36 | +0.02 | | |
| 3 | 108.38 | +0.02 | | |
| 4 | 108.40 | +0.02 | | |
| 5 | 108.42 | +0.02 | | |
| 6 | 108.44 | +0.02 | | |
| 7 | 108.46 | +0.02 | | |
| 8 | 108.48 | +0.02 | | |
| 9 | 108.50 | +0.02 | | |
| 10 | 108.52 | +0.02 | | |

| | | | | |
|---|---|---|---|---|
| 11 | 108.53 | +0.01 The rε point | **Anomaly. It should be a +0.03 sequence NOT a +0.01 The rε point.** | **Point No8 or rε (on d8):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 12 | 108.55 | +0.02 | **The NM Point** +0.02 | **Point No9 or NM (on d9):** Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 13 | 108.57 | +0.02 | | |
| 14 | 108.59 | +0.02 | | |
| 15 | 108.61 | +0.02 | | |
| 16 | 108.62 | +0.01 | | |
| 17 | 108.64 | +0.02 | | |
| 18 | 108.66 | +0.02 | | |
| 19 | 108.67 | +0.01 | | |
| 20 | 108.69 | +0.02 | | |
| 21 | 108.70 | +0.01 | | |
| 22 | 108.72 | +0.02 | | |
| 23 | 108.73 | +0.01 | | |
| 24 | 108.75 | +0.02 | | |
| 25 | 108.76 | +0.01 | | |
| 26 | 108.77 | +0.01 | | |
| 27 | 108.79 | +0.02 | | |

| | | | | |
|---|---|---|---|---|
| 28 | 108.80 | +0.01 | +0.01 | |
| 29 | 108.81 | +0.01 | | |
| 30 | 108.82 | +0.01 | | |
| 31 | 108.83 | +0.01 | | |
| **February** | | | | |
| 1 | 108.84 | +0.01 | | |
| 2 | 108.85 | +0.01 | | |
| 3 | 108.86 | +0.01 | | |
| 4 | 108.87 | +0.01 | | |
| 5 | 108.88 | +0.01 | | |
| 6 | 108.89 | +0.01 | | |
| 7 | 108.90 | +0.01 | | |
| 8 | 108.90 | 0 | | |
| 9 | 108.91 | | | |
| 10 | 108.92 | | | |
| 11 | 108.92 | | | |
| 12 | 108.93 | | | |
| 13 | 108.93 | | | |
| 14 | 108.93 | | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |
| 15 | 108.94 | +0.01 **(Aphe-LAEC)** | | |
| 16 | 108.94 | 0 | 0 | |
| 17 | 108.94 | 0 | | |
| 18 | 108.94 | 0 | | |
| 19 | 108.94 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 20 | 108.94 | 0 | | |
| 21 | 108.94 | 0 | | |
| 22 | 108.94 | 0 | | |
| 23 | 108.94 | 0 | | |
| 24 | 108.94 | 0 | | |
| 25 | 108.94 | 0 | | |
| 26 | 108.93 | | | |
| 27 | 108.93 | | | |
| 28 | 108.93 | | | ….. |

# Appendix B

**Step 1:**

I'll create a table with 5 columns for Mercury. In the first two columns, I'll insert these data on the first 2 columns:

- Column N01: The date
- Column N02: The Mercury's distance from the Sun in million km

**Step 2:**

I'll find these data for the next 3 columns:

- Column N03: The difference of the Mercury's distance from the Sun from the previous day
- Column N04: The Sequence of the difference (it's also related to the Orbital Speed)
- Column N05: The 10 Points & comments

| Date 2019 | The Mercury's distance from the Sun in million km | The difference of the Mercury's distance from the Sun from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| | | (see the **Blue** numbers) | | |
| Dec. 25, '19 | 69.39 | 69.39 | | |
| 26 | 69.56 | 0.17 | | |
| 27 | 69.68 | 0.12 | | |
| 28 | 69.77 | 0.09 | | |
| 29 | 69.81 | 0.**0**4 | 0 | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 30 | 69.81 | **0** | 0 | |
| 31 | 69.77 | -0.**0**4 | 0 | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 2020 Jan. 1 | 69.69 | -0.**0**8 | 0 | |
| 2 | 69.57 | -0.**1**2 | -0.1 | |
| 3 | 69.4 | -0.**1**7 | -0.1 | |

| | | | | |
|---|---|---|---|---|
| 4 | 69.19 | -0.21 | -0.2 | |
| 5 | 68.95 | -0.24 | -0.2 | |
| 6 | 68.66 | -0.29 | -0.2 | |
| 7 | 68.33 | -0.33 | -0.3 | |
| 8 | 67.96 | -0.37 | -0.3 | |
| 9 | 67.55 | -0.41 | -0.4 | |
| 10 | 67.1 | -0.45 | -0.4 | |
| 11 | 66.62 | -0.48 | -0.4 | |
| 12 | 66.09 | -0.53 | -0.5 | |
| 13 | 65.53 | -0.56 | -0.5 | |
| 14 | 64.94 | -0.59 | -0.5 | |
| 15 | 64.31 | -0.63 | -0.6 | |
| 16 | 63.65 | -0.66 | -0.6 | |
| 17 | 62.95 | -0.7 | -0.7 | |
| 18 | 62.23 | -0.72 | -0.7 | |
| 19 | 61.48 | -0.75 | -0.7 | |
| 20 | 60.7 | -0.78 | -0.7 | |
| 21 | 59.9 | -0.8 | -0.8 | |
| 22 | 59.08 | -0.82 | -0.8 | |
| 23 | 58.24 | -0.84 | **-0.8** | |
| 24 | 57.39 | -0.85 | -0.8 | |
| 25 | 56.53 | -0.86 | -0.8 | |
| 26 | 55.66 | -0.87 | -0.8 | |
| 27 | 54.79 | -0.87 (max) | -0.8 | |
| 28 | 53.93 | -0.86 | -0.8 | **Point No3 or rσ (on d3):** Rapid change |

| | | | | |
|---|---|---|---|---|
| | | | | (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 29 | 53.07 | -0.86 | **-0.8** | |
| 30 | 52.23 | -0.84 | -0.8 | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 31 | 51.42 | -0.81 | -0.8 | |
| Febr. 1 | 50.63 | -0.79 | -0.7 | |
| 2 | 49.88 | -0.75 | -0.7 | |
| 3 | 49.17 | -0.71 | -0.7 | |
| 4 | 48.52 | -0.65 | -0.6 | |
| 5 | 47.93 | -0.59 | -0.5 | |
| 6 | 47.4 | -0.53 | -0.5 | |
| 7 | 46.95 | -0.45 | -0.4 | |
| 8 | 46.58 | -0.37 | -0.3 | |
| 9 | 46.3 | -0.28 | -0.2 | |
| 10 | 46.11 | -0.19 | **-0.1** | **Point No5 or LA (on d5):** Last point with attractive forces between the natural |

| | | | | |
|---|---|---|---|---|
| | | | | "Satellite" and its natural "Sun". |
| 11 | 46.01 | -0.1 | -0.1 | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 12 | 46.01 | 0 | 0 | |
| 13 | 46.11 | 0.1 | 0.1 | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 14 | 46.3 | 0.19 | 0.1 | |
| 15 | 46.58 | 0.28 | 0.2 | |
| 16 | 46.95 | 0.37 | 0.3 | |
| 17 | 47.4 | 0.45 | 0.4 | |
| 18 | 47.92 | 0.52 | 0.5 | |
| 19 | 48.51 | 0.59 | 0.5 | |
| 20 | 49.17 | 0.66 | 0.6 | |

| | | | | |
|---|---|---|---|---|
| 21 | 49.87 | 0.7 | 0.7 | |
| 22 | 50.62 | 0.75 | 0.7 | |
| 23 | 51.41 | 0.79 | 0.7 | |
| 24 | 52.23 | 0.82 | 0.8 | |
| 25 | 53.06 | 0.83 | 0.8 | |
| 26 | 53.92 | 0.86 | 0.8 | |
| 27 | 54.78 | 0.86 | 0.8 | |
| 28 | 55.65 | 0.87 | 0.8 | |
| 29 | 56.52 | 0.87 (max) | 0.8 | |
| 1-Mar | 57.38 | 0.86 | 0.8 | **Point No8 or rε (on d8):** Rapid change (decrease) on the “Satellite’s” Orbital speed and anomaly on the “Satellite’s” Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 2 | 58.23 | 0.85 | 0.8 | **Point No9 or NM (on d9):** Gradual decrease of the “Satellite’s Orbital speed” by point No9 up to point No10. |
| 3 | 59.07 | 0.84 | 0.8 | |
| 4 | 59.89 | 0.82 | 0.8 | |
| 5 | 60.69 | 0.8 | 0.8 | |

| | | | | |
|---|---|---|---|---|
| 6 | 61.47 | 0.78 | 0.7 | |
| 7 | 62.22 | 0.75 | 0.7 | |
| 8 | 62.94 | 0.72 | 0.7 | |
| 9 | 63.64 | 0.7 | 0.7 | |
| 10 | 64.3 | 0.66 | 0.6 | |
| 11 | 64.93 | 0.63 | 0.6 | |
| 12 | 65.53 | 0.6 | 0.6 | |
| 13 | 66.09 | 0.56 | 0.5 | |
| 14 | 66.61 | 0.52 | 0.5 | |
| 15 | 67.1 | 0.49 | 0.4 | |
| 16 | 67.54 | 0.44 | 0.4 | |
| 17 | 67.95 | 0.41 | 0.4 | |
| 18 | 68.32 | 0.37 | 0.3 | |
| 19 | 68.65 | 0.33 | 0.3 | |
| 20 | 68.94 | 0.29 | 0.2 | |
| 21 | 69.19 | 0.25 | 0.2 | |
| 22 | 69.4 | 0.21 | 0.2 | |
| 23 | 69.56 | 0.16 | 0.1 | |
| 24 | 69.69 | 0.13 | 0.1 | |
| 25 | 69.77 | 0.08 | 0 | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural “Satellite” and its natural “Sun”. |
| 26 | 69.81 | 0.04 | 0 | **(Peri-LAEC)** |
| 27 | 69.81 | 0 | | … |

# Appendix C

**Step 1:**

I'll create a table with 5 columns for **Mars**. In the first two columns, I'll insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Mars' distance from the Sun in million km

**Step 2:**

I'll find these data for the next 3 columns:

- Column No3: The difference of the Mars' distance from the Sun from the previous day
- Column No4: The Sequence of the difference (it's also related to the Orbital Speed)
- Column No5: The 10 Points & comments

| Date 2019 | The Mars' distance from the Sun in million km | The difference of the Mars' distance from the Sun from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| **23-Aug** | **249.24** | **0** | **0** | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". |

| | | | | |
|---|---|---|---|---|
| | | | | Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 24 | 249.24 | 0 | | |
| 25 | 249.24 | 0 | | |
| 26 | 249.24 | 0 | | |
| 27 | 249.24 | 0 | | |
| **28** | **249.23** | -0.01 | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 29 | 249.23 | 0 | | |
| 30 | 249.22 | -0.01 | | |
| 31 | 249.22 | 0 | | |
| **1-Sep** | **249.21** | -0.01 | **-0.01** | |
| 2 | 249.19 | -0.02 | | |
| 3 | 249.18 | -0.01 | | |
| 4 | 249.17 | -0.01 | | |
| 5 | 249.15 | -0.02 | | |
| 6 | 249.14 | -0.01 | | |
| 7 | 249.12 | -0.02 | -0.02 | |
| 8 | 249.1 | -0.02 | | |
| 9 | 249.08 | -0.02 | | |
| 10 | 249.06 | -0.02 | | |
| 11 | 249.03 | -0.03 | | |

| | | | | |
|---|---|---|---|---|
| 12 | 249.01 | -0.02 | | |
| 13 | 248.98 | -0.03 | -0.03 | |
| 14 | 248.95 | -0.03 | | |
| 15 | 248.92 | -0.03 | | |
| 16 | 248.89 | -0.03 | | |
| 17 | 248.86 | -0.03 | | |
| 18 | 248.82 | -0.04 | | |
| 19 | 248.78 | -0.04 | | |
| 20 | 248.75 | -0.03 | | |
| 21 | 248.71 | -0.04 | -0.04 | |
| 22 | 248.67 | -0.04 | | |
| 23 | 248.63 | -0.04 | | |
| 24 | 248.58 | -0.05 | | |
| 25 | 248.54 | -0.04 | | |
| 26 | 248.49 | -0.05 | -0.05 | |
| 27 | 248.44 | -0.05 | | |
| 28 | 248.39 | -0.05 | | |
| 29 | 248.34 | -0.05 | | |
| 30 | 248.29 | -0.05 | | |
| **1-Oct** | **248.24** | -0.05 | | |
| 2 | 248.18 | -0.06 | | |
| 3 | 248.13 | -0.05 | | |
| 4 | 248.07 | -0.06 | -0.06 | |
| 5 | 248.01 | -0.06 | | |
| 6 | 247.95 | -0.06 | | |
| 7 | 247.89 | -0.06 | | |
| 8 | 247.82 | -0.07 | | |
| 9 | 247.76 | -0.06 | | |
| 10 | 247.69 | -0.07 | -0.07 | |
| 11 | 247.62 | -0.07 | | |
| 12 | 247.56 | -0.06 | | |

| | | | | |
|---|---|---|---|---|
| 13 | 247.49 | -0.07 | | |
| 14 | 247.41 | -0.08 | | |
| 15 | 247.34 | -0.07 | | |
| 16 | 247.26 | -0.08 | | |
| 17 | 247.19 | -0.07 | | |
| 18 | 247.11 | -0.08 | -0.08 | |
| 19 | 247.03 | -0.08 | | |
| 20 | 246.95 | -0.08 | | |
| 21 | 246.87 | -0.08 | | |
| 22 | 246.79 | -0.08 | | |
| 23 | 246.7 | -0.09 | | |
| 24 | 246.62 | -0.08 | | |
| 25 | 246.53 | -0.09 | -0.09 | |
| 26 | 246.44 | -0.09 | | |
| 27 | 246.35 | -0.09 | | |
| 28 | 246.25 | -0.1 | | |
| 29 | 246.16 | -0.09 | | |
| 30 | 246.07 | -0.09 | | |
| 31 | 245.97 | -0.1 | | |
| **1-Nov** | **245.88** | -0.09 | | |
| 2 | 245.78 | -0.1 | -0.1 | |
| 3 | 245.68 | -0.1 | | |
| 4 | 245.58 | -0.1 | | |
| 5 | 245.48 | -0.1 | | |
| 6 | 245.37 | -0.11 | | |
| 7 | 245.27 | -0.1 | | |
| 8 | 245.16 | -0.11 | -0.11 | |
| 9 | 245.05 | -0.11 | | |
| 10 | 244.95 | -0.1 | | |
| 11 | 244.84 | -0.11 | | |
| 12 | 244.72 | -0.12 | | |
| 13 | 244.61 | -0.11 | | |
| 14 | 244.5 | -0.11 | | |
| 15 | 244.38 | -0.12 | | |
| 16 | 244.27 | -0.11 | | |
| 17 | 244.15 | -0.12 | -0.12 | |

| | | | | |
|---|---|---|---|---|
| 18 | 244.03 | -0.12 | | |
| 19 | 243.91 | -0.12 | | |
| 20 | 243.79 | -0.12 | | |
| 21 | 243.67 | -0.12 | | |
| 22 | 243.54 | -0.13 | | |
| 23 | 243.42 | -0.12 | | |
| 24 | 243.29 | -0.13 | | |
| 25 | 243.17 | -0.12 | | |
| 26 | 243.04 | -0.13 | -0.13 | |
| 27 | 242.91 | -0.13 | | |
| 28 | 242.78 | -0.13 | | |
| 29 | 242.65 | -0.13 | | |
| 30 | 242.51 | -0.14 | | |
| **1-Dec** | **242.38** | -0.13 | | |
| 2 | 242.24 | -0.14 | | |
| 3 | 242.11 | -0.13 | | |
| 4 | 241.97 | -0.14 | -0.14 | |
| 5 | 241.83 | -0.14 | | |
| 6 | 241.69 | -0.14 | | |
| 7 | 241.55 | -0.14 | | |
| 8 | 241.41 | -0.14 | | |
| 9 | 241.26 | -0.15 | | |
| 10 | 241.12 | -0.14 | | |
| 11 | 240.98 | -0.14 | | |
| 12 | 240.83 | -0.15 | -0.15 | |
| 13 | 240.68 | -0.15 | | |
| 14 | 240.53 | -0.15 | | |
| 15 | 240.38 | -0.15 | | |
| 16 | 240.23 | -0.15 | | |
| 17 | 240.08 | -0.15 | | |
| 18 | 239.93 | -0.15 | | |
| 19 | 239.78 | -0.15 | | |
| 20 | 239.62 | -0.16 | | |
| 21 | 239.47 | -0.15 | | |
| 22 | 239.31 | -0.16 | -0.16 | |
| 23 | 239.15 | -0.16 | | |
| 24 | 238.99 | -0.16 | | |
| 25 | 238.83 | -0.16 | | |
| 26 | 238.67 | -0.16 | | |
| 27 | 238.51 | -0.16 | | |

| | | | | |
|---|---|---|---|---|
| 28 | 238.35 | -0.16 | | |
| 29 | 238.19 | -0.16 | | |
| 30 | 238.02 | -0.17 | | |
| 31 | 237.86 | -0.16 | | |
| **January 1 ‘20** | **237.69** | -0.17 | | |
| 2 | 237.53 | -0.16 | | |
| 3 | 237.36 | -0.17 | -0.17 | |
| 4 | 237.19 | -0.17 | | |
| 5 | 237.02 | -0.17 | | |
| 6 | 236.85 | -0.17 | | |
| 7 | 236.68 | -0.17 | | |
| 8 | 236.51 | -0.17 | | |
| 9 | 236.34 | -0.17 | | |
| 10 | 236.16 | -0.18 | | |
| 11 | 235.99 | -0.17 | | |
| 12 | 235.81 | -0.18 | | |
| 13 | 235.64 | -0.17 | | |
| 14 | 235.46 | -0.18 | | |
| 15 | 235.29 | -0.17 | | |
| 16 | 235.11 | -0.18 | -0.18 | |
| 17 | 234.93 | -0.18 | | |
| 18 | 234.75 | -0.18 | | |
| 19 | 234.57 | -0.18 | | |
| 20 | 234.39 | -0.18 | | |
| 21 | 234.21 | -0.18 | | |
| 22 | 234.03 | -0.18 | | |
| 23 | 233.85 | -0.18 | | |
| 24 | 233.66 | -0.19 | | |
| 25 | 233.48 | -0.18 | | |
| 26 | 233.3 | -0.18 | | |
| 27 | 233.11 | -0.19 | | |
| 28 | 232.93 | -0.18 | | |
| 29 | 232.74 | -0.19 | | |
| 30 | 232.55 | -0.19 | | |
| 31 | 232.37 | -0.18 | | |
| **1-Feb** | **232.18** | -0.19 | | |
| 2 | 231.99 | -0.19 | | |
| 3 | 231.8 | -0.19 | | |
| 4 | 231.62 | -0.18 | | |

| | | | | |
|---|---|---|---|---|
| 5 | 231.43 | -0.19 | -0.19 | |
| 6 | 231.24 | -0.19 | | |
| 7 | 231.05 | -0.19 | | |
| 8 | 230.86 | -0.19 | | |
| 9 | 230.67 | -0.19 | | |
| 10 | 230.47 | -0.2 | | |
| 11 | 230.28 | -0.19 | | |
| 12 | 230.09 | -0.19 | | |
| 13 | 229.9 | -0.19 | | |
| 14 | 229.71 | -0.19 | | |
| 15 | 229.51 | -0.2 | | |
| 16 | 229.32 | -0.19 | | |
| 17 | 229.13 | -0.19 | | |
| 18 | 228.93 | -0.2 | | |
| 19 | 228.74 | -0.19 | | |
| 20 | 228.54 | -0.2 | | |
| 21 | 228.35 | -0.19 | | |
| 22 | 228.15 | -0.2 | | |
| 23 | 227.96 | -0.19 | | |
| 24 | 227.77 | -0.19 | | |
| 25 | 227.57 | -0.2 | -0.2 | |
| 26 | 227.37 | -0.2 | | |
| 27 | 227.18 | -0.19 | | |
| 28 | 226.98 | -0.2 | | |
| 29 | 226.79 | -0.19 | | |
| **1-Mar** | **226.59** | -0.2 | | |
| 2 | 226.4 | -0.19 | | |
| 3 | 226.2 | -0.2 | | |
| 4 | 226.01 | -0.19 | | |
| 5 | 225.81 | -0.2 | | |
| 6 | 225.61 | -0.2 | | |
| 7 | 225.42 | -0.19 | | |
| 8 | 225.22 | -0.2 | | |
| 9 | 225.03 | -0.19 | | |
| 10 | 224.83 | -0.2 | | |
| 11 | 224.64 | -0.19 | | |
| 12 | 224.44 | -0.2 | | |
| 13 | 224.25 | -0.19 | | |
| 14 | 224.05 | -0.2 | | |
| 15 | 223.86 | -0.19 | | |

| | | | | |
|---|---|---|---|---|
| 16 | 223.66 | -0.2 | | |
| 17 | 223.47 | -0.19 | | |
| 18 | 223.27 | -0.2 | | |
| 19 | 223.08 | -0.19 | | |
| **20** | **222.88** | **-0.2** | **(max)** | |
| 21 | 222.69 | -0.19 | -0.19 | Anomaly. It should be -0.21 NOT -0.19 **Point No3 or rσ (on d3):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 22 | 222.5 | -0.19 | | |
| 23 | 222.31 | -0.19 | | |
| 24 | 222.11 | -0.2 | | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 25 | 221.92 | -0.19 | | |
| 26 | 221.73 | -0.19 | | |
| 27 | 221.54 | -0.19 | | |
| 28 | 221.35 | -0.19 | | |
| 29 | 221.16 | -0.19 | | |
| 30 | 220.97 | -0.19 | | |
| 31 | 220.78 | -0.19 | | |
| **1-Apr** | **220.59** | -0.19 | | |
| 2 | 220.41 | -0.18 | | |
| 3 | 220.22 | -0.19 | | |
| 4 | 220.03 | -0.19 | | |
| 5 | 219.84 | -0.19 | | |
| 6 | 219.66 | -0.18 | | |
| 7 | 219.47 | -0.19 | | |
| 8 | 219.28 | -0.19 | | |
| 9 | 219.1 | -0.18 | | |
| 10 | 218.92 | -0.18 | | |

| | | | | |
|---|---|---|---|---|
| 11 | 218.73 | -0.19 | | |
| 12 | 218.55 | -0.18 | -0.18 | |
| 13 | 218.37 | -0.18 | | |
| 14 | 218.19 | -0.18 | | |
| 15 | 218.01 | -0.18 | | |
| 16 | 217.83 | -0.18 | | |
| 17 | 217.65 | -0.18 | | |
| 18 | 217.47 | -0.18 | | |
| 19 | 217.29 | -0.18 | | |
| 20 | 217.11 | -0.18 | | |
| 21 | 216.94 | -0.17 | | |
| 22 | 216.76 | -0.18 | | |
| 23 | 216.59 | -0.17 | | |
| 24 | 216.42 | -0.17 | | |
| 25 | 216.24 | -0.18 | | |
| 26 | 216.07 | -0.17 | -0.17 | |
| 27 | 215.9 | -0.17 | | |
| 28 | 215.73 | -0.17 | | |
| 29 | 215.57 | -0.16 | | |
| 30 | 215.4 | -0.17 | | |
| **1-May** | **215.23** | -0.17 | | |
| 2 | 215.07 | -0.16 | | |
| 3 | 214.9 | -0.17 | | |
| 4 | 214.74 | -0.16 | -0.16 | |
| 5 | 214.58 | -0.16 | | |
| 6 | 214.42 | -0.16 | | |
| 7 | 214.26 | -0.16 | | |
| 8 | 214.1 | -0.16 | | |
| 9 | 213.94 | -0.16 | | |
| 10 | 213.79 | -0.15 | | |
| 11 | 213.63 | -0.16 | | |
| 12 | 213.48 | -0.15 | -0.15 | |
| 13 | 213.33 | -0.15 | | |
| 14 | 213.18 | -0.15 | | |
| 15 | 213.03 | -0.15 | | |
| 16 | 212.88 | -0.15 | | |
| 17 | 212.73 | -0.15 | | |
| 18 | 212.59 | -0.14 | | |
| 19 | 212.44 | -0.15 | | |
| 20 | 212.3 | -0.14 | -0.14 | |

| | | | | |
|---|---|---|---|---|
| 21 | 212.16 | -0.14 | | |
| 22 | 212.02 | -0.14 | | |
| 23 | 211.88 | -0.14 | | |
| 24 | 211.74 | -0.14 | | |
| 25 | 211.61 | -0.13 | -0.13 | |
| 26 | 211.48 | -0.13 | | |
| 27 | 211.34 | -0.14 | | |
| 28 | 211.21 | -0.13 | | |
| 29 | 211.08 | -0.13 | | |
| 30 | 210.96 | -0.12 | | |
| 31 | 210.83 | -0.13 | | |
| **1-Jun** | **210.7** | -0.13 | | |
| 2 | 210.58 | -0.12 | -0.12 | |
| 3 | 210.46 | -0.12 | | |
| 4 | 210.34 | -0.12 | | |
| 5 | 210.22 | -0.12 | | |
| 6 | 210.11 | -0.11 | | |
| 7 | 209.99 | -0.12 | | |
| 8 | 209.88 | -0.11 | -0.11 | |
| 9 | 209.77 | -0.11 | | |
| 10 | 209.66 | -0.11 | | |
| 11 | 209.55 | -0.11 | | |
| 12 | 209.45 | -0.1 | | |
| 13 | 209.34 | -0.11 | | |
| 14 | 209.24 | -0.1 | -0.1 | |
| 15 | 209.14 | -0.1 | | |
| 16 | 209.04 | -0.1 | | |
| 17 | 208.94 | -0.1 | | |
| 18 | 208.85 | -0.09 | -0.09 | |
| 19 | 208.76 | -0.09 | | |
| 20 | 208.66 | -0.1 | | |
| 21 | 208.57 | -0.09 | | |
| 22 | 208.49 | -0.08 | | |
| 23 | 208.4 | -0.09 | | |
| 24 | 208.32 | -0.08 | -0.08 | |
| 25 | 208.24 | -0.08 | | |
| 26 | 208.16 | -0.08 | | |
| 27 | 208.08 | -0.08 | | |
| 28 | 208 | -0.08 | | |
| 29 | 207.93 | -0.07 | -0.07 | |

| | | | | |
|---|---|---|---|---|
| 30 | 207.86 | -0.07 | | |
| **1-Jul** | **207.79** | -0.07 | | |
| 2 | 207.72 | -0.07 | | |
| 3 | 207.65 | -0.07 | | |
| 4 | 207.59 | -0.06 | -0.06 | |
| 5 | 207.53 | -0.06 | | |
| 6 | 207.47 | -0.06 | | |
| 7 | 207.41 | -0.06 | | |
| 8 | 207.35 | -0.06 | | |
| 9 | 207.3 | -0.05 | -0.05 | |
| 10 | 207.25 | -0.05 | | |
| 11 | 207.2 | -0.05 | | |
| 12 | 207.15 | -0.05 | | |
| 13 | 207.11 | -0.04 | | |
| 14 | 207.06 | -0.05 | | |
| 15 | 207.02 | -0.04 | | |
| 16 | 206.99 | -0.03 | | |
| 17 | 206.95 | -0.04 | -0.04 | |
| 18 | 206.91 | -0.04 | | |
| 19 | 206.88 | -0.03 | -0.03 | |
| 20 | 206.85 | -0.03 | | |
| 21 | 206.82 | -0.03 | | |
| 22 | 206.8 | -0.02 | | |
| 23 | 206.77 | -0.03 | | |
| 24 | 206.75 | -0.02 | -0.02 | |
| 25 | 206.73 | -0.02 | | |
| 26 | 206.71 | -0.02 | | |
| 27 | 206.7 | -0.01 | -0.01 | |
| 28 | 206.69 | -0.01 | | |
| 29 | 206.67 | -0.02 | | |
| 30 | 206.67 | 0 | | |
| **31** | **206.66** | -0.01 | | **Point No5 or LA (on d5):** Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| **1-Aug** | **206.65** | -0.01 | **0** | **Point No6 or Peri-LAEC (on d6):** The |

| | | | | |
|---|---|---|---|---|
| | | | | closest distance of the natural "Satellite" by its natural "Sun".<br>Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | 206.65 | 0 | | |
| 3 | 206.65 | 0 | | |
| 4 | 206.65 | 0 | | |
| **5** | **206.66** | 0.01 | | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 6 | 206.66 | 0 | | |
| 7 | 206.67 | 0.01 | 0.01 | |
| 8 | 206.68 | 0.01 | | |
| 9 | 206.7 | 0.02 | | |
| 10 | 206.71 | 0.01 | | |
| 11 | 206.73 | 0.02 | 0.02 | |
| 12 | 206.75 | 0.02 | | |
| 13 | 206.77 | 0.02 | | |
| 14 | 206.79 | 0.02 | | |
| 15 | 206.82 | 0.03 | 0.03 | |
| 16 | 206.85 | 0.03 | | |
| 17 | 206.88 | 0.03 | | |
| 18 | 206.91 | 0.03 | | |
| 19 | 206.94 | 0.03 | | |
| 20 | 206.98 | 0.04 | 0.04 | |
| 21 | 207.02 | 0.04 | | |
| 22 | 207.06 | 0.04 | | |
| 23 | 207.1 | 0.04 | | |
| 24 | 207.15 | 0.05 | | |
| 25 | 207.19 | 0.04 | | |
| 26 | 207.24 | 0.05 | 0.05 | |

| | | | | |
|---|---|---|---|---|
| 27 | 207.29 | 0.05 | | |
| 28 | 207.35 | 0.06 | | |
| 29 | 207.4 | 0.05 | | |
| 30 | 207.46 | 0.06 | 0.06 | |
| 31 | 207.52 | 0.06 | | |
| **1-Sep** | **207.58** | 0.06 | | |
| 2 | 207.64 | 0.06 | | |
| 3 | 207.71 | 0.07 | 0.07 | |
| 4 | 207.78 | 0.07 | | |
| 5 | 207.84 | 0.06 | | |
| 6 | 207.92 | 0.08 | | |
| 7 | 207.99 | 0.07 | | |
| 8 | 208.07 | 0.08 | | |
| 9 | 208.14 | 0.07 | | |
| 10 | 208.22 | 0.08 | 0.08 | |
| 11 | 208.3 | 0.08 | | |
| 12 | 208.39 | 0.09 | | |
| 13 | 208.47 | 0.08 | | |
| 14 | 208.56 | 0.09 | 0.09 | |
| 15 | 208.65 | 0.09 | | |
| 16 | 208.74 | 0.09 | | |
| 17 | 208.83 | 0.09 | | |
| 18 | 208.93 | 0.1 | | |
| 19 | 209.02 | 0.09 | | |
| 20 | 209.12 | 0.1 | 0.1 | |
| 21 | 209.22 | 0.1 | | |
| 22 | 209.32 | 0.1 | | |
| 23 | 209.43 | 0.11 | | |
| 24 | 209.53 | 0.1 | | |
| 25 | 209.64 | 0.11 | 0.11 | |
| 26 | 209.75 | 0.11 | | |
| 27 | 209.86 | 0.11 | | |
| 28 | 209.97 | 0.11 | | |
| 29 | 210.08 | 0.11 | | |
| 30 | 210.2 | 0.12 | 0.12 | |
| **1-Oct** | **210.32** | 0.12 | | |
| 2 | 210.44 | 0.12 | | |
| 3 | 210.56 | 0.12 | | |
| 4 | 210.68 | 0.12 | | |
| 5 | 210.8 | 0.12 | | |

| | | | | |
|---|---|---|---|---|
| 6 | 210.93 | 0.13 | 0.13 | |
| 7 | 211.06 | 0.13 | | |
| 8 | 211.19 | 0.13 | | |
| 9 | 211.32 | 0.13 | | |
| 10 | 211.45 | 0.13 | | |
| 11 | 211.58 | 0.13 | | |
| 12 | 211.72 | 0.14 | | |
| 13 | 211.85 | 0.13 | | |
| 14 | 211.99 | 0.14 | 0.14 | |
| 15 | 212.13 | 0.14 | | |
| 16 | 212.27 | 0.14 | | |
| 17 | 212.41 | 0.14 | | |
| 18 | 212.56 | 0.15 | | |
| 19 | 212.7 | 0.14 | | |
| 20 | 212.85 | 0.15 | 0.15 | |
| 21 | 213 | 0.15 | | |
| 22 | 213.15 | 0.15 | | |
| 23 | 213.3 | 0.15 | | |
| 24 | 213.45 | 0.15 | | |
| 25 | 213.61 | 0.16 | | |
| 26 | 213.76 | 0.15 | | |
| 27 | 213.92 | 0.16 | | |
| 28 | 214.07 | 0.15 | | |
| 29 | 214.23 | 0.16 | 0.16 | |
| 30 | 214.39 | 0.16 | | |
| 31 | 214.55 | 0.16 | | |
| **1-Nov** | **214.71** | 0.16 | | |
| 2 | 214.87 | 0.16 | | |
| 3 | 215.04 | 0.17 | | |
| 4 | 215.2 | 0.16 | | |
| 5 | 215.37 | 0.17 | | |
| 6 | 215.53 | 0.16 | | |
| 7 | 215.7 | 0.17 | 0.17 | |
| 8 | 215.87 | 0.17 | | |
| 9 | 216.04 | 0.17 | | |
| 10 | 216.21 | 0.17 | | |
| 11 | 216.38 | 0.17 | | |
| 12 | 216.56 | 0.18 | | |
| 13 | 216.73 | 0.17 | | |
| 14 | 216.9 | 0.17 | | |

| | | | | |
|---|---|---|---|---|
| 15 | 217.08 | 0.18 | | |
| 16 | 217.25 | 0.17 | | |
| 17 | 217.43 | 0.18 | 0.18 | |
| 18 | 217.61 | 0.18 | | |
| 19 | 217.79 | 0.18 | | |
| 20 | 217.97 | 0.18 | | |
| 21 | 218.15 | 0.18 | | |
| 22 | 218.33 | 0.18 | | |
| 23 | 218.51 | 0.18 | | |
| 24 | 218.69 | 0.18 | | |
| 25 | 218.88 | 0.19 | | |
| 26 | 219.06 | 0.18 | | |
| 27 | 219.24 | 0.18 | | |
| 28 | 219.43 | 0.19 | | |
| 29 | 219.61 | 0.18 | | |
| 30 | 219.8 | 0.19 | | |
| **1-Dec** | **219.99** | 0.19 | | |
| 2 | 220.17 | 0.18 | | |
| 3 | 220.36 | 0.19 | 0.19 | |
| 4 | 220.55 | 0.19 | | |
| 5 | 220.74 | 0.19 | | |
| 6 | 220.93 | 0.19 | | |
| 7 | 221.12 | 0.19 | | |
| 8 | 221.31 | 0.19 | | |
| 9 | 221.5 | 0.19 | | |
| 10 | 221.69 | 0.19 | | |
| 11 | 221.88 | 0.19 | | |
| 12 | 222.07 | 0.19 | | |
| 13 | 222.27 | 0.2 | | |
| 14 | 222.46 | 0.19 | | |
| 15 | 222.65 | 0.19 | | |
| 16 | 222.84 | 0.19 | | |
| 17 | 223.04 | 0.2 | | |
| 18 | 223.23 | 0.19 | | |
| 19 | 223.42 | 0.19 | | |
| 20 | 223.62 | 0.2 | | |
| 21 | 223.81 | 0.19 | | |
| 22 | 224.01 | 0.2 | | |
| 23 | 224.2 | 0.19 | | |
| 24 | 224.4 | 0.2 | | |

| | | | | |
|---|---|---|---|---|
| 25 | 224.59 | 0.19 | | |
| 26 | 224.79 | 0.2 | | |
| 27 | 224.98 | 0.19 | | |
| 28 | 225.18 | 0.2 | | |
| 29 | 225.37 | 0.19 | | |
| 30 | 225.57 | 0.2 | | |
| 31 | 225.76 | 0.19 | | |
| **January 1 '21** | **225.96** | 0.2 | | |
| 2 | 226.15 | 0.19 | | |
| 3 | 226.35 | 0.2 | 0.2 | |
| 4 | 226.55 | 0.2 | | |
| 5 | 226.74 | 0.19 | | |
| 6 | 226.94 | 0.2 | | |
| 7 | 227.13 | 0.19 | | |
| 8 | 227.33 | 0.2 | | |
| 9 | 227.52 | 0.19 | | |
| **10** | **227.72** | **0.2** | **(max)** | |
| **11** | **227.91** | **0.19** | | Anomaly. It should be 0.21 NOT 0.19 **Point No8 or rε (on d8):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| **12** | **228.1** | **0.19** | | |
| 13 | 228.3 | 0.2 | | **Point No9 or NM (on d9):** Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 14 | 228.49 | 0.19 | | |
| 15 | 228.69 | 0.2 | | |
| 16 | 228.88 | 0.19 | | |
| 17 | 229.07 | 0.19 | | |
| 18 | 229.27 | 0.2 | | |

| | | | | |
|---|---|---|---|---|
| 19 | 229.46 | 0.19 | | |
| 20 | 229.65 | 0.19 | | |
| 21 | 229.85 | 0.2 | | |
| 22 | 230.04 | 0.19 | 0.19 | |
| 23 | 230.23 | 0.19 | | |
| 24 | 230.42 | 0.19 | | |
| 25 | 230.61 | 0.19 | | |
| 26 | 230.8 | 0.19 | | |
| 27 | 230.99 | 0.19 | | |
| 28 | 231.18 | 0.19 | | |
| 29 | 231.37 | 0.19 | | |
| 30 | 231.56 | 0.19 | | |
| 31 | 231.75 | 0.19 | | |
| **1-Feb** | **231.94** | **0.19** | | |
| 2 | 232.12 | 0.18 | | |
| 3 | 232.31 | 0.19 | | |
| 4 | 232.5 | 0.19 | | |
| 5 | 232.68 | 0.18 | | |
| 6 | 232.87 | 0.19 | | |
| 7 | 233.05 | 0.18 | | |
| 8 | 233.24 | 0.19 | | |
| 9 | 233.42 | 0.18 | | |
| 10 | 233.61 | 0.19 | | |
| 11 | 233.79 | 0.18 | 0.18 | |
| 12 | 233.97 | 0.18 | | |
| 13 | 234.15 | 0.18 | | |
| 14 | 234.33 | 0.18 | | |
| 15 | 234.51 | 0.18 | | |
| 16 | 234.69 | 0.18 | | |
| 17 | 234.87 | 0.18 | | |
| 18 | 235.05 | 0.18 | | |
| 19 | 235.23 | 0.18 | | |
| 20 | 235.4 | 0.17 | | |
| 21 | 235.58 | 0.18 | | |
| 22 | 235.76 | 0.18 | | |
| 23 | 235.93 | 0.17 | | |
| 24 | 236.1 | 0.17 | | |
| 25 | 236.28 | 0.18 | | |

| | | | | |
|---|---|---|---|---|
| 26 | 236.45 | 0.17 | 0.17 | |
| 27 | 236.62 | 0.17 | | |
| 28 | 236.79 | 0.17 | | |
| **1-Mar** | **236.96** | 0.17 | | |
| 2 | 237.13 | 0.17 | | |
| 3 | 237.3 | 0.17 | | |
| 4 | 237.47 | 0.17 | | |
| 5 | 237.63 | 0.16 | | |
| 6 | 237.8 | 0.17 | | |
| 7 | 237.96 | 0.16 | | |
| 8 | 238.13 | 0.17 | | |
| 9 | 238.29 | 0.16 | 0.16 | |
| 10 | 238.45 | 0.16 | | |
| 11 | 238.61 | 0.16 | | |
| 12 | 238.77 | 0.16 | | |
| 13 | 238.93 | 0.16 | | |
| 14 | 239.09 | 0.16 | | |
| 15 | 239.25 | 0.16 | | |
| 16 | 239.41 | 0.16 | | |
| 17 | 239.56 | 0.15 | | |
| 18 | 239.72 | 0.16 | | |
| 19 | 239.87 | 0.15 | 0.15 | |
| 20 | 240.02 | 0.15 | | |
| 21 | 240.17 | 0.15 | | |
| 22 | 240.32 | 0.15 | | |
| 23 | 240.47 | 0.15 | | |
| 24 | 240.62 | 0.15 | | |
| 25 | 240.77 | 0.15 | | |
| 26 | 240.92 | 0.15 | | |
| 27 | 241.06 | 0.14 | 0.14 | |
| 28 | 241.2 | 0.14 | | |
| 29 | 241.34 | 0.14 | | |
| 30 | 241.49 | 0.15 | | |
| 31 | 241.63 | 0.14 | | |
| **1-Apr** | **241.77** | 0.14 | | |
| 2 | 241.91 | 0.14 | | |
| 3 | 242.04 | 0.13 | | |
| 4 | 242.18 | 0.14 | | |
| 5 | 242.32 | 0.14 | | |
| 6 | 242.45 | 0.13 | 0.13 | |

| | | | | |
|---|---|---|---|---|
| 7 | 242.58 | 0.13 | | |
| 8 | 242.72 | 0.14 | | |
| 9 | 242.85 | 0.13 | | |
| 10 | 242.98 | 0.13 | | |
| 11 | 243.1 | 0.12 | | |
| 12 | 243.23 | 0.13 | | |
| 13 | 243.36 | 0.13 | | |
| 14 | 243.48 | 0.12 | | |
| 15 | 243.61 | 0.13 | | |
| 16 | 243.73 | 0.12 | 0.12 | |
| 17 | 243.85 | 0.12 | | |
| 18 | 243.97 | 0.12 | | |
| 19 | 244.09 | 0.12 | | |
| 20 | 244.21 | 0.12 | | |
| 21 | 244.32 | 0.11 | | |
| 22 | 244.44 | 0.12 | | |
| 23 | 244.55 | 0.11 | | |
| 24 | 244.67 | 0.12 | | |
| 25 | 244.78 | 0.11 | 0.11 | |
| 26 | 244.89 | 0.11 | | |
| 27 | 245 | 0.11 | | |
| 28 | 245.1 | 0.1 | | |
| 29 | 245.21 | 0.11 | | |
| 30 | 245.32 | 0.11 | | |
| **1-May** | **245.42** | 0.1 | **0.1** | |
| 2 | 245.52 | 0.1 | | |
| 3 | 245.62 | 0.1 | | |
| 4 | 245.72 | 0.1 | | |
| 5 | 245.82 | 0.1 | | |
| 6 | 245.92 | 0.1 | | |
| 7 | 246.01 | 0.09 | | |
| 8 | 246.11 | 0.1 | | |
| 9 | 246.2 | 0.09 | 0.09 | |
| 10 | 246.29 | 0.09 | | |
| 11 | 246.38 | 0.09 | | |
| 12 | 246.47 | 0.09 | | |
| 13 | 246.56 | 0.09 | | |
| 14 | 246.65 | 0.09 | | |
| 15 | 246.73 | 0.08 | | |
| 16 | 246.82 | 0.09 | | |

| | | | | |
|---|---|---|---|---|
| 17 | 246.9 | 0.08 | 0.08 | |
| 18 | 246.98 | 0.08 | | |
| 19 | 247.06 | 0.08 | | |
| 20 | 247.14 | 0.08 | | |
| 21 | 247.21 | 0.07 | | |
| 22 | 247.29 | 0.08 | | |
| 23 | 247.36 | 0.07 | | |
| 24 | 247.44 | 0.08 | | |
| 25 | 247.51 | 0.07 | 0.07 | |
| 26 | 247.58 | 0.07 | | |
| 27 | 247.65 | 0.07 | | |
| 28 | 247.71 | 0.06 | | |
| 29 | 247.78 | 0.07 | | |
| 30 | 247.84 | 0.06 | | |
| 31 | 247.91 | 0.07 | | |
| **1-Jun** | **247.97** | 0.06 | **0.06** | |
| 2 | 248.03 | 0.06 | | |
| 3 | 248.08 | 0.05 | | |
| 4 | 248.14 | 0.06 | | |
| 5 | 248.2 | 0.06 | | |
| 6 | 248.25 | 0.05 | | |
| 7 | 248.3 | 0.05 | | |
| 8 | 248.36 | 0.06 | | |
| 9 | 248.4 | 0.04 | | |
| 10 | 248.45 | 0.05 | 0.05 | |
| 11 | 248.5 | 0.05 | | |
| 12 | 248.55 | 0.05 | | |
| 13 | 248.59 | 0.04 | 0.04 | |
| 14 | 248.63 | 0.04 | | |
| 15 | 248.67 | 0.04 | | |
| 16 | 248.71 | 0.04 | | |
| 17 | 248.75 | 0.04 | | |
| 18 | 248.79 | 0.04 | | |
| 19 | 248.82 | 0.03 | | |
| 20 | 248.86 | 0.04 | | |
| 21 | 248.89 | 0.03 | 0.03 | |
| 22 | 248.92 | 0.03 | | |
| 23 | 248.95 | 0.03 | | |
| 24 | 248.98 | 0.03 | | |

| | | | | |
|---|---|---|---|---|
| 25 | 249 | 0.02 | | |
| 26 | 249.03 | 0.03 | | |
| 27 | 249.05 | 0.02 | 0.02 | |
| 28 | 249.07 | 0.02 | | |
| 29 | 249.09 | 0.02 | | |
| 30 | 249.11 | 0.02 | | |
| **1-Jul** | **249.13** | 0.02 | | |
| 2 | 249.15 | 0.02 | | |
| 3 | 249.16 | 0.01 | 0.01 | |
| 4 | 249.17 | 0.01 | | |
| 5 | 249.18 | 0.01 | | |
| 6 | 249.19 | 0.01 | | |
| 7 | 249.2 | 0.01 | | |
| **8** | **249.21** | **0.01** | | **Point No10 or LR (on d10): Last point with repulsive forces between the natural "Satellite" and its natural "Sun".** |
| **9** | **249.22** | 0.01 | | **Aphe-LAEC** |
| 10 | 249.22 | 0 | 0 | |
| 11 | 249.22 | 0 | | |
| 12 | 249.22 | 0 | | |
| 13 | 249.22 | 0 | | |
| 14 | 249.22 | 0 | | |
| 15 | 249.22 | 0 | | |
| 16 | 249.21 | -0.01 | | …………… |

## Appendix D

**Step 1:**

I'll create a table with 5 columns for Moon, based on the data of "Lunar Phases" Application. In the first two columns, I'll insert these data:

- Column No1: The date
- Column No2: The Moon's distance from the Earth in km

**Step 2:**

I'll find these data for the next 3 columns:

- Column No3: The difference of the Moon's distance from the Earth from the previous day
- Column No4: The Sequence of the difference (it's also related to the Orbital Speed)
- Column No5: The 10 Points & comments

| Date<br><br>2019 | The Moon's distance from the Earth in km | The difference of the Moon's distance from the Earth from the previous day (watch the **blue** numbers) | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| **14-Sep** | **405.886** | **0.335** | **0** | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 15 | 405.141 | -0.745 | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to |

| | | | | |
|---|---|---|---|---|
| | | | | its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 16 | 403.352 | -**1**.789 | -1 | |
| 17 | 400.614 | -**2**.738 | -2 | |
| 18 | 397.067 | -**3**.547 | -3 | |
| 19 | 392.896 | -**4**.171 | -4 | |
| 20 | 388.316 | -**4**.58 | | |
| 21 | 383.564 | -**4**.752 | (max) | |
| 22 | 378.887 | -**4**.677 | Anomaly. It should be ⊵ -4.900 NOT -4.677 | **Point No3 or rσ (on d3):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 23 | 374.526 | -**4**.361 | | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 24 | 370.707 | -**3**.819 | -3 | |
| 25 | 367.629 | -**3**.078 | | |
| 26 | 365.45 | -**2**.179 | -2 | |
| 27 | 364.283 | -**1**.167 | -1 | **Point No5 or LA (on d5):** Last point with attractive forces between the natural "Satellite" and its natural "Sun". |

| | | | | |
|---|---|---|---|---|
| 28 | 364.189 | -0.094 | 0 | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun". |
| 29 | 365.172 | 0.983 | It's almost +1 this (it happens sometimes to be very close to what we expect to see. Here, it should be +1) | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 30 | 367.182 | 2.01 | +2 | |
| **1-Oct** | **370.114** | **2.932** | | |
| 2 | 373.817 | 3.703 | +3 | |
| 3 | 378.099 | 4.282 | +4 | |
| 4 | 382.739 | 4.64 | | |
| 5 | 387.495 | 4.756 | (max) | |
| 6 | 392.122 | 4.627 | Anomaly. It should be ⊴ 4.756 NOT 4.627 (NOT decrease) | **Point No8 or rε (on d8):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |

| | | | | |
|---|---|---|---|---|
| 7 | 396.381 | **4**.259 | | **Point No9 or NM (on d9):** Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 8 | 400.051 | **3**.67 | | |
| 9 | 402.941 | **2**.89 | | |
| 10 | 404.903 | 1.962 | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |
| 11 | 405.834 | **0**.931 | | Aphe-LAEC |
| 12 | 405.687 | -**0**.147 | | |

## Appendix E

**Step 1:**

I'll create a table with 5 columns for Mercury. In the first two columns, I'll insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Earth's distance from Mercury in million km

**Step 2:**

I'll find these data for the next 3 columns:

- Column N03: The difference of the Earth's distance from Mercury from the previous day
- Column No4: The Sequence of the difference (it's also related to the Orbital Speed)
- Column No5: The 10 Points & comments

| Date 2019 | The Earth's distance from Mercury in million km | The difference of the Earth's distance from Mercury from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| 6/30/2019 | 152.1 | 152.1 | 0 | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 1-Jul | 152.1 | 0 | | |
| 1 | 152.1 | 0 | | |
| 3 | 152.1 | 0 | | |
| 4 | 152.1 | 0 | | |
| 5 | 152.1 | 0 | | |
| 6 | 152.1 | 0 | | |
| 7 | 152.1 | 0 | | |
| 8 | 152.1 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 9 | 152.09 | -0.01 | | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 10 | 152.09 | 0 | | |
| 11 | 152.09 | 0 | | |
| 12 | 152.08 | -0.01 | | |
| 13 | 152.07 | -0.01 | | |
| 14 | 152.07 | 0 | | |
| 15 | 152.06 | -0.01 | | |
| 16 | 152.05 | -0.01 | | |
| 17 | 152.04 | -0.01 | | |
| 18 | 152.04 | 0 | | |
| 19 | 152.03 | -0.01 | -0.01 | |
| 20 | 152.02 | -0.01 | | |
| 21 | 152.01 | -0.01 | | |
| 22 | 152 | -0.01 | | |
| 23 | 151.98 | -0.02 | | |
| 24 | 151.97 | -0.01 | | |
| 25 | 151.96 | -0.01 | | |
| 26 | 151.95 | -0.01 | | |
| 27 | 151.93 | -0.02 | | |
| 28 | 151.92 | -0.01 | | |
| 29 | 151.9 | -0.02 | | |

| | | | | |
|---|---|---|---|---|
| 30 | 151.88 | -0.02 | | |
| 31 | 151.87 | -0.01 | | |
| Aug. 1 | 151.85 | -0.02 | -0.02 | |
| 2 | 151.83 | -0.02 | | |
| 3 | 151.81 | -0.02 | | |
| 4 | 151.79 | -0.02 | | |
| 5 | 151.77 | -0.02 | | |
| 6 | 151.74 | -0.03 | | |
| 7 | 151.72 | -0.02 | | |
| 8 | 151.7 | -0.02 | | |
| 9 | 151.67 | -0.03 | | |
| 10 | 151.65 | -0.02 | | |
| 11 | 151.62 | -0.03 | | |
| 12 | 151.6 | -0.02 | | |
| 13 | 151.57 | -0.03 | | |
| 14 | 151.54 | -0.03 | | |
| 15 | 151.52 | -0.02 | | |
| 16 | 151.49 | -0.03 | -0.03 | |
| **17** | 151.46 | -0.03 | | |
| 18 | 151.43 | -0.03 | | |
| 19 | 151.4 | -0.03 | | |
| 20 | 151.37 | -0.03 | | |
| 21 | 151.35 | -0.02 | | |
| 22 | 151.32 | -0.03 | | |
| 23 | 151.29 | -0.03 | | |
| 24 | 151.25 | -0.04 | | |
| 25 | 151.22 | -0.03 | | |
| **26** | 151.19 | -0.03 | | |
| 27 | 151.16 | -0.03 | | |
| 28 | 151.13 | -0.03 | | |
| 29 | 151.09 | -0.04 | | |
| 30 | 151.06 | -0.03 | | |
| 31 | 151.02 | -0.04 | | |

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|---|---|---|---|---|
| Sept. 1 | 150.99 | -0.03 | | |
| 2 | 150.95 | -0.04 | | |
| 3 | 150.91 | -0.04 | | |
| 4 | 150.88 | -0.03 | | |
| 5 | 150.84 | -0.04 | **-0.04** | |
| 6 | 150.8 | -0.04 | | |
| 7 | 150.76 | -0.04 | | |
| 8 | 150.72 | -0.04 | | |
| 9 | 150.68 | -0.04 | | |
| 10 | 150.64 | -0.04 | | |
| 11 | 150.6 | -0.04 | | |
| 12 | 150.56 | -0.04 | | |
| 13 | 150.52 | -0.04 | | |
| 14 | 150.49 | **-0.03** | **Anomaly. Why -0.03 (decrease before the max- the LAECsp has this decrease ALWAYS AFTER the pick of the sequence) and then -0.05? It should be directly -0.05** | **This anomaly would not exist if Mercury was a natural Satellite of the Earth.** |
| 15 | 150.45 | -0.04 | | |
| 16 | 150.41 | -0.04 | | |
| 17 | 150.36 | **-0.05** | | |
| 18 | 150.32 | **-0.04** | **2nd anomaly. Again a sequence of -0.04 and not -0.05** | **This anomaly would not exist if Mercury was a natural Satellite of the Earth.** |
| 19 | 150.28 | -0.04 | | |
| 20 | 150.24 | -0.04 | | |
| 21 | 150.2 | -0.04 | | |
| 22 | 150.16 | -0.04 | | |
| 23 | 150.12 | -0.04 | | |

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|---|---|---|---|---|
| 24 | 150.08 | -0.04 | | |
| 25 | 150.04 | -0.04 | | |
| 26 | 150 | -0.04 | | |
| 27 | 149.96 | -0.04 | | |
| 28 | 149.91 | **-0.05** | | |
| 29 | 149.87 | -0.04 | | |
| 30 | 149.83 | -0.04 | | |
| Oct. 1 | 149.78 | -0.05 | | |
| 2 | 149.74 | -0.04 | | |
| 3 | 149.7 | -0.04 | | |
| 4 | 149.65 | -0.05 | | |
| 5 | 149.61 | -0.04 | | |
| 6 | 149.56 | -0.05 | | |
| 7 | 149.52 | -0.04 | | |
| 8 | 149.48 | -0.04 | | |
| 9 | 149.43 | -0.05 | | |
| 10 | 149.39 | -0.04 | | |
| 11 | 149.35 | -0.04 | | |
| 12 | 149.3 | -0.05 | | |
| 13 | 149.26 | -0.04 | | |
| 14 | 149.22 | -0.04 | | |
| 15 | 149.17 | -0.05 | | |
| 16 | 149.13 | -0.04 | **3rd Anomaly – Again -0.04** | **This anomaly would not exist if Mercury was a natural Satellite of the Earth.** |
| 17 | 149.09 | -0.04 | | |
| 18 | 149.05 | -0.04 | | |
| 19 | 149.01 | -0.04 | | |
| 20 | 148.97 | -0.04 | | |
| 21 | 148.93 | -0.04 | | |
| 22 | 148.88 | -0.05 | | |
| 23 | 148.84 | -0.04 | **4th Anomaly – Again -0.04** | **This anomaly would not exist if Mercury was a natural Satellite of the Earth.** |
| 24 | 148.8 | -0.04 | | |
| 25 | 148.76 | -0.04 | | |
| 26 | 148.72 | -0.04 | | |
| 27 | 148.68 | -0.04 | | |
| 28 | 148.64 | -0.04 | | |

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|---|---|---|---|---|
| 29 | 148.6 | -0.04 | | |
| 30 | 148.56 | -0.04 | | |
| 31 | 148.52 | -0.04 | | |
| Nov. 1 | 148.48 | -0.04 | | |
| 2 | 148.44 | -0.04 | | |
| 3 | 148.4 | -0.04 | | |
| 4 | 148.36 | -0.04 | | |
| 5 | 148.33 | -0.03 | | |
| 6 | 148.29 | -0.04 | | |
| 7 | 148.25 | -0.04 | | |
| 8 | 148.21 | -0.04 | | |
| 9 | 148.18 | -0.03 | | |
| 10 | 148.14 | -0.04 | | |
| 11 | 148.1 | -0.04 | | |
| 12 | 148.07 | -0.03 | | |
| 13 | 148.03 | -0.04 | | |
| 14 | 148 | -0.03 | | |
| 15 | 147.97 | -0.03 | | |
| 16 | 147.94 | -0.03 | | |
| 17 | 147.9 | -0.04 | | |
| 18 | 147.87 | -0.03 | **Anomaly. -0.03 instead of - 0.05** | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No3 or rσ (on d3):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. |
| 19 | 147.84 | -0.03 | | |
| 20 | 147.81 | -0.03 | | |
| 21 | 147.78 | -0.03 | | |
| 22 | 147.76 | -0.02 | | |
| 23 | 147.73 | -0.03 | | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No4 or MS (on d4):** Gradual |

| | | | | |
|---|---|---|---|---|
| | | | | decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 24 | 147.7 | -0.03 | | |
| 25 | 147.67 | -0.03 | | |
| 26 | 147.64 | -0.03 | | |
| 27 | 147.62 | -0.02 | | |
| 28 | 147.59 | -0.03 | | |
| 29 | 147.56 | -0.03 | | |
| 30 | 147.54 | -0.02 | | |
| Dec. 1 | 147.51 | -0.03 | | |
| 2 | 147.49 | -0.02 | | |
| 3 | 147.46 | -0.03 | | |
| 4 | 147.44 | -0.02 | -0.02 | |
| 5 | 147.42 | -0.02 | | |
| 6 | 147.4 | -0.02 | | |
| 7 | 147.37 | -0.03 | | |
| 8 | 147.35 | -0.02 | | |
| 9 | 147.33 | -0.02 | | |
| 10 | 147.31 | -0.02 | | |
| 11 | 147.3 | -0.01 | | |
| 12 | 147.28 | -0.02 | | |
| 13 | 147.26 | -0.02 | | |
| 14 | 147.25 | -0.01 | | |
| 15 | 147.23 | -0.02 | | |
| 16 | 147.22 | -0.01 | | |
| 17 | 147.21 | -0.01 | | |
| 18 | 147.2 | -0.01 | | |
| 19 | 147.18 | -0.02 | | |
| 20 | 147.17 | -0.01 | | |
| 21 | 147.16 | -0.01 | | |
| 22 | 147.16 | 0 | | |
| 23 | 147.15 | -0.01 | -0.01 | |
| 24 | 147.14 | -0.01 | | |
| 25 | 147.13 | -0.01 | | |
| 26 | 147.12 | -0.01 | | |
| 27 | 147.12 | 0 | | |
| 28 | 147.11 | -0.01 | | |
| 29 | 147.1 | -0.01 | | |
| 30 | 147.1 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 31 | 147.1 | 0 | | |
| 2020 Jan. 1 | 147.1 | 0 | | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No5 or LA (on d5):** Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| 2 | 147.09 | -0.01 | | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun". |
| 3 | 147.09 | 0 | 0 | |
| 4 | 147.09 | 0 | | |
| 5 | 147.09 | 0 | | |
| 6 | 147.09 | 0 | | |
| 7 | 147.09 | 0 | | |
| 8 | 147.1 | 0.01 | | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 9 | 147.1 | 0 | | |
| 10 | 147.1 | 0 | | |
| 11 | 147.11 | 0.01 | | |
| 12 | 147.12 | 0.01 | | |
| 13 | 147.12 | 0 | | |

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| 14 | 147.13 | 0.01 | 0.01 | |
| 15 | 147.14 | 0.01 | | |
| 16 | 147.15 | 0.01 | | |
| 17 | 147.16 | 0.01 | | |
| 18 | 147.17 | 0.01 | | |
| 19 | 147.19 | 0.02 | | |
| 20 | 147.2 | 0.01 | | |
| 21 | 147.21 | 0.01 | | |
| 22 | 147.23 | 0.02 | | |
| 23 | 147.24 | 0.01 | | |
| 24 | 147.26 | 0.02 | | |
| 25 | 147.27 | 0.01 | | |
| 26 | 147.29 | 0.02 | | |
| 27 | 147.31 | 0.02 | | |
| 28 | 147.32 | 0.01 | | |
| 29 | 147.34 | 0.02 | 0.02 | |
| 30 | 147.36 | 0.02 | | |
| 31 | 147.38 | 0.02 | | |
| Febr. 1 | 147.4 | 0.02 | | |
| 2 | 147.42 | 0.02 | | |
| 3 | 147.44 | 0.02 | | |
| 4 | 147.46 | 0.02 | | |
| 5 | 147.48 | 0.02 | | |
| 6 | 147.51 | 0.03 | | |
| 7 | 147.53 | 0.02 | | |
| 8 | 147.56 | 0.03 | | |
| 9 | 147.58 | 0.02 | | |
| 10 | 147.61 | 0.03 | | |
| 11 | 147.64 | 0.03 | | |
| 12 | 147.66 | 0.02 | | |
| 13 | 147.69 | 0.03 | 0.03 | |
| 14 | 147.72 | 0.03 | | |
| 15 | 147.75 | 0.03 | | |
| 16 | 147.78 | 0.03 | | |
| 17 | 147.81 | 0.03 | | |
| 18 | 147.85 | 0.04 | | |
| 19 | 147.88 | 0.03 | | |
| 20 | 147.91 | 0.03 | | |

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|---|---|---|---|---|
| 21 | 147.94 | 0.03 | | |
| 22 | 147.98 | 0.04 | | |
| 23 | 148.01 | 0.03 | | |
| 24 | 148.04 | 0.03 | | |
| 25 | 148.08 | 0.04 | | |
| 26 | 148.11 | 0.03 | | |
| 27 | 148.15 | 0.04 | | |
| 28 | 148.18 | 0.03 | | |
| 29 | 148.22 | 0.04 | | |
| 1-Mar | 148.25 | 0.03 | | |
| 2 | 148.29 | 0.04 | | |
| 3 | 148.33 | 0.04 | | |
| 4 | 148.36 | 0.03 | | |
| 5 | 148.4 | 0.04 | | |
| 6 | 148.44 | 0.04 | | |
| 7 | 148.48 | 0.04 | | |
| 8 | 148.51 | 0.03 | | |
| 9 | 148.55 | 0.04 | **0.04** | |
| 10 | 148.59 | 0.04 | | |
| 11 | 148.63 | 0.04 | | |
| 12 | 148.67 | 0.04 | | |
| 13 | 148.72 | **0.05** | | |
| 14 | 148.76 | 0.04 | **Anomaly. 2nd time 0.04** | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No8 or rε (on d8):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. |
| 15 | 148.8 | 0.04 | | |
| 16 | 148.84 | 0.04 | | |
| 17 | 148.88 | 0.04 | | |
| 18 | 148.93 | **0.05** | | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Point No9 or NM (on d9):** Gradual |

| | | | | |
|---|---|---|---|---|
| | | | | decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 19 | 148.97 | 0.04 | | |
| 20 | 149.01 | 0.04 | | |
| 21 | 149.05 | 0.04 | | |
| 22 | 149.1 | 0.05 | | |
| 23 | 149.14 | 0.04 | | |
| 24 | 149.18 | 0.04 | | |
| 25 | 149.22 | 0.04 | | |
| 26 | 149.27 | 0.05 | | |
| 27 | 149.31 | 0.04 | **Anomaly. 3rd time 0.04** | **This anomaly would not exist if Mercury was a natural Satellite of the Earth.** |
| 28 | 149.35 | 0.04 | | |
| 29 | 149.39 | 0.04 | | |
| 30 | 149.43 | 0.04 | | |
| 31 | 149.48 | **0.05** | | |
| Apr. 1 | 149.52 | 0.04 | **Anomaly. 4th time 0.04** | **This anomaly would not exist if Mercury was a natural Satellite of the Earth.** |
| 2 | 149.56 | 0.04 | | |
| 3 | 149.6 | 0.04 | | |
| 4 | 149.64 | 0.04 | | |
| 5 | 149.69 | **0.05** | | |
| 6 | 149.73 | 0.04 | | |
| 7 | 149.77 | 0.04 | | |
| 8 | 149.82 | **0.05** | | |
| 9 | 149.86 | 0.04 | | |
| 10 | 149.9 | 0.04 | | |
| 11 | 149.94 | 0.04 | | |
| 12 | 149.99 | **0.05** | | |
| 13 | 150.03 | 0.04 | | |
| 14 | 150.07 | 0.04 | | |
| 15 | 150.12 | **0.05** | | |
| 16 | 150.16 | 0.04 | | |
| 17 | 150.2 | 0.04 | | |
| 18 | 150.25 | **0.05** | | |

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| 19 | 150.29 | 0.04 | Anomaly. 5th time 0.04 | This anomaly would not exist if Mercury was a natural Satellite of the Earth. |
| 20 | 150.33 | 0.04 | | |
| 21 | 150.37 | 0.04 | | |
| 22 | 150.41 | 0.04 | | |
| 23 | 150.45 | 0.04 | | |
| 24 | 150.49 | 0.04 | | |
| 25 | 150.53 | 0.04 | | |
| 26 | 150.57 | 0.04 | | |
| 27 | 150.61 | 0.04 | | |
| 28 | 150.65 | 0.04 | | |
| 29 | 150.68 | 0.03 | | |
| 30 | 150.72 | 0.04 | | |
| 1-May | 150.76 | 0.04 | | |
| 2 | 150.8 | 0.04 | | |
| 3 | 150.83 | 0.03 | | |
| 4 | 150.87 | 0.04 | | |
| 5 | 150.9 | 0.03 | | |
| 6 | 150.94 | 0.04 | | |
| 7 | 150.98 | 0.04 | | |
| 8 | 151.01 | 0.03 | | |
| 9 | 151.05 | 0.04 | | |
| 10 | 151.08 | 0.03 | | |
| 11 | 151.12 | 0.04 | | |
| 12 | 151.15 | 0.03 | | |
| 13 | 151.19 | 0.04 | | |
| 14 | 151.22 | 0.03 | | |
| 15 | 151.25 | 0.03 | | |
| 16 | 151.28 | 0.03 | | |
| 17 | 151.32 | 0.04 | | |
| 18 | 151.35 | 0.03 | Anomaly. 0.03 instead of 0.05 | This anomaly would not exist if Mercury was a natural Satellite of the Earth. |
| 19 | 151.38 | 0.03 | | |
| 20 | 151.41 | 0.03 | | |
| 21 | 151.44 | 0.03 | | |
| 22 | 151.47 | 0.03 | | |
| 23 | 151.5 | 0.03 | | |

| | | | | |
|---|---|---|---|---|
| 24 | 151.52 | 0.02 | | |
| 25 | 151.55 | 0.03 | | |
| 26 | 151.57 | 0.02 | | |
| 27 | 151.6 | 0.03 | | |
| 28 | 151.62 | 0.02 | | |
| 29 | 151.65 | 0.03 | | |
| 30 | 151.67 | 0.02 | | |
| 31 | 151.69 | 0.02 | | |
| 1-Jun | 151.72 | 0.03 | | |
| 2 | 151.74 | 0.02 | 0.02 | |
| 3 | 151.76 | 0.02 | | |
| 4 | 151.78 | 0.02 | | |
| 5 | 151.8 | 0.02 | | |
| 6 | 151.82 | 0.02 | | |
| 7 | 151.84 | 0.02 | | |
| 8 | 151.86 | 0.02 | | |
| 9 | 151.87 | 0.01 | | |
| 10 | 151.89 | 0.02 | | |
| 11 | 151.91 | 0.02 | | |
| 12 | 151.93 | 0.02 | | |
| 13 | 151.94 | 0.01 | | |
| 14 | 151.96 | 0.02 | | |
| 15 | 151.97 | 0.01 | | |
| 16 | 151.99 | 0.02 | | |
| 17 | 152 | 0.01 | 0.01 | |
| 18 | 152.01 | 0.01 | | |
| 19 | 152.02 | 0.01 | | |
| 20 | 152.03 | 0.01 | | |
| 21 | 152.04 | 0.01 | | |
| 22 | 152.05 | 0.01 | | |
| 23 | 152.06 | 0.01 | | |
| 24 | 152.07 | 0.01 | | |
| 25 | 152.07 | 0 | | |
| 26 | 152.08 | 0.01 | | |
| 27 | 152.08 | 0 | | |
| 28 | 152.09 | 0.01 | | |
| 29 | 152.09 | 0 | | |
| 30 | 152.09 | 0 | | |
| 1-Jul | 152.09 | 0 | | |
| 2 | 152.09 | 0 | | ***If Earth was the natural "Sun" of*** |

| | | | | |
|---|---|---|---|---|
| | | | | ***Mercury then, we should see here the:*** **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |
| 3 | 152.1 | 0.01 | | ***If Earth was the natural "Sun" of Mercury then, we should see here the:*** **Aphe-LAEC** |
| 4 | 152.1 | 0 | | |
| 5 | 152.09 | -0.01 | | **See where is the 0 (zero) sequence – not at the Point No1 (the Aphe-LAEC) but at Point No2.** |
| 6 | 152.09 | 0 | | |
| 7 | 152.09 | 0 | | |
| 8 | 152.09 | 0 | | |
| 9 | 152.09 | 0 | | |
| 10 | 152.09 | 0 | | |
| 11 | 152.08 | -0.01 | | |
| 12 | | -152.08 | | |
| 13 | | 0 | | |
| 14 | | 0 | | |

## Appendix F

**Step 1:**

I'll create a table with 5 columns for Venus. In the first two columns, I'll insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Earth's distance from Venus in million km

**Step 2:**

I'll find these data for the next 3 columns:

– Column No3: The difference of the Earth's distance from Venus from the previous day
– Column No4: The Sequence of the difference (it's also related to the Orbital Speed)
– Column No5: The 10 Points & comments

| Date 2019 | The Earth's distance from Venus in million km | The difference of the Earth's distance from Venus from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| **August 9 2019** | **258.99** | **258.99** | **0** | |
| 10 | 258.99 | 0 | | |
| 11 | 258.99 | 0 | | |
| 12 | 258.98 | -0.01 | 0.01 | |
| 13 | 258.97 | -0.01 | | |
| 14 | 258.94 | -0.03 | 0.02 | |
| 15 | 258.91 | -0.03 | | |
| 16 | 258.87 | -0.04 | 0.01 | |
| 17 | 258.82 | -0.05 | | |
| 18 | 258.76 | -0.06 | 0.01 | |
| 19 | 258.69 | -0.07 | 0.01 | |
| 20 | 258.62 | -0.07 | | |
| 21 | 258.54 | -0.08 | 0.01 | |
| 22 | 258.45 | -0.09 | 0.01 | |

| | | | | |
|---|---|---|---|---|
| 23 | 258.35 | -0.1 | 0.01 | |
| 24 | 258.24 | -0.11 | 0.01 | |
| 25 | 258.13 | -0.11 | | |
| 26 | 258.01 | -0.12 | 0.01 | |
| 27 | 257.88 | -0.13 | 0.01 | |
| 28 | 257.74 | -0.14 | 0.01 | |
| 29 | 257.59 | -0.15 | 0.01 | |
| 30 | 257.44 | -0.15 | | |
| 31 | 257.28 | -0.16 | 0.01 | |
| **Sept. 1** | **257.11** | **-0.17** | 0.01 | |
| 2 | 256.93 | -0.18 | 0.01 | |
| 3 | 256.74 | -0.19 | 0.01 | |
| 4 | 256.55 | -0.19 | | |
| 5 | 256.35 | -0.2 | 0.01 | |
| 6 | 256.14 | -0.21 | 0.01 | |
| 7 | 255.92 | -0.22 | 0.01 | |
| 8 | 255.69 | -0.23 | 0.01 | |
| 9 | 255.46 | -0.23 | | |
| 10 | 255.22 | -0.24 | 0.01 | |
| 11 | 254.98 | -0.24 | | |
| 12 | 254.72 | -0.26 | 0.02 | |
| 13 | 254.46 | -0.26 | | |
| 14 | 254.2 | -0.26 | | |
| 15 | 253.92 | -0.28 | 0.02 | |
| 16 | 253.64 | -0.28 | | |
| 17 | 253.35 | -0.29 | 0.01 | |
| 18 | 253.06 | -0.29 | | |
| 19 | 252.76 | -0.3 | 0.01 | |
| 20 | 252.45 | -0.31 | 0.01 | |

| | | | | |
|---|---|---|---|---|
| 21 | 252.13 | -0.32 | 0.01 | |
| 22 | 251.81 | -0.32 | | |
| 23 | 251.48 | -0.33 | 0.01 | |
| 24 | 251.14 | -0.34 | 0.01 | |
| 25 | 250.8 | -0.34 | | |
| 26 | 250.45 | -0.35 | 0.01 | |
| 27 | 250.1 | -0.35 | | |
| 28 | 249.73 | -0.37 | 0.02 | |
| 29 | 249.36 | -0.37 | | |
| 30 | 248.99 | -0.37 | | |
| **Oct. 1** | **248.61** | **-0.38** | 0.01 | |
| 2 | 248.22 | -0.39 | 0.01 | |
| 3 | 247.82 | -0.4 | 0.01 | |
| 4 | 247.42 | -0.4 | | |
| 5 | 247.01 | -0.41 | 0.01 | |
| 6 | 246.59 | -0.42 | 0.01 | |
| 7 | 246.17 | -0.42 | | |
| 8 | 245.75 | -0.42 | | |
| 9 | 245.31 | -0.44 | **0.02** | |
| 10 | 244.87 | -0.44 | | |
| 11 | 244.43 | -0.44 | | |
| 12 | 243.98 | -0.45 | 0.03 | |
| 13 | 243.52 | -0.46 | 0.01 | |
| 14 | 243.06 | -0.46 | | |
| 15 | 242.59 | -0.47 | 0.01 | |
| 16 | 242.12 | -0.47 | | |
| 17 | 241.64 | -0.48 | 0.01 | |
| 18 | 241.16 | -0.48 | | |
| 19 | 240.67 | -0.49 | 0.01 | |
| 20 | 240.17 | -0.5 | 0.01 | |
| 21 | 239.67 | -0.5 | | |
| 22 | 239.16 | -0.51 | 0.01 | |
| 23 | 238.65 | -0.51 | | |

| | | | | |
|---|---|---|---|---|
| 24 | 238.14 | -0.51 | | |
| 25 | 237.61 | -0.53 | 0.02 | |
| 26 | 237.08 | -0.53 | | |
| 27 | 236.53 | -0.55 | 0.02 | |
| 28 | 235.99 | -0.54 | -0.01 | |
| 29 | 235.44 | -0.55 | 0.01 | |
| 30 | 234.89 | -0.55 | | |
| 31 | 234.34 | -0.55 | | |
| **Nov. 1** | **233.78** | **-0.56** | 0.01 | |
| 2 | 233.21 | -0.57 | 0.01 | |
| 3 | 232.64 | -0.57 | | |
| 4 | 232.06 | -0.58 | 0.01 | |
| 5 | 231.48 | -0.58 | | |
| 6 | 230.89 | -0.59 | 0.01 | |
| 7 | 230.3 | -0.59 | | |
| 8 | 229.7 | -0.6 | 0.01 | |
| 9 | 229.1 | -0.6 | | |
| 10 | 228.49 | -0.61 | 0.01 | |
| 11 | 227.88 | -0.61 | | |
| 12 | 227.26 | -0.62 | 0.01 | |
| 13 | 226.64 | -0.62 | | |
| 14 | 226.02 | -0.62 | | |
| 15 | 225.38 | -0.64 | 0.02 | |
| 16 | 224.75 | -0.63 | -0.01 | |
| 17 | 224.11 | -0.64 | 0.01 | |
| 18 | 223.46 | -0.65 | 0.01 | |
| 19 | 222.82 | -0.64 | -0.01 | |
| 20 | 222.16 | -0.66 | 0.02 | |
| 21 | 221.5 | -0.66 | | |
| 22 | 220.84 | -0.66 | | |
| 23 | 220.17 | -0.67 | 0.01 | |
| 24 | 219.5 | -0.67 | | |
| 25 | 218.82 | -0.68 | 0.01 | |
| 26 | 218.14 | -0.68 | | |
| 27 | 217.45 | -0.69 | 0.01 | |
| 28 | 216.76 | -0.69 | | |
| 29 | 216.07 | -0.69 | | |
| 30 | 215.37 | -0.7 | 0.01 | |
| **Dec. 1** | **214.66** | **-0.71** | 0.01 | |
| 2 | 213.95 | -0.71 | | |

| | | | | |
|---|---|---|---|---|
| 3 | 213.23 | -0.72 | 0.01 | |
| 4 | 212.51 | -0.72 | | |
| 5 | 211.79 | -0.72 | | |
| 6 | 211.06 | -0.73 | 0.01 | |
| 7 | 210.33 | -0.73 | | |
| 8 | 209.59 | -0.74 | 0.01 | |
| 9 | 208.85 | -0.74 | | |
| 10 | 208.1 | -0.75 | 0.01 | |
| 11 | 207.35 | -0.75 | | |
| 12 | 206.59 | -0.76 | 0.01 | |
| 13 | 205.83 | -0.76 | | |
| 14 | 205.07 | -0.76 | | |
| 15 | 204.3 | -0.77 | 0.01 | |
| 16 | 203.53 | -0.77 | | |
| 17 | 202.75 | -0.78 | 0.01 | |
| 18 | 201.97 | -0.78 | | |
| 19 | 201.19 | -0.78 | | |
| 20 | 200.4 | -0.79 | 0.01 | |
| 21 | 199.61 | -0.79 | | |
| 22 | 198.81 | -0.8 | 0.01 | |
| 23 | 198.01 | -0.8 | | |
| 24 | 197.2 | -0.81 | 0.01 | |
| 25 | 196.39 | -0.81 | | |
| 26 | 195.57 | -0.82 | 0.01 | |
| 27 | 194.75 | -0.82 | | |
| 28 | 193.93 | -0.82 | | |
| 29 | 193.1 | -0.83 | 0.01 | |
| 30 | 192.26 | -0.84 | 0.01 | |
| 31 | 191.42 | -0.84 | | |
| **2020 Jan. 1** | **190.58** | **-0.84** | | |
| 2 | 189.73 | -0.85 | 0.01 | |
| 3 | 188.88 | -0.85 | | |
| 4 | 188.02 | -0.86 | 0.01 | |
| 5 | 187.16 | -0.86 | | |
| 6 | 186.3 | -0.86 | | |
| 7 | 185.43 | -0.87 | 0.01 | |
| 8 | 184.55 | -0.88 | 0.01 | |
| 9 | 183.67 | -0.88 | | |
| 10 | 182.79 | -0.88 | | |

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|---|---|---|---|---|
| 11 | 181.9 | -0.89 | 0.01 | |
| 12 | 181.01 | -0.89 | | |
| 13 | 180.12 | -0.89 | | |
| 14 | 179.22 | -0.9 | 0.01 | |
| 15 | 178.32 | -0.9 | | |
| 16 | 177.41 | -0.91 | 0.01 | |
| 17 | 176.5 | -0.91 | | |
| 18 | 175.58 | -0.92 | 0.01 | |
| 19 | 174.66 | -0.92 | | |
| 20 | 173.74 | -0.92 | | |
| 21 | 172.81 | -0.93 | 0.01 | |
| 22 | 171.87 | -0.94 | 0.01 | |
| 23 | 170.94 | -0.93 | | |
| 24 | 169.99 | -0.95 | 0.02 | |
| 25 | 169.05 | -0.94 | -0.01 | |
| 26 | 168.1 | -0.95 | 0.01 | |
| 27 | 167.14 | -0.96 | 0.01 | |
| 28 | 166.18 | -0.96 | | |
| 29 | 165.22 | -0.96 | | |
| 30 | 164.25 | -0.97 | 0.01 | |
| 31 | 163.27 | -0.98 | 0.01 | |
| **Febr. 1** | **162.3** | **-0.97** | -0.01 | |
| 2 | 161.31 | -0.99 | 0.02 | |
| 3 | 160.33 | -0.98 | -0.01 | |
| 4 | 159.34 | -0.99 | 0.01 | |
| 5 | 158.34 | -1 | 0.01 | |
| 6 | 157.34 | -1 | | |
| 7 | 156.34 | -1 | | |
| 8 | 155.33 | -1.01 | 0.01 | |
| 9 | 154.32 | -1.01 | | |
| 10 | 153.3 | -1.02 | 0.01 | |
| 11 | 152.28 | -1.02 | | |
| 12 | 151.26 | -1.02 | | |
| 13 | 150.23 | -1.03 | 0.01 | |
| 14 | 149.2 | -1.03 | | |
| 15 | 148.17 | -1.03 | | |
| 16 | 147.13 | -1.04 | 0.01 | |
| 17 | 146.09 | -1.04 | | |
| 18 | 145.04 | -1.05 | 0.01 | |
| 19 | 143.99 | -1.05 | | |

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|---|---|---|---|---|
| 20 | 142.94 | -1.05 | | |
| 21 | 141.88 | -1.06 | 0.01 | |
| 22 | 140.82 | -1.06 | | |
| 23 | 139.75 | -1.07 | 0.01 | |
| 24 | 138.68 | -1.07 | | |
| 25 | 137.61 | -1.07 | | |
| 26 | 136.53 | -1.08 | 0.01 | |
| 27 | 135.45 | -1.08 | | |
| 28 | 134.36 | -1.09 | 0.01 | |
| 29 | 133.27 | -1.09 | | |
| **1-Mar** | **132.18** | **-1.09** | | |
| 2 | 131.09 | -1.09 | | |
| 3 | 129.99 | -1.1 | 0.01 | |
| 4 | 128.88 | -1.11 | 0.01 | |
| 5 | 127.78 | -1.1 | | |
| 6 | 126.67 | -1.11 | | |
| 7 | 125.56 | -1.11 | | |
| 8 | 124.44 | -1.12 | 0.01 | |
| 9 | 123.32 | -1.12 | | |
| 10 | 122.2 | -1.12 | | |
| 11 | 121.08 | -1.12 | | |
| 12 | 119.95 | -1.13 | 0.01 | |
| 13 | 118.82 | -1.13 | | |
| 14 | 117.69 | -1.13 | | |
| 15 | 116.56 | -1.13 | | |
| 16 | 115.42 | -1.14 | 0.01 | |
| 17 | 114.28 | -1.14 | | |
| 18 | 113.14 | -1.14 | | |
| 19 | 112 | -1.14 | | |
| 20 | 110.85 | -1.15 | 0.01 | |
| 21 | 109.71 | -1.14 | -0.01 | |
| 22 | 108.56 | -1.15 | 0.01 | |
| 23 | 107.41 | -1.15 | | |
| 24 | 106.26 | -1.15 | | |
| 25 | 105.11 | -1.15 | | |
| 26 | 103.95 | -1.16 | 0.01 | |
| 27 | 102.8 | -1.15 | -0.01 | |
| 28 | 101.64 | -1.16 | 0.01 | |

| | | | | |
|---|---|---|---|---|
| 29 | 100.53 | -1.11 | **-0.05** | |
| 30 | 99.37 | -1.16 | 0.05 | |
| 31 | 98.22 | -1.15 | -0.01 | |
| **Apr. 1** | **97.06** | **-1.16** | 0.01 | |
| 2 | 95.9 | -1.16 | | |
| 3 | 94.74 | -1.16 | | |
| 4 | 93.58 | -1.16 | | |
| 5 | 92.42 | -1.16 | | |
| 6 | 91.26 | -1.16 | | |
| 7 | 90.11 | -1.15 | -0.01 | |
| 8 | 88.95 | -1.16 | 0.01 | |
| 9 | 87.8 | -1.15 | **-0.01** | |
| 10 | 86.65 | -1.15 | | |
| 11 | 85.5 | -1.15 | | |
| 12 | 84.35 | -1.15 | | |
| 13 | 83.21 | -1.14 | -0.01 | |
| 14 | 82.07 | -1.14 | | |
| 15 | 80.93 | -1.14 | | |
| 16 | 79.79 | -1.14 | | |
| 17 | 78.67 | -1.12 | -0.02 | |
| 18 | 77.54 | -1.13 | 0.01 | |
| 19 | 76.42 | -1.12 | -0.01 | |
| 20 | 75.31 | -1.11 | -0.01 | |
| 21 | 74.2 | -1.11 | | |
| 22 | 73.09 | -1.11 | | |
| 23 | 72 | -1.09 | -0.02 | |
| 24 | 70.91 | -1.09 | | |
| 25 | 69.82 | -1.09 | | |
| 26 | 68.75 | -1.07 | -0.02 | |
| 27 | 67.68 | -1.07 | | |
| 28 | 66.63 | -1.05 | -0.02 | |
| 29 | 65.58 | -1.05 | | |
| 30 | 64.55 | -1.03 | -0.02 | |
| **1-May** | **63.52** | **-1.03** | | |
| 2 | 62.51 | -1.01 | -0.02 | |
| 3 | 61.51 | -1 | -0.01 | |
| 4 | 60.53 | -0.98 | -0.02 | |
| 5 | 59.56 | -0.97 | -0.01 | |
| 6 | 58.6 | -0.96 | -0.01 | |
| 7 | 57.67 | -0.93 | -0.03 | |

| | | | | |
|---|---|---|---|---|
| 8 | 56.75 | -0.92 | -0.01 | |
| 9 | 55.85 | -0.9 | **-0.02** | |
| 10 | 54.97 | -0.88 | -0.02 | |
| 11 | 54.11 | -0.86 | -0.02 | |
| 12 | 53.28 | -0.83 | -0.03 | |
| 13 | 52.46 | -0.82 | -0.01 | |
| 14 | 51.68 | -0.78 | -0.04 | |
| 15 | 50.92 | -0.76 | -0.02 | |
| 16 | 50.18 | -0.74 | -0.02 | |
| 17 | 49.48 | -0.7 | -0.04 | |
| 18 | 48.8 | -0.68 | -0.02 | |
| 19 | 48.16 | -0.64 | -0.04 | |
| 20 | 47.55 | -0.61 | -0.03 | |
| 21 | 46.98 | -0.57 | -0.04 | |
| 22 | 46.44 | -0.54 | -0.03 | |
| 23 | 45.93 | -0.51 | -0.03 | |
| 24 | 45.47 | -0.46 | -0.05 | |
| 25 | 45.04 | -0.43 | -0.03 | |
| 26 | 44.66 | -0.38 | -0.05 | |
| 27 | 44.32 | -0.34 | -0.04 | |
| 28 | 44.02 | -0.3 | -0.04 | |
| 29 | 43.76 | -0.26 | -0.04 | |
| 30 | 43.55 | -0.21 | -0.05 | |
| 31 | 43.39 | -0.16 | -0.05 | |
| **1-Jun** | **43.27** | **-0.12** | -0.04 | |
| 2 | 43.2 | -0.07 | -0.05 | |
| **3** | **43.17** | **-0.03** | **-0.04** | |
| 4 | 43.19 | 0.02 | **0.05** | |
| 5 | 43.26 | 0.07 | 0.05 | |
| 6 | 43.38 | 0.12 | 0.05 | |
| 7 | 43.54 | 0.16 | 0.04 | |
| 8 | 43.75 | 0.21 | 0.05 | |
| 9 | 44 | 0.25 | **0.04** | |
| 10 | 44.3 | 0.3 | 0.05 | |
| 11 | 44.64 | 0.34 | 0.04 | |
| 12 | 45.03 | 0.39 | 0.05 | |
| 13 | 45.45 | 0.42 | 0.03 | |
| 14 | 45.91 | 0.46 | 0.04 | |
| 15 | 46.42 | 0.51 | 0.05 | |
| 16 | 46.96 | 0.54 | 0.03 | |

| | | | | |
|---|---|---|---|---|
| 17 | 47.53 | 0.57 | 0.03 | |
| 18 | 48.14 | 0.61 | 0.03 | |
| 19 | 48.78 | 0.64 | 0.03 | |
| 20 | 49.46 | 0.68 | 0.04 | |
| 21 | 50.16 | 0.7 | 0.02 | |
| 22 | 50.89 | 0.73 | 0.03 | |
| 23 | 51.65 | 0.76 | 0.03 | |
| 24 | 52.44 | 0.79 | 0.03 | |
| 25 | 53.25 | 0.81 | 0.03 | |
| 26 | 54.09 | 0.84 | 0.03 | |
| 27 | 54.94 | 0.85 | 0.01 | |
| 28 | 55.82 | 0.88 | 0.03 | |
| 29 | 56.72 | 0.9 | 0.02 | |
| 30 | 57.64 | 0.92 | 0.02 | |
| **1-Jul** | **58.57** | **0.93** | 0.01 | |
| 1 | 59.53 | 0.96 | 0.03 | |
| 3 | 60.5 | 0.97 | 0.01 | |
| 4 | 61.48 | 0.98 | 0.01 | |
| 5 | 62.48 | 1 | 0.02 | |
| 6 | 63.5 | 1.02 | 0.02 | |
| 7 | 64.52 | 1.02 | | |
| 8 | 65.56 | 1.04 | 0.02 | |
| 9 | 66.61 | 1.05 | **0.01** | |
| 10 | 67.67 | 1.06 | 0.01 | |
| 11 | 68.74 | 1.07 | 0.01 | |
| 12 | 69.81 | 1.07 | | |
| 13 | 70.9 | 1.09 | 0.02 | |
| 14 | 72 | 1.1 | 0.02 | |
| 15 | 73.1 | 1.1 | | |
| 16 | 74.21 | 1.11 | 0.01 | |
| 17 | 75.32 | 1.11 | | |
| 18 | 76.44 | 1.12 | 0.01 | |
| 19 | 77.57 | 1.13 | 0.01 | |
| 20 | 78.7 | 1.13 | | |
| 21 | 79.83 | 1.13 | | |
| 22 | … | | | |

There is no sense to continue as the table is full of anomalies.

## Appendix G

**Step 1:**

I'll create a table with 5 columns for Ceres.

Then, I'll insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Ceres' distance from the Sun in million km

**Step 2:**

I'll find these data for the next 3 columns:

- Column No3: The difference of the Ceres' distance from the Sun from the previous day
- Column No4: The Sequence of the difference (it's also related to the Orbital Speed)
- Column No5: The 10 Points & comments

***Note:*** You can start both from "perihelion" or "aphelion" the observation; just observe a full orbit and find the 10 points– if you start from "perihelion" you must finish at "perihelion" to find the 10 points.

| Date 2020 | The Ceres' distance from the Sun in million km | The difference of the Ceres' distance from the Sun from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| August 17, '20 | 446.14 | - | | |
| August 18, '20 | 446.15 | 0.01 | | **Point No1 or Aphe-LAEC (on** |

| | | | | |
|---|---|---|---|---|
| | | | | **d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 19 | 446.15 | 0 | | |
| 20 | 446.15 | 0 | | |
| 21 | 446.15 | 0 | | |
| 22 | 446.14 | -0.01 | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 23 | 446.14 | 0 | | |
| 24 | 446.14 | 0 | | |
| 25 | 446.14 | 0 | | |
| 26 | 446.14 | 0 | | |
| 27 | 446.13 | -0.01 | | |
| 28 | 446.13 | 0 | | |
| 29 | 446.13 | 0 | | |
| 30 | 446.12 | -0.01 | | |
| 31 | 446.12 | 0 | | |
| Sept. 1 | 446.11 | -0.01 | | |
| 2 | 446.11 | 0 | | |
| 3 | 446.1 | -0.01 | | |
| 4 | 446.1 | 0 | | |
| 5 | 446.09 | -0.01 | | |
| 6 | 446.09 | 0 | | |
| 7 | 446.08 | -0.01 | -0.01 | |

| | | | | |
|---|---|---|---|---|
| 8 | 446.07 | -0.01 | | |
| 9 | 446.06 | -0.01 | | |
| 10 | 446.05 | -0.01 | | |
| 11 | 446.04 | -0.01 | | |
| 12 | 446.03 | -0.01 | | |
| 13 | 446.03 | 0 | | |
| 14 | 446.02 | -0.01 | | |
| 15 | 446.01 | -0.01 | | |
| 16 | 445.99 | -0.02 | | |
| 17 | 445.98 | -0.01 | | |
| 18 | 445.97 | -0.01 | | |
| 19 | 445.96 | -0.01 | | |
| 20 | 445.95 | -0.01 | | |
| 21 | 445.94 | -0.01 | | |
| 22 | 445.92 | -0.02 | | |
| 23 | 445.91 | -0.01 | | |
| 24 | 445.9 | -0.01 | | |
| 25 | 445.88 | -0.02 | | |
| 26 | 445.87 | -0.01 | | |
| 27 | 445.85 | -0.02 | | |
| 28 | 445.84 | -0.01 | | |
| 29 | 445.82 | -0.02 | | |
| 30 | 445.81 | -0.01 | | |
| Oct. 1 | 445.79 | -0.02 | | |
| 2 | 445.77 | -0.02 | | |
| 3 | 445.75 | -0.02 | | |
| 4 | 445.74 | -0.01 | | |
| 5 | 445.72 | -0.02 | -0.02 | |
| 6 | 445.7 | -0.02 | | |
| 7 | 445.68 | -0.02 | | |
| 8 | 445.66 | -0.02 | | |
| 9 | 445.64 | -0.02 | | |
| 10 | 445.62 | -0.02 | | |
| 11 | 445.6 | -0.02 | | |
| 12 | 445.58 | -0.02 | | |
| 13 | 445.56 | -0.02 | | |

| | | | | |
|---|---|---|---|---|
| 14 | 445.54 | -0.02 | | |
| 15 | 445.52 | -0.02 | | |
| 16 | 445.5 | -0.02 | | |
| 17 | 445.47 | -0.03 | | |
| 18 | 445.45 | -0.02 | | |
| 19 | 445.43 | -0.02 | | |
| 20 | 445.4 | -0.03 | | |
| 21 | 445.38 | -0.02 | | |
| 22 | 445.35 | -0.03 | | |
| 23 | 445.33 | -0.02 | | |
| 24 | 445.3 | -0.03 | | |
| 25 | 445.28 | -0.02 | | |
| 26 | 445.25 | -0.03 | | |
| 27 | 445.23 | -0.02 | | |
| 28 | 445.2 | -0.03 | | |
| 29 | 445.17 | -0.03 | | |
| 30 | 445.14 | -0.03 | | |
| 31 | 445.12 | -0.02 | | |
| Nov. 1 | 445.09 | -0.03 | -0.03 | |
| 2 | 445.06 | -0.03 | | |
| 3 | 445.03 | -0.03 | | |
| 4 | 445 | -0.03 | | |
| 5 | 444.97 | -0.03 | | |
| 6 | 444.94 | -0.03 | | |
| 7 | 444.91 | -0.03 | | |
| 8 | 444.88 | -0.03 | | |
| 9 | 444.85 | -0.03 | | |
| 10 | 444.82 | -0.03 | | |
| 11 | 444.78 | -0.04 | | |
| 12 | 444.75 | -0.03 | | |
| 13 | 444.72 | -0.03 | | |
| 14 | 444.68 | -0.04 | | |
| 15 | 444.65 | -0.03 | | |
| 16 | 444.62 | -0.03 | | |
| 17 | 444.58 | -0.04 | | |
| 18 | 444.55 | -0.03 | | |

| | | | | |
|---|---|---|---|---|
| 19 | 444.51 | -0.04 | | |
| 20 | 444.48 | -0.03 | | |
| 21 | 444.44 | -0.04 | | |
| 22 | 444.41 | -0.03 | | |
| 23 | 444.37 | -0.04 | | |
| 24 | 444.33 | -0.04 | | |
| 25 | 444.29 | -0.04 | | |
| 26 | 444.26 | -0.03 | | |
| 27 | 444.22 | -0.04 | -0.04 | |
| 28 | 444.18 | -0.04 | | |
| 29 | 444.14 | -0.04 | | |
| 30 | 444.1 | -0.04 | | |
| Dec. 1 | 444.06 | -0.04 | | |
| 2 | 444.02 | -0.04 | | |
| 3 | 443.98 | -0.04 | | |
| 4 | 443.94 | -0.04 | | |
| 5 | 443.9 | -0.04 | | |
| 6 | 443.86 | -0.04 | | |
| 7 | 443.82 | -0.04 | | |
| 8 | 443.77 | -0.05 | | |
| 9 | 443.73 | -0.04 | | |
| 10 | 443.69 | -0.04 | | |
| 11 | 443.65 | -0.04 | | |
| 12 | 443.6 | -0.05 | | |
| 13 | 443.56 | -0.04 | | |
| 14 | 443.51 | -0.05 | | |
| 15 | 443.47 | -0.04 | | |
| 16 | 443.42 | -0.05 | | |
| 17 | 443.38 | -0.04 | | |
| 18 | 443.33 | -0.05 | | |
| 19 | 443.29 | -0.04 | | |
| 20 | 443.24 | -0.05 | | |
| 21 | 443.19 | -0.05 | | |
| 22 | 443.14 | -0.05 | | |
| 23 | 443.1 | -0.04 | | |
| 24 | 443.05 | -0.05 | -0.05 | |

| | | | | |
|---|---|---|---|---|
| 25 | 443 | -0.05 | | |
| 26 | 442.95 | -0.05 | | |
| 27 | 442.9 | -0.05 | | |
| 28 | 442.85 | -0.05 | | |
| 29 | 442.8 | -0.05 | | |
| 30 | 442.75 | -0.05 | | |
| 31 | 442.7 | -0.05 | | |
| 2021 Jan. 1 | 442.65 | -0.05 | | |
| 2 | 442.6 | -0.05 | | |
| 3 | 442.55 | -0.05 | | |
| 4 | 442.5 | -0.05 | | |
| 5 | 442.44 | -0.06 | | |
| 6 | 442.39 | -0.05 | | |
| 7 | 442.34 | -0.05 | | |
| 8 | 442.28 | -0.06 | | |
| 9 | 442.23 | -0.05 | | |
| 10 | 442.18 | -0.05 | | |
| 11 | 442.12 | -0.06 | | |
| 12 | 442.07 | -0.05 | | |
| 13 | 442.01 | -0.06 | | |
| 14 | 441.96 | -0.05 | | |
| 15 | 441.9 | -0.06 | | |
| 16 | 441.84 | -0.06 | | |
| 17 | 441.79 | -0.05 | | |
| 18 | 441.73 | -0.06 | | |
| 19 | 441.67 | -0.06 | | |
| 20 | 441.62 | -0.05 | | |
| 21 | 441.56 | -0.06 | -0.06 | |
| 22 | 441.5 | -0.06 | | |
| 23 | 441.44 | -0.06 | | |
| 24 | 441.38 | -0.06 | | |
| 25 | 441.32 | -0.06 | | |
| 26 | 441.26 | -0.06 | | |
| 27 | 441.2 | -0.06 | | |
| 28 | 441.14 | -0.06 | | |
| 29 | 441.08 | -0.06 | | |

| | | | | |
|---|---|---|---|---|
| 30 | 441.02 | -0.06 | | |
| 31 | 440.96 | -0.06 | | |
| Febr. 1 | 440.9 | -0.06 | | |
| 2 | 440.83 | -0.07 | | |
| 3 | 440.77 | -0.06 | | |
| 4 | 440.71 | -0.06 | | |
| 5 | 440.65 | -0.06 | | |
| 6 | 440.58 | -0.07 | | |
| 7 | 440.52 | -0.06 | | |
| 8 | 440.45 | -0.07 | | |
| 9 | 440.39 | -0.06 | | |
| 10 | 440.32 | -0.07 | | |
| 11 | 440.26 | -0.06 | | |
| 12 | 440.19 | -0.07 | | |
| 13 | 440.13 | -0.06 | | |
| 14 | 440.06 | -0.07 | | |
| 15 | 439.99 | -0.07 | | |
| 16 | 439.93 | -0.06 | | |
| 17 | 439.86 | -0.07 | | |
| 18 | 439.79 | -0.07 | | |
| 19 | 439.72 | -0.07 | | |
| 20 | 439.66 | -0.06 | | |
| 21 | 439.59 | -0.07 | -0.07 | |
| 22 | 439.52 | -0.07 | | |
| 23 | 439.45 | -0.07 | | |
| 24 | 439.38 | -0.07 | | |
| 25 | 439.31 | -0.07 | | |
| 26 | 439.24 | -0.07 | | |
| 27 | 439.17 | -0.07 | | |
| 28 | 439.1 | -0.07 | | |
| 1-Mar | 439.03 | -0.07 | | |
| 2 | 438.95 | -0.08 | | |
| 3 | 438.88 | -0.07 | | |
| 4 | 438.81 | -0.07 | | |
| 5 | 438.74 | -0.07 | | |
| 6 | 438.67 | -0.07 | | |

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| 7 | 438.59 | -0.08 | | |
| 8 | 438.52 | -0.07 | | |
| 9 | 438.44 | -0.08 | | |
| 10 | 438.37 | -0.07 | | |
| 11 | 438.3 | -0.07 | | |
| 12 | 438.22 | -0.08 | | |
| 13 | 438.15 | -0.07 | | |
| 14 | 438.07 | -0.08 | | |
| 15 | 437.99 | -0.08 | | |
| 16 | 437.92 | -0.07 | | |
| 17 | 437.84 | -0.08 | | |
| 18 | 437.77 | -0.07 | | |
| 19 | 437.69 | -0.08 | | |
| 20 | 437.61 | -0.08 | | |
| 21 | 437.53 | -0.08 | | |
| 22 | 437.46 | -0.07 | | |
| 23 | 437.38 | -0.08 | -0.08 | |
| 24 | 437.3 | -0.08 | | |
| 25 | 437.22 | -0.08 | | |
| 26 | 437.14 | -0.08 | | |
| 27 | 437.06 | -0.08 | | |
| 28 | 436.98 | -0.08 | | |
| 29 | 436.9 | -0.08 | | |
| 30 | 436.82 | -0.08 | | |
| 31 | 436.74 | -0.08 | | |
| Apr. 1 | 436.66 | -0.08 | | |
| 2 | 436.58 | -0.08 | | |
| 3 | 436.5 | -0.08 | | |
| 4 | 436.42 | -0.08 | | |
| 5 | 436.33 | -0.09 | | |
| 6 | 436.25 | -0.08 | | |
| 7 | 436.17 | -0.08 | | |
| 8 | 436.09 | -0.08 | | |
| 9 | 436 | -0.09 | | |
| 10 | 435.92 | -0.08 | | |
| 11 | 435.83 | -0.09 | | |

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| 12 | 435.75 | -0.08 | | |
| 13 | 435.67 | -0.08 | | |
| 14 | 435.58 | -0.09 | | |
| 15 | 435.5 | -0.08 | | |
| 16 | 435.41 | -0.09 | | |
| 17 | 435.32 | -0.09 | | |
| 18 | 435.24 | -0.08 | | |
| 19 | 435.15 | -0.09 | | |
| 20 | 435.06 | -0.09 | | |
| 21 | 434.98 | -0.08 | | |
| 22 | 434.89 | -0.09 | | |
| 23 | 434.8 | -0.09 | | |
| 24 | 434.72 | -0.08 | | |
| 25 | 434.63 | -0.09 | -0.09 | |
| 26 | 434.54 | -0.09 | | |
| 27 | 434.45 | -0.09 | | |
| 28 | 434.36 | -0.09 | | |
| 29 | 434.27 | -0.09 | | |
| 30 | 434.18 | -0.09 | | |
| 1-May | 434.09 | -0.09 | | |
| 2 | 434 | -0.09 | | |
| 3 | 433.91 | -0.09 | | |
| 4 | 433.82 | -0.09 | | |
| 5 | 433.73 | -0.09 | | |
| 6 | 433.64 | -0.09 | | |
| 7 | 433.55 | -0.09 | | |
| 8 | 433.46 | -0.09 | | |
| 9 | 433.36 | -0.1 | | |
| 10 | 433.27 | -0.09 | | |
| 11 | 433.18 | -0.09 | | |
| 12 | 433.09 | -0.09 | | |
| 13 | 432.99 | -0.1 | | |
| 14 | 432.9 | -0.09 | | |
| 15 | 432.81 | -0.09 | | |
| 16 | 432.71 | -0.1 | | |
| 17 | 432.62 | -0.09 | | |

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| 18 | 432.52 | -0.1 | | |
| 19 | 432.43 | -0.09 | | |
| 20 | 432.33 | -0.1 | | |
| 21 | 432.24 | -0.09 | | |
| 22 | 432.14 | -0.1 | | |
| 23 | 432.05 | -0.09 | | |
| 24 | 431.95 | -0.1 | | |
| 25 | 431.86 | -0.09 | | |
| 26 | 431.76 | -0.1 | | |
| 27 | 431.66 | -0.1 | | |
| 28 | 431.57 | -0.09 | | |
| 29 | 431.47 | -0.1 | | |
| 30 | 431.37 | -0.1 | | |
| 31 | 431.27 | -0.1 | | |
| 1-Jun | 431.18 | -0.09 | | |
| 2 | 431.08 | -0.1 | -0.10 | |
| 3 | 430.98 | -0.1 | | |
| 4 | 430.88 | -0.1 | | |
| 5 | 430.78 | -0.1 | | |
| 6 | 430.68 | -0.1 | | |
| 7 | 430.58 | -0.1 | | |
| 8 | 430.48 | -0.1 | | |
| 9 | 430.38 | -0.1 | | |
| 10 | 430.28 | -0.1 | | |
| 11 | 430.18 | -0.1 | | |
| 12 | 430.08 | -0.1 | | |
| 13 | 429.98 | -0.1 | | |
| 14 | 429.88 | -0.1 | | |
| 15 | 429.78 | -0.1 | | |
| 16 | 429.68 | -0.1 | | |
| 17 | 429.57 | -0.11 | | |
| 18 | 429.47 | -0.1 | | |
| 19 | 429.37 | -0.1 | | |
| 20 | 429.27 | -0.1 | | |
| 21 | 429.16 | -0.11 | | |
| 22 | 429.06 | -0.1 | | |

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| 23 | 428.96 | -0.1 | | |
| 24 | 428.85 | -0.11 | | |
| 25 | 428.75 | -0.1 | | |
| 26 | 428.65 | -0.1 | | |
| 27 | 428.54 | -0.11 | | |
| 28 | 428.44 | -0.1 | | |
| 29 | 428.33 | -0.11 | | |
| 30 | 428.23 | -0.1 | | |
| 1-Jul | 428.12 | -0.11 | | |
| 2 | 428.02 | -0.1 | | |
| 3 | 427.91 | -0.11 | | |
| 4 | 427.81 | -0.1 | | |
| 5 | 427.7 | -0.11 | | |
| 6 | 427.6 | -0.1 | | |
| 7 | 427.49 | -0.11 | | |
| 8 | 427.38 | -0.11 | | |
| 9 | 427.28 | -0.1 | | |
| 10 | 427.17 | -0.11 | | |
| 11 | 427.06 | -0.11 | | |
| 12 | 426.96 | -0.1 | | |
| 13 | 426.85 | -0.11 | | |
| 14 | 426.74 | -0.11 | | |
| 15 | 426.63 | -0.11 | | |
| 16 | 426.53 | -0.1 | | |
| 17 | 426.42 | -0.11 | -0.11 | |
| 18 | 426.31 | -0.11 | | |
| 19 | 426.2 | -0.11 | | |
| 20 | 426.09 | -0.11 | | |
| 21 | 425.98 | -0.11 | | |
| 22 | 425.87 | -0.11 | | |
| 23 | 425.76 | -0.11 | | |
| 24 | 425.65 | -0.11 | | |
| 25 | 425.54 | -0.11 | | |
| 26 | 425.43 | -0.11 | | |
| 27 | 425.32 | -0.11 | | |
| 28 | 425.21 | -0.11 | | |

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| 29 | 425.1 | -0.11 | | |
| 30 | 424.99 | -0.11 | | |
| 31 | 424.88 | -0.11 | | |
| Aug. 1 | 424.77 | -0.11 | | |
| 2 | 424.66 | -0.11 | | |
| 3 | 424.55 | -0.11 | | |
| 4 | 424.44 | -0.11 | | |
| 5 | 424.32 | -0.12 | | |
| 6 | 424.21 | -0.11 | | |
| 7 | 424.1 | -0.11 | | |
| 8 | 423.99 | -0.11 | | |
| 9 | 423.88 | -0.11 | | |
| 10 | 423.76 | -0.12 | | |
| 11 | 423.65 | -0.11 | | |
| 12 | 423.54 | -0.11 | | |
| 13 | 423.42 | -0.12 | | |
| 14 | 423.31 | -0.11 | | |
| 15 | 423.2 | -0.11 | | |
| 16 | 423.08 | -0.12 | | |
| 17 | 422.97 | -0.11 | | |
| 18 | 422.86 | -0.11 | | |
| 19 | 422.74 | -0.12 | | |
| 20 | 422.63 | -0.11 | | |
| 21 | 422.51 | -0.12 | | |
| 22 | 422.4 | -0.11 | | |
| 23 | 422.28 | -0.12 | | |
| 24 | 422.17 | -0.11 | | |
| 25 | 422.06 | -0.11 | | |
| 26 | 421.94 | -0.12 | | |
| 27 | 421.83 | -0.11 | | |
| 28 | 421.71 | -0.12 | | |
| 29 | 421.59 | -0.12 | | |
| 30 | 421.48 | -0.11 | | |
| 31 | 421.36 | -0.12 | | |
| Sept. 1 | 421.25 | -0.11 | | |
| 2 | 421.13 | -0.12 | | |

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|---|---|---|---|---|
| 3 | 421.01 | -0.12 | | |
| 4 | 420.9 | -0.11 | | |
| 5 | 420.78 | -0.12 | | |
| 6 | 420.67 | -0.11 | | |
| 7 | 420.55 | -0.12 | | |
| 8 | 420.43 | -0.12 | | |
| 9 | 420.32 | -0.11 | | |
| 10 | 420.2 | -0.12 | | |
| 11 | 420.08 | -0.12 | | |
| 12 | 419.96 | -0.12 | | |
| 13 | 419.85 | -0.11 | | |
| 14 | 419.73 | -0.12 | | |
| 15 | 419.61 | -0.12 | | |
| 16 | 419.49 | -0.12 | | |
| 17 | 419.38 | -0.11 | | |
| 18 | 419.26 | -0.12 | | |
| 19 | 419.14 | -0.12 | | |
| 20 | 419.02 | -0.12 | | |
| 21 | 418.9 | -0.12 | | |
| 22 | 418.78 | -0.12 | | |
| 23 | 418.67 | -0.11 | | |
| 24 | 418.55 | -0.12 | | |
| 25 | 418.43 | -0.12 | | |
| 26 | 418.31 | -0.12 | | |
| 27 | 418.19 | -0.12 | | |
| 28 | 418.07 | -0.12 | | |
| 29 | 417.95 | -0.12 | | |
| 30 | 417.83 | -0.12 | | |
| Oct. 1 | 417.71 | -0.12 | | |
| 2 | 417.6 | -0.11 | | |
| 3 | 417.48 | -0.12 | -0.12 | |
| 4 | 417.36 | -0.12 | | |
| 5 | 417.24 | -0.12 | | |
| 6 | 417.12 | -0.12 | | |
| 7 | 417 | -0.12 | | |
| 8 | 416.88 | -0.12 | | |

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| 9 | 416.76 | -0.12 | | |
| 10 | 416.64 | -0.12 | | |
| 11 | 416.52 | -0.12 | | |
| 12 | 416.4 | -0.12 | | |
| 13 | 416.28 | -0.12 | | |
| 14 | 416.16 | -0.12 | | |
| 15 | 416.04 | -0.12 | | |
| 16 | 415.92 | -0.12 | | |
| 17 | 415.79 | **-0.13** | | |
| 18 | 415.67 | -0.12 | | |
| 19 | 415.55 | -0.12 | | |
| 20 | 415.43 | -0.12 | | |
| 21 | 415.31 | -0.12 | | |
| 22 | 415.19 | -0.12 | | |
| 23 | 415.07 | -0.12 | | |
| 24 | 414.95 | -0.12 | | |
| 25 | 414.83 | -0.12 | | |
| 26 | 414.71 | -0.12 | | |
| 27 | 414.59 | -0.12 | | |
| 28 | 414.47 | -0.12 | | |
| 29 | 414.34 | **-0.13** | | |
| 30 | 414.22 | -0.12 | | |
| 31 | 414.1 | -0.12 | | |
| Nov. 1 | 413.98 | -0.12 | | |
| 2 | 413.85 | **-0.13** | | |
| 3 | 413.73 | -0.12 | | |
| 4 | 413.61 | -0.12 | | |
| 5 | 413.49 | -0.12 | | |
| 6 | 413.37 | -0.12 | | |
| 7 | 413.25 | -0.12 | | |
| 8 | 413.13 | -0.12 | | |
| 9 | 413 | **-0.13** | | |
| 10 | 412.88 | -0.12 | | |
| 11 | 412.76 | -0.12 | | |
| 12 | 412.64 | -0.12 | | |
| 13 | 412.52 | -0.12 | | |

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| 14 | 412.4 | -0.12 | | |
| 15 | 412.27 | **-0.13** | | |
| 16 | 412.15 | -0.12 | | |
| 17 | 412.03 | -0.12 | | |
| 18 | 411.91 | -0.12 | | |
| 19 | 411.79 | -0.12 | | |
| 20 | 411.67 | -0.12 | | |
| 21 | 411.54 | **-0.13** | | |
| 22 | 411.42 | -0.12 | | |
| 23 | 411.3 | -0.12 | | |
| 24 | 411.18 | -0.12 | | |
| 25 | 411.06 | -0.12 | | |
| 26 | 410.93 | **-0.13** | | |
| 27 | 410.81 | -0.12 | | |
| 28 | 410.69 | -0.12 | | |
| 29 | 410.57 | -0.12 | | |
| 30 | 410.45 | -0.12 | | |
| Dec. 1 | 410.33 | -0.12 | | |
| 2 | 410.2 | **-0.13** | | |
| 3 | 410.08 | -0.12 | | |
| 40 | 409.96 | -0.12 | | |
| 5 | 409.84 | -0.12 | | |
| 6 | 409.72 | -0.12 | | |
| 7 | 409.6 | -0.12 | | |
| 8 | 409.47 | **-0.13** | | |
| 9 | 409.35 | -0.12 | | |
| 10 | 409.23 | -0.12 | | |
| 11 | 409.11 | -0.12 | | |
| 12 | 408.99 | -0.12 | | |
| 13 | 408.87 | -0.12 | | |
| 14 | 408.74 | **-0.13** | | |
| 15 | 408.62 | -0.12 | | |
| 16 | 408.5 | -0.12 | | |
| 17 | 408.38 | -0.12 | | |
| 18 | 408.26 | -0.12 | | |
| 19 | 408.14 | -0.12 | | |

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| 20 | 408.02 | -0.12 | | |
| 21 | 407.9 | -0.12 | | |
| 22 | 407.77 | **-0.13** | | |
| 23 | 407.65 | -0.12 | | |
| 24 | 407.53 | -0.12 | | |
| 25 | 407.41 | -0.12 | | |
| 26 | 407.29 | -0.12 | | |
| 27 | 407.17 | -0.12 | | |
| 28 | 407.05 | -0.12 | | |
| 29 | 406.93 | -0.12 | | |
| 30 | 406.81 | -0.12 | | |
| 31 | 406.69 | -0.12 | | |
| 2022 Jan. 1 | 406.57 | -0.12 | | |
| 2 | 406.45 | -0.12 | | |
| 3 | 406.33 | -0.12 | | |
| 4 | 406.21 | -0.12 | | |
| 5 | 406.08 | **-0.13** | -0.13 **(max)** | |
| 6 | 405.96 | -0.12 | | |
| 7 | 405.84 | -0.12 | | |
| 8 | 405.72 | -0.12 | | |
| 9 | 405.6 | -0.12 | | |
| 10 | 405.48 | -0.12 | | |
| 11 | 405.37 | -0.11 | -0.11. Anomaly. It should be a sequence of -0.13 NOT -0.11 | **Point No3 or rσ (on d3):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 12 | 405.25 | -0.12 | Again a sequence of -0.12 | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 13 | 405.13 | -0.12 | | |

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| 14 | 405.01 | -0.12 | | |
| 15 | 404.89 | -0.12 | | |
| 16 | 404.77 | -0.12 | | |
| 17 | 404.65 | -0.12 | | |
| 18 | 404.53 | -0.12 | | |
| 19 | 404.41 | -0.12 | | |
| 20 | 404.29 | -0.12 | | |
| 21 | 404.17 | -0.12 | | |
| 22 | 404.05 | -0.12 | | |
| 23 | 403.94 | -0.11 | | |
| 24 | 403.82 | -0.12 | | |
| 25 | 403.7 | -0.12 | | |
| 26 | 403.58 | -0.12 | | |
| 27 | 403.46 | -0.12 | | |
| 28 | 403.34 | -0.12 | | |
| 29 | 403.23 | -0.11 | | |
| 30 | 403.11 | -0.12 | | |
| 31 | 402.99 | -0.12 | | |
| Febr. 1 | 402.87 | -0.12 | | |
| 2 | 402.76 | -0.11 | | |
| 3 | 402.64 | -0.12 | | |
| 4 | 402.52 | -0.12 | | |
| 5 | 402.4 | -0.12 | | |
| 6 | 402.29 | -0.11 | | |
| 7 | 402.17 | -0.12 | | |
| 8 | 402.05 | -0.12 | | |
| 9 | 401.94 | -0.11 | | |
| 10 | 401.82 | -0.12 | | |
| 11 | 401.7 | -0.12 | | |
| 12 | 401.59 | -0.11 | | |
| 13 | 401.47 | -0.12 | | |
| 14 | 401.36 | -0.11 | | |
| 15 | 401.24 | -0.12 | | |
| 16 | 401.13 | -0.11 | | |
| 17 | 401.01 | -0.12 | | |
| 18 | 400.9 | -0.11 | | |

| | | | | |
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| 19 | 400.78 | -0.12 | | |
| 20 | 400.67 | -0.11 | | |
| 21 | 400.55 | -0.12 | | |
| 22 | 400.44 | -0.11 | | |
| 23 | 400.32 | -0.12 | | |
| 24 | 400.21 | -0.11 | | |
| 25 | 400.09 | -0.12 | | |
| 26 | 399.98 | -0.11 | | |
| 27 | 399.87 | -0.11 | | |
| 28 | 399.75 | -0.12 | | |
| 1-Mar | 399.64 | -0.11 | | |
| 2 | 399.53 | -0.11 | | |
| 3 | 399.41 | -0.12 | | |
| 4 | 399.3 | -0.11 | | |
| 5 | 399.19 | -0.11 | | |
| 6 | 399.08 | -0.11 | | |
| 7 | 398.96 | -0.12 | | |
| 8 | 398.85 | -0.11 | | |
| 9 | 398.74 | -0.11 | | |
| 10 | 398.63 | -0.11 | | |
| 11 | 398.52 | -0.11 | | |
| 12 | 398.41 | -0.11 | | |
| 13 | 398.29 | -0.12 | | |
| 14 | 398.18 | -0.11 | -0.11 | |
| 15 | 398.07 | -0.11 | | |
| 16 | 397.96 | -0.11 | | |
| 17 | 397.85 | -0.11 | | |
| 18 | 397.74 | -0.11 | | |
| 19 | 397.63 | -0.11 | | |
| 20 | 397.52 | -0.11 | | |
| 21 | 397.41 | -0.11 | | |
| 22 | 397.3 | -0.11 | | |
| 23 | 397.2 | -0.1 | | |
| 24 | 397.09 | -0.11 | | |
| 25 | 396.98 | -0.11 | | |
| 26 | 396.87 | -0.11 | | |

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| 27 | 396.77 | -0.1 | | |
| 28 | 396.66 | -0.11 | | |
| 29 | 396.55 | -0.11 | | |
| 30 | 396.44 | -0.11 | | |
| 31 | 396.34 | -0.1 | | |
| Apr. 1 | 396.23 | -0.11 | | |
| 2 | 396.12 | -0.11 | | |
| 3 | 396.02 | -0.1 | | |
| 4 | 395.91 | -0.11 | | |
| 5 | 395.81 | -0.1 | | |
| 6 | 395.7 | -0.11 | | |
| 7 | 395.59 | -0.11 | | |
| 8 | 395.49 | -0.1 | | |
| 9 | 395.38 | -0.11 | | |
| 10 | 395.28 | -0.1 | | |
| 11 | 395.18 | -0.1 | | |
| 12 | 395.07 | -0.11 | | |
| 13 | 394.97 | -0.1 | | |
| 14 | 394.86 | -0.11 | | |
| 15 | 394.76 | -0.1 | | |
| 16 | 394.66 | -0.1 | | |
| 17 | 394.55 | -0.11 | | |
| 18 | 394.45 | -0.1 | | |
| 19 | 394.35 | -0.1 | | |
| 20 | 394.25 | -0.1 | | |
| 21 | 394.15 | -0.1 | | |
| 22 | 394.04 | -0.11 | | |
| 23 | 393.94 | -0.1 | -0.10 | |
| 24 | 393.84 | -0.1 | | |
| 25 | 393.74 | -0.1 | | |
| 26 | 393.64 | -0.1 | | |
| 27 | 393.54 | -0.1 | | |
| 28 | 393.44 | -0.1 | | |
| 29 | 393.34 | -0.1 | | |
| 30 | 393.24 | -0.1 | | |
| 1-May | 393.14 | -0.1 | | |

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|---|---|---|---|---|
| 2 | 393.05 | -0.09 | | |
| 3 | 392.95 | -0.1 | | |
| 4 | 392.85 | -0.1 | | |
| 5 | 392.75 | -0.1 | | |
| 6 | 392.66 | -0.09 | | |
| 7 | 392.56 | -0.1 | | |
| 8 | 392.46 | -0.1 | | |
| 9 | 392.36 | -0.1 | | |
| 10 | 392.27 | -0.09 | | |
| 11 | 392.17 | -0.1 | | |
| 12 | 392.08 | -0.09 | | |
| 13 | 391.98 | -0.1 | | |
| 14 | 391.89 | -0.09 | | |
| 15 | 391.79 | -0.1 | | |
| 16 | 391.7 | -0.09 | | |
| 17 | 391.6 | -0.1 | | |
| 18 | 391.51 | -0.09 | | |
| 19 | 391.42 | -0.09 | | |
| 20 | 391.33 | -0.09 | | |
| 21 | 391.23 | -0.1 | | |
| 22 | 391.14 | -0.09 | | |
| 23 | 391.05 | -0.09 | | |
| 24 | 390.96 | -0.09 | | |
| 25 | 390.87 | -0.09 | | |
| 26 | 390.77 | -0.1 | | |
| 27 | 390.68 | -0.09 | -0.09 | |
| 28 | 390.59 | -0.09 | | |
| 29 | 390.5 | -0.09 | | |
| 30 | 390.41 | -0.09 | | |
| 31 | 390.33 | -0.08 | | |
| 1-Jun | 390.24 | -0.09 | | |
| 2 | 390.15 | -0.09 | | |
| 3 | 390.06 | -0.09 | | |
| 4 | 389.97 | -0.09 | | |
| 5 | 389.88 | -0.09 | | |
| 6 | 389.8 | -0.08 | | |

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| 7 | 389.71 | -0.09 | | |
| 8 | 389.62 | -0.09 | | |
| 9 | 389.54 | -0.08 | | |
| 10 | 389.45 | -0.09 | | |
| 11 | 389.37 | -0.08 | | |
| 12 | 389.28 | -0.09 | | |
| 13 | 389.2 | -0.08 | | |
| 14 | 389.11 | -0.09 | | |
| 15 | 389.03 | -0.08 | | |
| 16 | 388.95 | -0.08 | | |
| 17 | 388.86 | -0.09 | | |
| 18 | 388.78 | -0.08 | | |
| 19 | 388.7 | -0.08 | | |
| 20 | 388.62 | -0.08 | | |
| 21 | 388.54 | -0.08 | | |
| 22 | 388.45 | -0.09 | | |
| 23 | 388.37 | -0.08 | -0.08 | |
| 24 | 388.29 | -0.08 | | |
| 25 | 388.21 | -0.08 | | |
| 26 | 388.13 | -0.08 | | |
| 27 | 388.05 | -0.08 | | |
| 28 | 387.98 | -0.07 | | |
| 29 | 387.9 | -0.08 | | |
| 30 | 387.82 | -0.08 | | |
| 1-Jul | 387.74 | -0.08 | | |
| 2 | 387.67 | -0.07 | | |
| 3 | 387.59 | -0.08 | | |
| 4 | 387.51 | -0.08 | | |
| 5 | 387.44 | -0.07 | | |
| 6 | 387.36 | -0.08 | | |
| 7 | 387.29 | -0.07 | | |
| 8 | 387.21 | -0.08 | | |
| 9 | 387.14 | -0.07 | | |
| 10 | 387.06 | -0.08 | | |
| 11 | 386.99 | -0.07 | | |
| 12 | 386.92 | -0.07 | | |

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|---|---|---|---|---|
| 13 | 386.84 | -0.08 | | |
| 14 | 386.77 | -0.07 | -0.07 | |
| 15 | 386.7 | -0.07 | | |
| 16 | 386.63 | -0.07 | | |
| 17 | 386.56 | -0.07 | | |
| 18 | 386.49 | -0.07 | | |
| 19 | 386.42 | -0.07 | | |
| 20 | 386.35 | -0.07 | | |
| 21 | 386.28 | -0.07 | | |
| 22 | 386.21 | -0.07 | | |
| 23 | 386.14 | -0.07 | | |
| 24 | 386.07 | -0.07 | | |
| 25 | 386 | -0.07 | | |
| 26 | 385.94 | -0.06 | | |
| 27 | 385.87 | -0.07 | | |
| 28 | 385.8 | -0.07 | | |
| 29 | 385.74 | -0.06 | | |
| 30 | 385.67 | -0.07 | | |
| 31 | 385.61 | -0.06 | | |
| Aug. 1 | 385.54 | -0.07 | | |
| 2 | 385.48 | -0.06 | | |
| 3 | 385.42 | -0.06 | | |
| 4 | 385.35 | -0.07 | | |
| 5 | 385.29 | -0.06 | | |
| 6 | 385.23 | -0.06 | | |
| 7 | 385.17 | -0.06 | | |
| 8 | 385.1 | -0.07 | | |
| 9 | 385.04 | -0.06 | -0.06 | |
| 10 | 384.98 | -0.06 | | |
| 11 | 384.92 | -0.06 | | |
| 12 | 384.86 | -0.06 | | |
| 13 | 384.81 | -0.05 | | |
| 14 | 384.75 | -0.06 | | |
| 15 | 384.69 | -0.06 | | |
| 16 | 384.63 | -0.06 | | |

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| 17 | 384.57 | -0.06 | | |
| 18 | 384.52 | -0.05 | | |
| 19 | 384.46 | -0.06 | | |
| 20 | 384.4 | -0.06 | | |
| 21 | 384.35 | -0.05 | | |
| 22 | 384.29 | -0.06 | | |
| 23 | 384.24 | -0.05 | | |
| 24 | 384.19 | -0.05 | | |
| 25 | 384.13 | -0.06 | | |
| 26 | 384.08 | -0.05 | | |
| 27 | 384.03 | -0.05 | | |
| 28 | 383.98 | -0.05 | | |
| 29 | 383.92 | -0.06 | | |
| 30 | 383.87 | -0.05 | -0.05 | |
| 31 | 383.82 | -0.05 | | |
| Sept. 1 | 383.77 | -0.05 | | |
| 2 | 383.72 | -0.05 | | |
| 3 | 383.67 | -0.05 | | |
| 4 | 383.63 | -0.04 | | |
| 5 | 383.58 | -0.05 | | |
| 6 | 383.53 | -0.05 | | |
| 7 | 383.48 | -0.05 | | |
| 8 | 383.44 | -0.04 | | |
| 9 | 383.39 | -0.05 | | |
| 10 | 383.34 | -0.05 | | |
| 11 | 383.3 | -0.04 | | |
| 12 | 383.25 | -0.05 | | |
| 13 | 383.21 | -0.04 | | |
| 14 | 383.17 | -0.04 | | |
| 15 | 383.12 | -0.05 | | |
| 16 | 383.08 | -0.04 | -0.04 | |
| 17 | 383.04 | -0.04 | | |
| 18 | 383 | -0.04 | | |
| 19 | 382.96 | -0.04 | | |
| 20 | 382.91 | -0.05 | | |

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| 21 | 382.87 | -0.04 | | |
| 22 | 382.83 | -0.04 | | |
| 23 | 382.8 | -0.03 | | |
| 24 | 382.76 | -0.04 | | |
| 25 | 382.72 | -0.04 | | |
| 26 | 382.68 | -0.04 | | |
| 27 | 382.64 | -0.04 | | |
| 28 | 382.61 | -0.03 | | |
| 29 | 382.57 | -0.04 | | |
| 30 | 382.54 | -0.03 | | |
| Oct. 1 | 382.5 | -0.04 | | |
| 2 | 382.47 | -0.03 | | |
| 3 | 382.43 | -0.04 | | |
| 4 | 382.4 | -0.03 | | |
| 5 | 382.36 | -0.04 | | |
| 6 | 382.33 | -0.03 | -0.03 | |
| 7 | 382.3 | -0.03 | | |
| 8 | 382.27 | -0.03 | | |
| 9 | 382.24 | -0.03 | | |
| 10 | 382.21 | -0.03 | | |
| 11 | 382.18 | -0.03 | | |
| 12 | 382.15 | -0.03 | | |
| 13 | 382.12 | -0.03 | | |
| 14 | 382.09 | -0.03 | | |
| 15 | 382.06 | -0.03 | | |
| 16 | 382.03 | -0.03 | | |
| 17 | 382.01 | -0.02 | | |
| 18 | 381.98 | -0.03 | | |
| 19 | 381.96 | -0.02 | | |
| 20 | 381.93 | -0.03 | | |
| 21 | 381.91 | -0.02 | | |
| 22 | 381.88 | -0.03 | | |
| 23 | 381.86 | -0.02 | | |
| 24 | 381.83 | -0.03 | | |
| 25 | 381.81 | -0.02 | -0.02 | |
| 26 | 381.79 | -0.02 | | |

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| 27 | 381.77 | -0.02 | | |
| 28 | 381.75 | -0.02 | | |
| 29 | 381.73 | -0.02 | | |
| 30 | 381.71 | -0.02 | | |
| 31 | 381.69 | -0.02 | | |
| Nov. 1 | 381.67 | -0.02 | | |
| 2 | 381.65 | -0.02 | | |
| 3 | 381.63 | -0.02 | | |
| 4 | 381.61 | -0.02 | | |
| 5 | 381.6 | -0.01 | | |
| 6 | 381.58 | -0.02 | | |
| 7 | 381.56 | -0.02 | | |
| 8 | 381.55 | -0.01 | | |
| 9 | 381.53 | -0.02 | | |
| 10 | 381.52 | -0.01 | | |
| 11 | 381.51 | -0.01 | | |
| 12 | 381.49 | -0.02 | | |
| 13 | 381.48 | -0.01 | | |
| 14 | 381.47 | -0.01 | | |
| 15 | 381.46 | -0.01 | | |
| 16 | 381.45 | -0.01 | | |
| 17 | 381.44 | -0.01 | | |
| 18 | 381.43 | -0.01 | | |
| 19 | 381.42 | -0.01 | | |
| 20 | 381.41 | -0.01 | | |
| 21 | 381.4 | -0.01 | | |
| 22 | 381.39 | -0.01 | | |
| 23 | 381.38 | -0.01 | -0.01 | |
| 24 | 381.38 | 0 | | |
| 25 | 381.37 | -0.01 | | |
| 26 | 381.36 | -0.01 | | |
| 27 | 381.36 | 0 | | |
| 28 | 381.35 | -0.01 | | |
| 29 | 381.35 | 0 | | |
| 30 | 381.35 | 0 | | **Point No5 or LA (on d5):** Last point |

| | | | | |
|---|---|---|---|---|
| | | | | with attractive forces between the natural "Satellite" and its natural "Sun". |
| Dec. 1 | 381.34 | -0.01 | | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun".<br>Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 2 | 381.34 | 0 | 0 | |
| 3 | 381.34 | 0 | | |
| 4 | 381.34 | 0 | | |
| 5 | 381.34 | 0 | | |
| 6 | 381.34 | 0 | | |
| 7 | 381.34 | 0 | | |
| 8 | 381.34 | 0 | | |
| 9 | 381.34 | 0 | | |
| 10 | 381.35 | 0.01 | | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 11 | 381.35 | 0 | | |
| 12 | 381.35 | 0 | | |
| 13 | 381.35 | 0 | | |
| 14 | 381.36 | 0.01 | | |
| 15 | 381.36 | 0 | | |
| 16 | 381.37 | 0.01 | | |
| 17 | 381.37 | 0 | | |

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| 18 | 381.38 | 0.01 | | |
| 19 | 381.38 | 0 | | |
| 20 | 381.39 | 0.02 | | |
| 21 | 381.4 | 0.01 | 0.01 | |
| 22 | 381.41 | 0.01 | | |
| 23 | 381.42 | 0.01 | | |
| 24 | 381.43 | 0.01 | | |
| 25 | 381.44 | 0.01 | | |
| 26 | 381.45 | 0.01 | | |
| 27 | 381.46 | 0.01 | | |
| 28 | 381.47 | 0.01 | | |
| 29 | 381.48 | 0.01 | | |
| 30 | 381.49 | 0.02 | | |
| 31 | 381.51 | 0.01 | | |
| 2023 Jan. 1 | 381.52 | 0.01 | | |
| 2 | 381.53 | 0.02 | | |
| 3 | 381.55 | 0.01 | | |
| 4 | 381.56 | 0.02 | | |
| 5 | 381.58 | 0.02 | | |
| 6 | 381.6 | 0.01 | | |
| 7 | 381.61 | 0.02 | 0.02 | |
| 8 | 381.63 | 0.02 | | |
| 9 | 381.65 | 0.02 | | |
| 10 | 381.67 | 0.02 | | |
| 11 | 381.69 | 0.02 | | |
| 12 | 381.71 | 0.02 | | |
| 13 | 381.73 | 0.02 | | |
| 14 | 381.75 | 0.02 | | |
| 15 | 381.77 | 0.02 | | |
| 16 | 381.79 | 0.02 | | |
| 17 | 381.81 | 0.02 | | |
| 18 | 381.83 | 0.03 | | |
| 19 | 381.86 | 0.02 | | |
| 20 | 381.88 | 0.03 | | |
| 21 | 381.91 | 0.02 | | |

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| 22 | 381.93 | 0.03 | | |
| 23 | 381.96 | 0.02 | | |
| 24 | 381.98 | 0.03 | | |
| 25 | 382.01 | 0.03 | | |
| 26 | 382.04 | 0.02 | | |
| 27 | 382.06 | 0.03 | 0.03 | |
| 28 | 382.09 | 0.03 | | |
| 29 | 382.12 | 0.03 | | |
| 30 | 382.15 | 0.03 | | |
| 31 | 382.18 | 0.03 | | |
| Febr. 1 | 382.21 | 0.03 | | |
| 2 | 382.24 | 0.03 | | |
| 3 | 382.27 | 0.03 | | |
| 4 | 382.3 | 0.03 | | |
| 5 | 382.33 | 0.04 | | |
| 6 | 382.37 | 0.03 | | |
| 7 | 382.4 | 0.03 | | |
| 8 | 382.43 | 0.04 | | |
| 9 | 382.47 | 0.03 | | |
| 10 | 382.5 | 0.04 | | |
| 11 | 382.54 | 0.03 | | |
| 12 | 382.57 | 0.04 | | |
| 13 | 382.61 | 0.03 | | |
| 14 | 382.64 | 0.04 | 0.04 | |
| 15 | 382.68 | 0.04 | | |
| 16 | 382.72 | 0.04 | | |
| 17 | 382.76 | 0.04 | | |
| 18 | 382.8 | 0.04 | | |
| 19 | 382.84 | 0.04 | | |
| 20 | 382.88 | 0.04 | | |
| 21 | 382.92 | 0.04 | | |
| 22 | 382.96 | 0.04 | | |
| 23 | 383 | 0.04 | | |
| 24 | 383.04 | 0.04 | | |
| 25 | 383.08 | 0.04 | | |

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| 26 | 383.12 | 0.05 | | |
| 27 | 383.17 | 0.04 | | |
| 28 | 383.21 | 0.05 | | |
| 1-Mar | 383.26 | 0.04 | | |
| 2 | 383.3 | 0.05 | | |
| 3 | 383.35 | 0.04 | | |
| 4 | 383.39 | 0.05 | | |
| 5 | 383.44 | 0.04 | | |
| 6 | 383.48 | 0.05 | 0.05 | |
| 7 | 383.53 | 0.05 | | |
| 8 | 383.58 | 0.05 | | |
| 9 | 383.63 | 0.05 | | |
| 10 | 383.68 | 0.05 | | |
| 11 | 383.73 | 0.05 | | |
| 12 | 383.78 | 0.05 | | |
| 13 | 383.83 | 0.05 | | |
| 14 | 383.88 | 0.05 | | |
| 15 | 383.93 | 0.05 | | |
| 16 | 383.98 | 0.05 | | |
| 17 | 384.03 | 0.05 | | |
| 18 | 384.08 | 0.06 | | |
| 19 | 384.14 | 0.05 | | |
| 20 | 384.19 | 0.05 | | |
| 21 | 384.24 | 0.06 | | |
| 22 | 384.3 | 0.05 | | |
| 23 | 384.35 | 0.06 | | |
| 24 | 384.41 | 0.05 | | |
| 25 | 384.46 | 0.06 | | |
| 26 | 384.52 | 0.06 | | |
| 27 | 384.58 | 0.05 | | |
| 28 | 384.63 | 0.06 | 0.06 | |
| 29 | 384.69 | 0.06 | | |
| 30 | 384.75 | 0.06 | | |
| 31 | 384.81 | 0.06 | | |
| Apr. 1 | 384.87 | 0.06 | | |

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| 2 | 384.93 | 0.06 | | |
| 3 | 384.99 | 0.06 | | |
| 4 | 385.05 | 0.06 | | |
| 5 | 385.11 | 0.06 | | |
| 6 | 385.17 | 0.06 | | |
| 7 | 385.23 | 0.06 | | |
| 8 | 385.29 | 0.07 | | |
| 9 | 385.36 | 0.06 | | |
| 10 | 385.42 | 0.06 | | |
| 11 | 385.48 | 0.07 | | |
| 12 | 385.55 | 0.06 | | |
| 13 | 385.61 | 0.07 | | |
| 14 | 385.68 | 0.06 | | |
| 15 | 385.74 | 0.07 | | |
| 16 | 385.81 | 0.06 | | |
| 17 | 385.87 | 0.07 | 0.07 | |
| 18 | 385.94 | 0.07 | | |
| 19 | 386.01 | 0.07 | | |
| 20 | 386.08 | 0.06 | | |
| 21 | 386.14 | 0.07 | | |
| 22 | 386.21 | 0.07 | | |
| 23 | 386.28 | 0.07 | | |
| 24 | 386.35 | 0.07 | | |
| 25 | 386.42 | 0.07 | | |
| 26 | 386.49 | 0.07 | | |
| 27 | 386.56 | 0.07 | | |
| 28 | 386.63 | 0.07 | | |
| 29 | 386.7 | 0.08 | | |
| 30 | 386.78 | 0.07 | | |
| 1-May | 386.85 | 0.07 | | |
| 2 | 386.92 | 0.07 | | |
| 3 | 386.99 | 0.08 | | |
| 4 | 387.07 | 0.07 | | |
| 5 | 387.14 | 0.08 | | |
| 6 | 387.22 | 0.07 | | |
| 7 | 387.29 | 0.08 | | |

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| 8 | 387.37 | 0.07 | | |
| 9 | 387.44 | 0.08 | | |
| 10 | 387.52 | 0.08 | | |
| 11 | 387.6 | 0.07 | | |
| 12 | 387.67 | 0.08 | | |
| 13 | 387.75 | 0.08 | | |
| 14 | 387.83 | 0.08 | | |
| 15 | 387.91 | 0.07 | | |
| 16 | 387.98 | 0.08 | 0.08 | |
| 17 | 388.06 | 0.08 | | |
| 18 | 388.14 | 0.08 | | |
| 19 | 388.22 | 0.08 | | |
| 20 | 388.3 | 0.08 | | |
| 21 | 388.38 | 0.08 | | |
| 22 | 388.46 | 0.09 | | |
| 23 | 388.55 | 0.08 | | |
| 24 | 388.63 | 0.08 | | |
| 25 | 388.71 | 0.08 | | |
| 26 | 388.79 | 0.08 | | |
| 27 | 388.87 | 0.09 | | |
| 28 | 388.96 | 0.08 | | |
| 29 | 389.04 | 0.09 | | |
| 30 | 389.13 | 0.08 | | |
| 31 | 389.21 | 0.08 | | |
| 1-Jun | 389.29 | 0.09 | | |
| 2 | 389.38 | 0.08 | | |
| 3 | 389.46 | 0.09 | | |
| 4 | 389.55 | 0.09 | | |
| 5 | 389.64 | 0.08 | | |
| 6 | 389.72 | 0.09 | | |
| 7 | 389.81 | 0.09 | | |
| 8 | 389.9 | 0.09 | | |
| 9 | 389.99 | 0.08 | | |
| 10 | 390.07 | 0.09 | 0.09 | |
| 11 | 390.16 | 0.09 | | |
| 12 | 390.25 | 0.09 | | |

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| 13 | 390.34 | 0.09 | | |
| 14 | 390.43 | 0.09 | | |
| 15 | 390.52 | 0.09 | | |
| 16 | 390.61 | 0.09 | | |
| 17 | 390.7 | 0.09 | | |
| 18 | 390.79 | 0.09 | | |
| 19 | 390.88 | 0.09 | | |
| 20 | 390.97 | 0.09 | | |
| 21 | 391.06 | 0.1 | | |
| 22 | 391.16 | 0.09 | | |
| 23 | 391.25 | 0.09 | | |
| 24 | 391.34 | 0.1 | | |
| 25 | 391.44 | 0.09 | | |
| 26 | 391.53 | 0.09 | | |
| 27 | 391.62 | 0.1 | | |
| 28 | 391.72 | 0.09 | | |
| 29 | 391.81 | 0.1 | | |
| 30 | 391.91 | 0.09 | | |
| 1-Jul | 392 | 0.1 | | |
| 2 | 392.1 | 0.09 | | |
| 3 | 392.19 | 0.1 | | |
| 4 | 392.29 | 0.09 | | |
| 5 | 392.38 | 0.1 | | |
| 6 | 392.48 | 0.1 | | |
| 7 | 392.58 | 0.1 | | |
| 8 | 392.68 | 0.09 | | |
| 9 | 392.77 | 0.1 | 0.10 | |
| 10 | 392.87 | 0.1 | | |
| 11 | 392.97 | 0.1 | | |
| 12 | 393.07 | 0.1 | | |
| 13 | 393.17 | 0.1 | | |
| 14 | 393.27 | 0.1 | | |
| 15 | 393.37 | 0.1 | | |
| 16 | 393.47 | 0.1 | | |
| 17 | 393.57 | 0.1 | | |
| 18 | 393.67 | 0.1 | | |

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| 19 | 393.77 | 0.1 | | |
| 20 | 393.87 | 0.1 | | |
| 21 | 393.97 | 0.1 | | |
| 22 | 394.07 | 0.1 | | |
| 23 | 394.17 | 0.1 | | |
| 24 | 394.27 | 0.11 | | |
| 25 | 394.38 | 0.1 | | |
| 26 | 394.48 | 0.1 | | |
| 27 | 394.58 | 0.1 | | |
| 28 | 394.68 | 0.11 | | |
| 29 | 394.79 | 0.1 | | |
| 30 | 394.89 | 0.11 | | |
| 31 | 395 | 0.1 | | |
| Aug. 1 | 395.1 | 0.1 | | |
| 2 | 395.2 | 0.11 | | |
| 3 | 395.31 | 0.1 | | |
| 4 | 395.41 | 0.11 | | |
| 5 | 395.52 | 0.11 | | |
| 6 | 395.63 | 0.1 | | |
| 7 | 395.73 | 0.11 | | |
| 8 | 395.84 | 0.1 | | |
| 9 | 395.94 | 0.11 | | |
| 10 | 396.05 | 0.11 | | |
| 11 | 396.16 | 0.1 | | |
| 12 | 396.26 | 0.11 | | |
| 13 | 396.37 | 0.11 | | |
| 14 | 396.48 | 0.11 | | |
| 15 | 396.59 | 0.1 | | |
| 16 | 396.69 | 0.11 | 0.11 | |
| 17 | 396.8 | 0.11 | | |
| 18 | 396.91 | 0.11 | | |
| 19 | 397.02 | 0.11 | | |
| 20 | 397.13 | 0.11 | | |
| 21 | 397.24 | 0.11 | | |
| 22 | 397.35 | 0.11 | | |
| 23 | 397.46 | 0.11 | | |

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| 24 | 397.57 | 0.11 | | |
| 25 | 397.68 | 0.11 | | |
| 26 | 397.79 | 0.11 | | |
| 27 | 397.9 | 0.11 | | |
| 28 | 398.01 | 0.11 | | |
| 29 | 398.12 | 0.11 | | |
| 30 | 398.23 | 0.11 | | |
| 31 | 398.34 | 0.11 | | |
| Sept. 1 | 398.45 | 0.11 | | |
| 2 | 398.56 | 0.12 | | |
| 3 | 398.68 | 0.11 | | |
| 4 | 398.79 | 0.11 | | |
| 5 | 398.9 | 0.11 | | |
| 6 | 399.01 | 0.11 | | |
| 7 | 399.12 | 0.12 | | |
| 8 | 399.24 | 0.11 | | |
| 9 | 399.35 | 0.11 | | |
| 10 | 399.46 | 0.12 | | |
| 11 | 399.58 | 0.11 | | |
| 12 | 399.69 | 0.11 | | |
| 13 | 399.8 | 0.12 | | |
| 14 | 399.92 | 0.11 | | |
| 15 | 400.03 | 0.12 | | |
| 16 | 400.15 | 0.11 | | |
| 17 | 400.26 | 0.12 | | |
| 18 | 400.38 | 0.11 | | |
| 19 | 400.49 | 0.12 | | |
| 20 | 400.61 | 0.11 | | |
| 21 | 400.72 | 0.12 | | |
| 22 | 400.84 | 0.11 | | |
| 23 | 400.95 | 0.12 | | |
| 24 | 401.07 | 0.11 | | |
| 25 | 401.18 | 0.12 | | |
| 26 | 401.3 | 0.12 | | |
| 27 | 401.42 | 0.11 | | |
| 28 | 401.53 | 0.12 | | |

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| 29 | 401.65 | 0.12 | | |
| 30 | 401.77 | 0.11 | | |
| Oct. 1 | 401.88 | 0.12 | | |
| 2 | 402 | 0.12 | | |
| 3 | 402.12 | 0.11 | | |
| 4 | 402.23 | 0.12 | | |
| 5 | 402.35 | 0.12 | | |
| 6 | 402.47 | 0.12 | | |
| 7 | 402.59 | 0.11 | | |
| 8 | 402.7 | 0.12 | | |
| 9 | 402.82 | 0.12 | | |
| 10 | 402.94 | 0.12 | | |
| 11 | 403.06 | 0.12 | | |
| 12 | 403.18 | 0.11 | | |
| 13 | 403.29 | 0.12 | 0.12 | |
| 14 | 403.41 | 0.12 | | |
| 15 | 403.53 | 0.12 | | |
| 16 | 403.65 | 0.12 | | |
| 17 | 403.77 | 0.12 | | |
| 18 | 403.89 | 0.12 | | |
| 19 | 404.01 | 0.12 | | |
| 20 | 404.13 | 0.12 | | |
| 21 | 404.25 | 0.11 | | |
| 22 | 404.36 | 0.12 | | |
| 23 | 404.48 | 0.12 | | |
| 24 | 404.6 | 0.12 | | |
| 25 | 404.72 | 0.12 | | |
| 26 | 404.84 | 0.12 | | |
| 27 | 404.96 | 0.12 | | |
| 28 | 405.08 | **0.13** | | |
| 29 | 405.21 | 0.12 | | |
| 30 | 405.33 | 0.12 | | |
| 31 | 405.45 | 0.12 | | |
| Nov. 1 | 405.57 | 0.12 | | |
| 2 | 405.69 | 0.12 | | |
| 3 | 405.81 | 0.12 | | |

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| 4 | 405.93 | 0.12 | | |
| 5 | 406.05 | 0.12 | | |
| 6 | 406.17 | 0.12 | | |
| 7 | 406.29 | **0.13** | | |
| 8 | 406.42 | 0.12 | | |
| 9 | 406.54 | 0.12 | | |
| 10 | 406.66 | 0.12 | | |
| 11 | 406.78 | 0.12 | | |
| 12 | 406.9 | 0.12 | | |
| 13 | 407.02 | 0.12 | | |
| 14 | 407.14 | 0.12 | | |
| 15 | 407.26 | **0.13** | | |
| 16 | 407.39 | 0.12 | | |
| 17 | 407.51 | 0.12 | | |
| 18 | 407.63 | 0.12 | | |
| 19 | 407.75 | 0.12 | | |
| 20 | 407.87 | 0.12 | | |
| 21 | 407.99 | **0.13** | | |
| 22 | 408.12 | 0.12 | | |
| 23 | 408.24 | 0.12 | | |
| 24 | 408.36 | 0.12 | | |
| 25 | 408.48 | 0.12 | | |
| 26 | 408.6 | **0.13** | | |
| 27 | 408.73 | 0.12 | | |
| 28 | 408.85 | 0.12 | | |
| 29 | 408.97 | 0.12 | | |
| 30 | 409.09 | 0.12 | | |
| Dec. 1 | 409.21 | **0.13** | | |
| 2 | 409.34 | 0.12 | | |
| 3 | 409.46 | 0.12 | | |
| 4 | 409.58 | 0.12 | | |
| 5 | 409.7 | **0.13** | | |
| 6 | 409.83 | 0.12 | | |
| 7 | 409.95 | 0.12 | | |
| 8 | 410.07 | 0.12 | | |
| 9 | 410.19 | **0.13** | | |

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| 10 | 410.32 | 0.12 | | |
| 11 | 410.44 | 0.12 | | |
| 12 | 410.56 | 0.12 | | |
| 13 | 410.68 | **0.13** | | |
| 14 | 410.81 | 0.12 | | |
| 15 | 410.93 | 0.12 | | |
| 16 | 411.05 | 0.12 | | |
| 17 | 411.17 | **0.13** | | |
| 18 | 411.3 | 0.12 | | |
| 19 | 411.42 | 0.12 | | |
| 20 | 411.54 | 0.12 | | |
| 21 | 411.66 | **0.13** | | |
| 22 | 411.79 | 0.12 | | |
| 23 | 411.91 | 0.12 | | |
| 24 | 412.03 | 0.12 | | |
| 25 | 412.15 | **0.13** | | |
| 26 | 412.28 | 0.12 | | |
| 27 | 412.4 | 0.12 | | |
| 28 | 412.52 | 0.12 | | |
| 29 | 412.64 | **0.13** | | |
| 30 | 412.77 | 0.12 | | |
| 31 | 412.89 | 0.12 | | |
| 2024 Jan. 1 | 413.01 | 0.12 | | |
| 2 | 413.13 | **0.13** | | |
| 3 | 413.26 | 0.12 | | |
| 4 | 413.38 | 0.12 | | |
| 5 | 413.5 | 0.12 | | |
| 6 | 413.62 | **0.13** | | |
| 7 | 413.75 | 0.12 | | |
| 8 | 413.87 | 0.12 | | |
| 9 | 413.99 | 0.12 | | |
| 10 | 414.11 | 0.12 | | |
| 11 | 414.23 | **0.13** | | |
| 12 | 414.36 | 0.12 | | |
| 13 | 414.48 | 0.12 | | |
| 14 | 414.6 | 0.12 | | |

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| 15 | 414.72 | 0.12 | | |
| 16 | 414.84 | **0.13** | | |
| 17 | 414.97 | 0.12 | | |
| 18 | 415.09 | 0.12 | | |
| 19 | 415.21 | 0.12 | | |
| 20 | 415.33 | 0.12 | | |
| 21 | 415.45 | **0.13** | | |
| 22 | 415.58 | 0.12 | | |
| 23 | 415.7 | 0.12 | | |
| 24 | 415.82 | 0.12 | | |
| 25 | 415.94 | 0.12 | | |
| 26 | 416.06 | 0.12 | | |
| 27 | 416.18 | 0.12 | | |
| 28 | 416.3 | 0.12 | | |
| 29 | 416.42 | **0.13** | 0.13 (max) | |
| 30 | 416.55 | 0.12 | A huge sequence of 0.12. Anomaly. More than 12 same numbers on a row with -0.01 difference from the max 0.13 | **Point No8 or rε (on d8):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 31 | 416.67 | 0.12 | | |
| Febr. 1 | 416.79 | 0.12 | | |
| 2 | 416.91 | 0.12 | | |
| 3 | 417.03 | 0.12 | | |
| 4 | 417.15 | 0.12 | | |
| 5 | 417.27 | 0.12 | | |
| 6 | 417.39 | 0.12 | | |
| 7 | 417.51 | 0.12 | | |
| 8 | 417.63 | 0.12 | | |
| 9 | 417.75 | 0.12 | | |
| 10 | 417.87 | 0.12 | | |
| 11 | 417.99 | 0.12 | | |
| 12 | 418.11 | 0.12 | | |

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| 13 | 418.23 | 0.12 | | |
| 14 | 418.35 | 0.12 | | |
| 15 | 418.47 | 0.12 | | |
| 16 | 418.59 | 0.12 | | |
| 17 | 418.71 | 0.12 | | |
| 18 | 418.83 | 0.12 | | |
| 19 | 418.95 | 0.12 | | |
| 20 | 419.07 | 0.12 | | |
| 21 | 419.19 | 0.12 | | |
| 22 | 419.31 | 0.12 | | |
| 23 | 419.43 | 0.12 | | |
| 24 | 419.55 | 0.12 | | |
| 25 | 419.67 | 0.11 | | **Point No9 or NM (on d9):** Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 26 | 419.78 | 0.12 | | |
| 27 | 419.9 | 0.12 | | |
| 28 | 420.02 | 0.12 | | |
| 29 | 420.14 | 0.12 | | |
| 1-Mar | 420.26 | 0.12 | | |
| 2 | 420.38 | 0.11 | | |
| 3 | 420.49 | 0.12 | | |
| 4 | 420.61 | 0.12 | | |
| 5 | 420.73 | 0.12 | | |
| 6 | 420.85 | 0.11 | | |
| 7 | 420.96 | 0.12 | | |
| 8 | 421.08 | 0.12 | | |
| 9 | 421.2 | 0.12 | | |
| 10 | 421.32 | 0.11 | | |
| 11 | 421.43 | 0.12 | | |
| 12 | 421.55 | 0.12 | | |
| 13 | 421.67 | 0.11 | | |
| 14 | 421.78 | 0.12 | | |
| 15 | 421.9 | 0.12 | | |

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| 16 | 422.02 | 0.11 | | |
| 17 | 422.13 | 0.12 | | |
| 18 | 422.25 | 0.11 | | |
| 19 | 422.36 | 0.12 | | |
| 20 | 422.48 | 0.12 | | |
| 21 | 422.6 | 0.11 | | |
| 22 | 422.71 | 0.12 | | |
| 23 | 422.83 | 0.11 | | |
| 24 | 422.94 | 0.12 | | |
| 25 | 423.06 | 0.11 | | |
| 26 | 423.17 | 0.12 | | |
| 27 | 423.29 | 0.11 | | |
| 28 | 423.4 | 0.11 | | |
| 29 | 423.51 | 0.12 | | |
| 30 | 423.63 | 0.11 | | |
| 31 | 423.74 | 0.11 | | |
| Apr. 1 | 423.85 | 0.12 | | |
| 2 | 423.97 | 0.11 | | |
| 3 | 424.08 | 0.11 | | |
| 4 | 424.19 | 0.12 | | |
| 5 | 424.31 | 0.11 | | |
| 6 | 424.42 | 0.11 | | |
| 7 | 424.53 | 0.11 | | |
| 8 | 424.64 | 0.12 | | |
| 9 | 424.76 | 0.11 | | |
| 10 | 424.87 | 0.11 | | |
| 11 | 424.98 | 0.11 | | |
| 12 | 425.09 | 0.12 | | |
| 13 | 425.21 | 0.11 | 0.11 | |
| 14 | 425.32 | 0.11 | | |
| 15 | 425.43 | 0.11 | | |
| 16 | 425.54 | 0.11 | | |
| 17 | 425.65 | 0.11 | | |
| 18 | 425.76 | 0.11 | | |
| 19 | 425.87 | 0.11 | | |
| 20 | 425.98 | 0.11 | | |

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| 21 | 42.09 | 0.11 | | |
| 22 | 426.2 | 0.11 | | |
| 23 | 426.31 | 0.11 | | |
| 24 | 426.42 | 0.11 | | |
| 25 | 426.53 | 0.11 | | |
| 26 | 426.64 | 0.11 | | |
| 27 | 426.75 | 0.11 | | |
| 28 | 426.86 | 0.11 | | |
| 29 | 426.97 | 0.11 | | |
| 30 | 427.08 | 0.11 | | |
| 1-May | 427.19 | 0.11 | | |
| 2 | 427.3 | 0.1 | | |
| 3 | 427.4 | 0.11 | | |
| 4 | 427.51 | 0.11 | | |
| 5 | 427.62 | 0.11 | | |
| 6 | 427.73 | 0.1 | | |
| 7 | 427.83 | 0.11 | | |
| 8 | 427.94 | 0.11 | | |
| 9 | 428.05 | 0.1 | | |
| 10 | 428.15 | 0.11 | | |
| 11 | 428.26 | 0.11 | | |
| 12 | 428.37 | 0.1 | | |
| 13 | 428.47 | 0.11 | | |
| 14 | 428.58 | 0.1 | | |
| 15 | 428.68 | 0.11 | | |
| 16 | 428.79 | 0.1 | | |
| 17 | 428.89 | 0.11 | | |
| 18 | 429 | 0.1 | | |
| 19 | 429.1 | 0.11 | | |
| 20 | 429.21 | 0.1 | | |
| 21 | 429.31 | 0.11 | | |
| 22 | 429.42 | 0.1 | | |
| 23 | 429.52 | 0.1 | | |
| 24 | 429.62 | 0.11 | | |
| 25 | 429.73 | 0.1 | | |
| 26 | 429.83 | 0.1 | | |

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| 27 | 429.93 | 0.11 | | |
| 28 | 430.04 | 0.1 | | |
| 29 | 430.14 | 0.1 | | |
| 30 | 430.24 | 0.1 | | |
| 31 | 430.34 | 0.1 | | |
| 1-Jun | 430.44 | 0.11 | | |
| 2 | 430.55 | 0.1 | 0.10 | |
| 3 | 430.65 | 0.1 | | |
| 4 | 430.75 | 0.1 | | |
| 5 | 430.85 | 0.1 | | |
| 6 | 430.95 | 0.1 | | |
| 7 | 431.05 | 0.1 | | |
| 8 | 431.15 | 0.1 | | |
| 9 | 431.25 | 0.1 | | |
| 10 | 431.35 | 0.1 | | |
| 11 | 431.45 | 0.1 | | |
| 12 | 431.55 | 0.1 | | |
| 13 | 431.65 | 0.09 | | |
| 14 | 431.74 | 0.1 | | |
| 15 | 431.84 | 0.1 | | |
| 16 | 431.94 | 0.1 | | |
| 17 | 432.04 | 0.1 | | |
| 18 | 432.14 | 0.09 | | |
| 19 | 432.23 | 0.1 | | |
| 20 | 432.33 | 0.1 | | |
| 21 | 432.43 | 0.09 | | |
| 22 | 432.52 | 0.1 | | |
| 23 | 432.62 | 0.09 | | |
| 24 | 432.71 | 0.1 | | |
| 25 | 432.81 | 0.1 | | |
| 26 | 432.91 | 0.09 | | |
| 27 | 433 | 0.1 | | |
| 28 | 433.1 | 0.09 | | |
| 29 | 433.19 | 0.1 | | |
| 30 | 433.29 | 0.09 | | |
| 1-Jul | 433.38 | 0.09 | | |

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| 2 | 433.47 | 0.1 | | |
| 3 | 433.57 | 0.09 | | |
| 4 | 433.66 | 0.09 | | |
| 5 | 433.75 | 0.1 | | |
| 6 | 433.85 | 0.09 | | |
| 7 | 433.94 | 0.09 | | |
| 8 | 434.03 | 0.09 | | |
| 9 | 434.12 | 0.09 | | |
| 10 | 434.21 | 0.1 | | |
| 11 | 434.31 | 0.09 | 0.09 | |
| 12 | 434.4 | 0.09 | | |
| 13 | 434.49 | 0.09 | | |
| 14 | 434.58 | 0.09 | | |
| 15 | 434.67 | 0.09 | | |
| 16 | 434.76 | 0.09 | | |
| 17 | 434.85 | 0.09 | | |
| 18 | 434.94 | 0.09 | | |
| 19 | 435.03 | 0.09 | | |
| 20 | 435.12 | 0.08 | | |
| 21 | 435.2 | 0.09 | | |
| 22 | 435.29 | 0.09 | | |
| 23 | 435.38 | 0.09 | | |
| 24 | 435.47 | 0.09 | | |
| 25 | 435.56 | 0.08 | | |
| 26 | 435.64 | 0.09 | | |
| 27 | 435.73 | 0.09 | | |
| 28 | 435.82 | 0.08 | | |
| 29 | 435.9 | 0.09 | | |
| 30 | 435.99 | 0.08 | | |
| 31 | 436.07 | 0.09 | | |
| Aug. 1 | 436.16 | 0.08 | | |
| 2 | 436.24 | 0.09 | | |
| 3 | 436.33 | 0.08 | | |
| 4 | 436.41 | 0.09 | | |
| 5 | 436.5 | 0.08 | | |
| 6 | 436.58 | 0.09 | | |

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| 7 | 436.67 | 0.08 | | |
| 8 | 436.75 | 0.08 | | |
| 9 | 436.83 | 0.08 | | |
| 10 | 436.91 | 0.09 | | |
| 11 | 437 | 0.08 | 0.08 | |
| 12 | 437.08 | 0.08 | | |
| 13 | 437.16 | 0.08 | | |
| 14 | 437.24 | 0.08 | | |
| 15 | 437.32 | 0.08 | | |
| 16 | 437.4 | 0.08 | | |
| 17 | 437.48 | 0.08 | | |
| 18 | 437.56 | 0.08 | | |
| 19 | 437.64 | 0.08 | | |
| 20 | 437.72 | 0.08 | | |
| 21 | 437.8 | 0.08 | | |
| 22 | 437.88 | 0.08 | | |
| 23 | 437.96 | 0.08 | | |
| 24 | 438.04 | 0.08 | | |
| 25 | 438.12 | 0.08 | | |
| 26 | 438.2 | 0.07 | | |
| 27 | 438.27 | 0.08 | | |
| 28 | 438.35 | 0.08 | | |
| 29 | 438.43 | 0.07 | | |
| 30 | 438.5 | 0.08 | | |
| 31 | 438.58 | 0.07 | | |
| Sept. 1 | 438.65 | 0.08 | | |
| 2 | 438.73 | 0.08 | | |
| 3 | 438.81 | 0.07 | | |
| 4 | 438.88 | 0.07 | | |
| 5 | 438.95 | 0.08 | | |
| 6 | 439.03 | 0.07 | | |
| 7 | 439.1 | 0.08 | | |
| 8 | 439.18 | 0.07 | | |
| 9 | 439.25 | 0.07 | | |
| 10 | 439.32 | 0.08 | | |
| 11 | 439.4 | 0.07 | 0.07 | |

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| 12 | 439.47 | 0.07 | | |
| 13 | 439.54 | 0.07 | | |
| 14 | 439.61 | 0.07 | | |
| 15 | 439.68 | 0.07 | | |
| 16 | 439.75 | 0.07 | | |
| 17 | 439.82 | 0.07 | | |
| 18 | 439.89 | 0.07 | | |
| 19 | 439.96 | 0.07 | | |
| 20 | 440.03 | 0.07 | | |
| 21 | 440.1 | 0.07 | | |
| 22 | 440.17 | 0.07 | | |
| 23 | 440.24 | 0.07 | | |
| 24 | 440.31 | 0.07 | | |
| 25 | 440.38 | 0.06 | | |
| 26 | 440.44 | 0.07 | | |
| 27 | 440.51 | 0.07 | | |
| 28 | 440.58 | 0.06 | | |
| 29 | 440.64 | 0.07 | | |
| 30 | 440.71 | 0.07 | | |
| Oct. 1 | 440.78 | 0.06 | | |
| 2 | 440.84 | 0.07 | | |
| 3 | 440.91 | 0.06 | | |
| 4 | 440.97 | 0.07 | | |
| 5 | 441.04 | 0.06 | | |
| 6 | 441.1 | 0.07 | | |
| 7 | 441.17 | 0.06 | | |
| 8 | 441.23 | 0.06 | | |
| 9 | 441.29 | 0.06 | | |
| 10 | 441.35 | 0.07 | | |
| 11 | 441.42 | 0.06 | 0.06 | |
| 12 | 441.48 | 0.06 | | |
| 13 | 441.54 | 0.06 | | |
| 14 | 441.6 | 0.06 | | |
| 15 | 441.66 | 0.06 | | |
| 16 | 441.72 | 0.06 | | |
| 17 | 441.78 | 0.06 | | |

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| 18 | 441.84 | 0.07 | | |
| 19 | 441.91 | 0.05 | | |
| 20 | 441.96 | 0.06 | | |
| 21 | 442.02 | 0.06 | | |
| 22 | 442.08 | 0.06 | | |
| 23 | 442.14 | 0.06 | | |
| 24 | 442.2 | 0.05 | | |
| 25 | 442.25 | 0.06 | | |
| 26 | 442.31 | 0.06 | | |
| 27 | 442.37 | 0.06 | | |
| 28 | 442.43 | 0.05 | | |
| 29 | 442.48 | 0.06 | | |
| 30 | 442.54 | 0.05 | | |
| 31 | 442.59 | 0.06 | | |
| Nov. 1 | 442.65 | 0.05 | | |
| 2 | 442.7 | 0.06 | | |
| 3 | 442.76 | 0.05 | | |
| 4 | 442.81 | 0.06 | | |
| 5 | 442.87 | 0.05 | | |
| 6 | 442.92 | 0.05 | | |
| 7 | 442.97 | 0.05 | | |
| 8 | 443.02 | 0.06 | | |
| 9 | 443.08 | 0.05 | 0.05 | |
| 10 | 443.13 | 0.05 | | |
| 11 | 443.18 | 0.05 | | |
| 12 | 443.23 | 0.05 | | |
| 13 | 443.28 | 0.05 | | |
| 14 | 443.33 | 0.05 | | |
| 15 | 443.38 | 0.05 | | |
| 16 | 443.43 | 0.05 | | |
| 17 | 443.48 | 0.05 | | |
| 18 | 443.53 | 0.05 | | |
| 19 | 443.58 | 0.05 | | |
| 20 | 443.63 | 0.04 | | |
| 21 | 443.67 | 0.05 | | |
| 22 | 443.72 | 0.05 | | |

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| 23 | 443.77 | 0.05 | | |
| 24 | 443.82 | 0.04 | | |
| 25 | 443.86 | 0.05 | | |
| 26 | 443.91 | 0.04 | | |
| 27 | 443.95 | 0.05 | | |
| 28 | 444 | 0.04 | | |
| 29 | 444.04 | 0.05 | | |
| 30 | 444.09 | 0.04 | | |
| Dec. 1 | 444.13 | 0.05 | | |
| 2 | 444.18 | 0.04 | | |
| 3 | 444.22 | 0.04 | | |
| 4 | 444.26 | 0.04 | | |
| 5 | 444.3 | 0.05 | | |
| 6 | 444.35 | 0.04 | 0.04 | |
| 7 | 444.39 | 0.04 | | |
| 8 | 444.43 | 0.04 | | |
| 9 | 444.47 | 0.04 | | |
| 10 | 444.51 | 0.04 | | |
| 11 | 444.55 | 0.04 | | |
| 12 | 444.59 | 0.04 | | |
| 13 | 444.63 | 0.04 | | |
| 14 | 444.67 | 0.04 | | |
| 15 | 444.71 | 0.04 | | |
| 16 | 444.75 | 0.04 | | |
| 17 | 444.79 | 0.03 | | |
| 18 | 444.82 | 0.04 | | |
| 19 | 444.86 | 0.04 | | |
| 20 | 444.9 | 0.04 | | |
| 21 | 444.94 | 0.03 | | |
| 22 | 444.97 | 0.04 | | |
| 23 | 445.01 | 0.03 | | |
| 24 | 445.04 | 0.04 | | |
| 25 | 445.08 | 0.03 | | |
| 26 | 445.11 | 0.04 | | |
| 27 | 445.15 | 0.03 | | |
| 28 | 445.18 | 0.03 | | |

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| 29 | 445.21 | 0.04 | | |
| 30 | 445.25 | 0.03 | | |
| 31 | 445.28 | 0.03 | | |
| 2025 Jan. 1 | 445.31 | 0.03 | | |
| 2 | 445.34 | 0.04 | | |
| 3 | 445.38 | 0.03 | 0.03 | |
| 4 | 445.41 | 0.03 | | |
| 5 | 445.44 | 0.03 | | |
| 6 | 445.47 | 0.03 | | |
| 7 | 445.5 | 0.03 | | |
| 8 | 445.53 | 0.03 | | |
| 9 | 445.56 | 0.03 | | |
| 10 | 445.59 | 0.03 | | |
| 11 | 445.62 | 0.02 | | |
| 12 | 445.64 | 0.03 | | |
| 13 | 445.67 | 0.03 | | |
| 14 | 445.7 | 0.03 | | |
| 15 | 445.73 | 0.02 | | |
| 16 | 445.75 | 0.03 | | |
| 17 | 445.78 | 0.03 | | |
| 18 | 445.81 | 0.02 | | |
| 19 | 445.83 | 0.03 | | |
| 20 | 445.86 | 0.02 | | |
| 21 | 445.88 | 0.02 | | |
| 22 | 445.9 | 0.03 | | |
| 23 | 445.93 | 0.02 | | |
| 24 | 445.95 | 0.03 | | |
| 25 | 445.98 | 0.02 | | |
| 26 | 446 | 0.02 | | |
| 27 | 446.02 | 0.02 | | |
| 28 | 446.04 | 0.02 | | |
| 29 | 446.06 | 0.03 | | |
| 30 | 446.09 | 0.02 | 0.02 | |
| 31 | 446.11 | 0.02 | | |
| Febr. 1 | 446.13 | 0.02 | | |
| 2 | 446.15 | 0.02 | | |

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| 3 | 446.17 | 0.02 | | |
| 4 | 446.19 | 0.01 | | |
| 5 | 446.2 | 0.02 | | |
| 6 | 446.22 | 0.02 | | |
| 7 | 446.24 | 0.02 | | |
| 8 | 446.26 | 0.02 | | |
| 9 | 446.28 | 0.01 | | |
| 10 | 446.29 | 0.02 | | |
| 11 | 446.31 | 0.02 | | |
| 12 | 446.33 | 0.01 | | |
| 13 | 446.34 | 0.02 | | |
| 14 | 446.36 | 0.01 | | |
| 15 | 446.37 | 0.02 | | |
| 16 | 446.39 | 0.01 | | |
| 17 | 446.4 | 0.01 | | |
| 18 | 446.41 | 0.02 | | |
| 19 | 446.43 | 0.01 | | |
| 20 | 446.44 | 0.01 | | |
| 21 | 446.45 | 0.02 | | |
| 22 | 446.47 | 0.01 | 0.01 | |
| 23 | 446.48 | 0.01 | | |
| 24 | 446.49 | 0.01 | | |
| 25 | 446.5 | 0.01 | | |
| 26 | 446.51 | 0.01 | | |
| 27 | 446.52 | 0.01 | | |
| 28 | 446.53 | 0.01 | | |
| 1-Mar | 446.54 | 0.01 | | |
| 2 | 446.55 | 0.01 | | |
| 3 | 446.56 | 0.01 | | |
| 4 | 446.57 | 0.01 | | |
| 5 | 446.58 | 0 | | |
| 6 | 446.58 | 0.01 | | |
| 7 | 446.59 | 0.01 | | |
| 8 | 446.6 | 0 | | |
| 9 | 446.6 | 0.01 | | |
| 10 | 446.61 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 11 | 446.61 | 0.01 | | |
| 12 | 446.62 | 0 | | |
| 13 | 446.62 | 0.01 | | |
| 14 | 446.63 | 0 | | |
| 15 | 446.63 | 0.01 | | |
| 16 | 446.64 | 0 | | |
| 17 | 446.64 | 0 | | |
| 18 | 446.64 | 0.01 | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |
| 19 | 446.65 | 0 | 0 | **(Aphe-LAEC)** |
| 20 | 446.65 | 0 | | |
| 21 | 446.65 | 0 | | |
| 22 | 446.65 | 0 | | |
| 23 | 446.65 | 0 | | |
| 24 | 446.65 | 0 | | |
| 25 | 446.65 | 0 | | |
| 26 | 446.65 | 0 | | |
| 27 | 446.65 | 0 | | |
| 28 | 446.65 | 0 | | |
| 29 | 446.65 | 0 | | |
| 30 | 446.65 | 0 | 0 | |
| 31 | 446.64 | -0.01 | | |

## Appendix H

**Step 1:**

I'll create a table with 5 columns for Asteroid 4 Vesta.

Then, I'll insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Asteroid's 4 Vesta distance from the Sun in million km

**Step 2:**

I'll find these data for the next 3 columns:

- Column N03: The difference of the Asteroid's 4 Vesta distance from the Sun from the previous day
- Column N04: The Sequence of the difference (it's also related to the Orbital Speed)
- Column N05: The 10 Points & comments

| Date 2018 | The Asteroid's 4 Vesta distance from the Sun in million km | The difference of the Asteroid's 4 Vesta distance from the Sun from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| Feb. 25, 2020 | 384.62 | | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |

| | | | | |
|---|---|---|---|---|
| Feb. 26, 2020 | 384.63 | 0.01 | 0 | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 27 | 384.63 | 0 | | |
| 28 | 384.63 | 0 | | |
| 29 | 384.63 | 0 | | |
| 1-Mar | 384.63 | 0 | | |
| 2 | 384.63 | 0 | | |
| 3 | 384.63 | 0 | | |
| 4 | 384.63 | 0 | | |
| 5 | 384.63 | 0 | | |
| 6 | 384.63 | 0 | | |
| 7 | 384.62 | -0.01 | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 8 | 384.62 | 0 | | |
| 9 | 384.62 | 0 | | |
| 10 | 384.61 | -0.01 | | |
| 11 | 384.61 | 0 | | |
| 12 | 384.6 | -0.01 | | |

| | | | | |
|---|---|---|---|---|
| 13 | 384.59 | -0.01 | | |
| 14 | 384.59 | 0 | | |
| 15 | 384.58 | -0.01 | -0.01 | |
| 16 | 384.57 | -0.01 | | |
| 17 | 384.56 | -0.01 | | |
| 18 | 384.55 | -0.01 | | |
| 19 | 384.54 | -0.01 | | |
| 20 | 384.53 | -0.01 | | |
| 21 | 384.52 | -0.01 | | |
| 22 | 384.51 | -0.01 | | |
| 23 | 384.5 | -0.01 | | |
| 24 | 384.48 | -0.02 | | |
| 25 | 384.47 | -0.01 | | |
| 26 | 384.46 | -0.01 | | |
| 27 | 384.44 | -0.02 | | |
| 28 | 384.43 | -0.01 | | |
| 29 | 384.41 | -0.02 | | |
| 30 | 384.4 | -0.01 | | |
| 31 | 384.38 | -0.02 | -0.02 | |
| Apr. 1 | 384.36 | -0.02 | | |
| 2 | 384.34 | -0.02 | | |
| 3 | 384.32 | -0.02 | | |
| 4 | 384.3 | -0.02 | | |
| 5 | 384.28 | -0.02 | | |
| 6 | 384.26 | -0.02 | | |
| 7 | 384.24 | -0.02 | | |
| 8 | 384.22 | -0.02 | | |
| 9 | 384.2 | -0.02 | | |
| 10 | 384.17 | -0.03 | | |
| 11 | 384.15 | -0.02 | | |
| 12 | 384.13 | -0.02 | | |
| 13 | 384.1 | -0.03 | | |
| 14 | 384.08 | -0.02 | | |
| 15 | 384.05 | -0.03 | | |
| 16 | 384.02 | -0.03 | | |
| 17 | 384 | -0.02 | | |

| | | | | |
|---|---|---|---|---|
| 18 | 383.97 | -0.03 | -0.03 | |
| 19 | 383.94 | -0.03 | | |
| 20 | 383.91 | -0.03 | | |
| 21 | 383.88 | -0.03 | | |
| 22 | 383.85 | -0.03 | | |
| 23 | 383.82 | -0.03 | | |
| 24 | 383.79 | -0.03 | | |
| 25 | 383.76 | -0.03 | | |
| 26 | 383.73 | -0.03 | | |
| 27 | 383.7 | -0.03 | | |
| 28 | 383.66 | -0.04 | | |
| 29 | 383.63 | -0.03 | | |
| 30 | 383.59 | -0.04 | | |
| 1-May | 383.56 | -0.03 | | |
| 2 | 383.52 | -0.04 | | |
| 3 | 383.49 | -0.03 | | |
| 4 | 383.45 | -0.04 | -0.04 | |
| 5 | 383.41 | -0.04 | | |
| 6 | 383.37 | -0.04 | | |
| 7 | 383.33 | -0.04 | | |
| 8 | 383.3 | -0.03 | | |
| 9 | 383.26 | -0.04 | | |
| 10 | 383.22 | -0.04 | | |
| 11 | 383.17 | -0.05 | | |
| 12 | 383.13 | -0.04 | | |
| 13 | 383.09 | -0.04 | | |
| 14 | 383.05 | -0.04 | | |
| 15 | 383.01 | -0.04 | | |
| 16 | 382.96 | -0.05 | | |
| 17 | 382.92 | -0.04 | | |
| 18 | 382.87 | -0.05 | | |
| 19 | 382.83 | -0.04 | | |
| 20 | 382.78 | -0.05 | | |
| 21 | 382.73 | -0.05 | | |
| 22 | 382.69 | -0.04 | | |
| 23 | 382.64 | -0.05 | -0.05 | |

| | | | | |
|---|---|---|---|---|
| 24 | 382.59 | -0.05 | | |
| 25 | 382.54 | -0.05 | | |
| 26 | 382.49 | -0.05 | | |
| 27 | 382.44 | -0.05 | | |
| 28 | 382.39 | -0.05 | | |
| 29 | 382.34 | -0.05 | | |
| 30 | 382.29 | -0.05 | | |
| 31 | 382.24 | -0.05 | | |
| 1-Jun | 382.18 | -0.06 | | |
| 2 | 382.13 | -0.05 | | |
| 3 | 382.08 | -0.05 | | |
| 4 | 382.02 | -0.06 | | |
| 5 | 381.97 | -0.05 | | |
| 6 | 381.91 | -0.06 | | |
| 7 | 381.85 | -0.06 | | |
| 8 | 381.8 | -0.05 | | |
| 9 | 381.74 | -0.06 | -0.06 | |
| 10 | 381.68 | -0.06 | | |
| 11 | 381.62 | -0.06 | | |
| 12 | 381.57 | -0.05 | | |
| 13 | 381.51 | -0.06 | | |
| 14 | 381.45 | -0.06 | | |
| 15 | 381.39 | -0.06 | | |
| 16 | 381.32 | -0.07 | | |
| 17 | 381.26 | -0.06 | | |
| 18 | 381.2 | -0.06 | | |
| 19 | 381.14 | -0.06 | | |
| 20 | 381.07 | -0.07 | | |
| 21 | 381.01 | -0.06 | | |
| 22 | 380.95 | -0.06 | | |
| 23 | 380.88 | -0.07 | | |
| 24 | 380.82 | -0.06 | | |
| 25 | 380.75 | -0.07 | | |
| 26 | 380.68 | -0.07 | | |
| 27 | 380.62 | -0.06 | | |
| 28 | 380.55 | -0.07 | -0.07 | |

| | | | | |
|---|---|---|---|---|
| 29 | 380.48 | -0.07 | | |
| 30 | 380.41 | -0.07 | | |
| 1-Jul | 380.34 | -0.07 | | |
| 1 | 380.27 | -0.07 | | |
| 3 | 380.2 | -0.07 | | |
| 4 | 380.13 | -0.07 | | |
| 5 | 380.06 | -0.07 | | |
| 6 | 379.99 | -0.07 | | |
| 7 | 379.91 | -0.08 | | |
| 8 | 379.84 | -0.07 | | |
| 9 | 379.77 | -0.07 | | |
| 10 | 379.69 | -0.08 | | |
| 11 | 379.62 | -0.07 | | |
| 12 | 379.54 | -0.08 | | |
| 13 | 379.47 | -0.07 | | |
| 14 | 379.39 | -0.08 | | |
| 15 | 379.32 | -0.07 | | |
| 16 | 379.24 | -0.08 | -0.08 | |
| 17 | 379.16 | -0.08 | | |
| 18 | 379.08 | -0.08 | | |
| 19 | 379 | -0.08 | | |
| 20 | 378.92 | -0.08 | | |
| 21 | 378.85 | -0.07 | | |
| 22 | 378.76 | -0.09 | | |
| 23 | 378.68 | -0.08 | | |
| 24 | 378.6 | -0.08 | | |
| 25 | 378.52 | -0.08 | | |
| 26 | 378.44 | -0.08 | | |
| 27 | 378.36 | -0.08 | | |
| 28 | 378.27 | -0.09 | | |
| 29 | 378.19 | -0.08 | | |
| 30 | 378.1 | -0.09 | | |
| 31 | 378.02 | -0.08 | | |
| Aug. 1 | 377.93 | -0.09 | | |
| 2 | 377.85 | -0.08 | | |
| 3 | 377.76 | -0.09 | | |

| | | | | |
|---|---|---|---|---|
| 4 | 377.67 | -0.09 | | |
| 5 | 377.59 | -0.08 | | |
| 6 | 377.5 | -0.09 | -0.09 | |
| 7 | 377.41 | -0.09 | | |
| 8 | 377.32 | -0.09 | | |
| 9 | 377.23 | -0.09 | | |
| 10 | 377.14 | -0.09 | | |
| 11 | 377.05 | -0.09 | | |
| 12 | 376.96 | -0.09 | | |
| 13 | 376.87 | -0.09 | | |
| 14 | 376.78 | -0.09 | | |
| 15 | 376.69 | -0.09 | | |
| 16 | 376.59 | -0.1 | | |
| 17 | 376.5 | -0.09 | | |
| 18 | 376.41 | -0.09 | | |
| 19 | 376.31 | -0.1 | | |
| 20 | 376.22 | -0.09 | | |
| 21 | 376.12 | -0.1 | | |
| 22 | 376.03 | -0.09 | | |
| 23 | 375.93 | -0.1 | | |
| 24 | 375.83 | -0.1 | | |
| 25 | 375.74 | -0.09 | | |
| 26 | 375.64 | -0.1 | -0.10 | |
| 27 | 375.54 | -0.1 | | |
| 28 | 375.44 | -0.1 | | |
| 29 | 375.34 | -0.1 | | |
| 30 | 375.25 | -0.09 | | |
| 31 | 375.15 | -0.1 | | |
| Sept. 1 | 375.05 | -0.1 | | |
| 2 | 374.94 | -0.11 | | |
| 3 | 374.84 | -0.1 | | |
| 4 | 374.74 | -0.1 | | |
| 5 | 374.64 | -0.1 | | |
| 6 | 374.54 | -0.1 | | |
| 7 | 374.43 | -0.11 | | |
| 8 | 374.33 | -0.1 | | |

| | | | | |
|---|---|---|---|---|
| 9 | 374.23 | -0.1 | | |
| 10 | 374.12 | -0.11 | | |
| 11 | 374.02 | -0.1 | | |
| 12 | 373.91 | -0.11 | | |
| 13 | 373.81 | -0.1 | | |
| 14 | 373.7 | -0.11 | | |
| 15 | 373.59 | -0.11 | | |
| 16 | 373.49 | -0.1 | | |
| 17 | 373.38 | -0.11 | -0.11 | |
| 18 | 373.27 | -0.11 | | |
| 19 | 373.16 | -0.11 | | |
| 20 | 373.05 | -0.11 | | |
| 21 | 372.95 | -0.1 | | |
| 22 | 372.84 | -0.11 | | |
| 23 | 372.73 | -0.11 | | |
| 24 | 372.62 | -0.11 | | |
| 25 | 372.5 | -0.12 | | |
| 26 | 372.39 | -0.11 | | |
| 27 | 372.28 | -0.11 | | |
| 28 | 372.17 | -0.11 | | |
| 29 | 372.06 | -0.11 | | |
| 30 | 371.94 | -0.12 | | |
| Oct. 1 | 371.83 | -0.11 | | |
| 2 | 371.72 | -0.11 | | |
| 3 | 371.6 | -0.12 | | |
| 4 | 371.49 | -0.11 | | |
| 5 | 371.37 | -0.12 | | |
| 6 | 371.26 | -0.11 | | |
| 7 | 371.14 | -0.12 | | |
| 8 | 371.03 | -0.11 | | |
| 9 | 370.91 | -0.12 | | |
| 10 | 370.79 | -0.12 | | |
| 11 | 370.68 | -0.11 | | |
| 12 | 370.56 | -0.12 | -0.12 | |
| 13 | 370.44 | -0.12 | | |
| 14 | 370.32 | -0.12 | | |

| | | | | |
|---|---|---|---|---|
| 15 | 370.2 | -0.12 | | |
| 16 | 370.08 | -0.12 | | |
| 17 | 369.96 | -0.12 | | |
| 18 | 369.84 | -0.12 | | |
| 19 | 369.72 | -0.12 | | |
| 20 | 369.6 | -0.12 | | |
| 21 | 369.48 | -0.12 | | |
| 22 | 369.36 | -0.12 | | |
| 23 | 369.24 | -0.12 | | |
| 24 | 369.12 | -0.12 | | |
| 25 | 368.99 | -0.13 | | |
| 26 | 368.86 | -0.13 | | |
| 27 | 368.74 | -0.12 | | |
| 28 | 368.62 | -0.12 | | |
| 29 | 368.49 | -0.13 | | |
| 30 | 368.37 | -0.12 | | |
| 31 | 368.24 | -0.13 | | |
| Nov. 1 | 368.12 | -0.12 | | |
| 2 | 367.99 | -0.13 | | |
| 3 | 367.87 | -0.12 | | |
| 4 | 367.74 | -0.13 | | |
| 5 | 367.62 | -0.12 | | |
| 6 | 367.49 | -0.13 | | |
| 7 | 367.36 | -0.13 | | |
| 8 | 367.23 | -0.13 | | |
| 9 | 367.11 | -0.12 | | |
| 10 | 366.98 | -0.13 | -0.13 | |
| 11 | 366.85 | -0.13 | | |
| 12 | 366.72 | -0.13 | | |
| 13 | 366.59 | -0.13 | | |
| 14 | 366.46 | -0.13 | | |
| 15 | 366.33 | -0.13 | | |
| 16 | 366.2 | -0.13 | | |
| 17 | 366.07 | -0.13 | | |
| 18 | 365.94 | -0.13 | | |
| 19 | 365.81 | -0.13 | | |

| | | | | |
|---|---|---|---|---|
| 20 | 365.68 | -0.13 | | |
| 21 | 365.55 | -0.13 | | |
| 22 | 365.41 | -0.14 | | |
| 23 | 365.28 | -0.13 | | |
| 24 | 365.15 | -0.13 | | |
| 25 | 365.02 | -0.13 | | |
| 26 | 364.88 | -0.14 | | |
| 27 | 364.75 | -0.13 | | |
| 28 | 364.62 | -0.13 | | |
| 29 | 364.48 | -0.14 | | |
| 30 | 364.35 | -0.13 | | |
| Dec. 1 | 364.21 | -0.14 | | |
| 2 | 364.08 | -0.13 | | |
| 3 | 363.94 | -0.14 | | |
| 4 | 363.81 | -0.13 | | |
| 5 | 363.67 | -0.14 | | |
| 6 | 363.54 | -0.13 | | |
| 7 | 363.4 | -0.14 | | |
| 8 | 363.26 | -0.14 | | |
| 9 | 363.13 | -0.13 | | |
| 10 | 362.99 | -0.14 | | |
| 11 | 362.85 | -0.14 | | |
| 12 | 362.72 | -0.13 | | |
| 13 | 362.58 | -0.14 | | |
| 14 | 362.44 | -0.14 | | |
| 15 | 362.3 | -0.14 | | |
| 16 | 362.16 | -0.14 | | |
| 17 | 362.02 | -0.14 | | |
| 18 | 361.89 | -0.13 | | |
| 19 | 361.75 | -0.14 | -0.14 | |
| 20 | 361.61 | -0.14 | | |
| 21 | 361.47 | -0.14 | | |
| 22 | 361.33 | -0.14 | | |
| 23 | 361.19 | -0.14 | | |
| 24 | 361.05 | -0.14 | | |
| 25 | 360.91 | -0.14 | | |

| | | | | |
|---|---|---|---|---|
| 26 | 360.77 | -0.14 | | |
| 27 | 360.62 | -0.15 | | |
| 28 | 360.48 | -0.14 | | |
| 29 | 360.34 | -0.14 | | |
| 30 | 360.2 | -0.14 | | |
| 31 | 360.06 | -0.14 | | |
| 2021 Jan. 1 | 359.92 | -0.14 | | |
| 2 | 359.77 | -0.15 | | |
| 3 | 359.63 | -0.14 | | |
| 4 | 359.49 | -0.14 | | |
| 5 | 359.35 | -0.14 | | |
| 6 | 359.2 | -0.15 | | |
| 7 | 359.06 | -0.14 | | |
| 8 | 358.92 | -0.14 | | |
| 9 | 358.77 | -0.15 | | |
| 10 | 358.63 | -0.14 | | |
| 11 | 358.49 | -0.14 | | |
| 12 | 358.34 | -0.15 | | |
| 13 | 358.2 | -0.14 | | |
| 14 | 358.05 | -0.15 | | |
| 15 | 357.91 | -0.14 | | |
| 16 | 357.76 | -0.15 | | |
| 17 | 357.62 | -0.14 | | |
| 18 | 357.47 | -0.15 | | |
| 19 | 357.33 | -0.14 | | |
| 20 | 357.18 | -0.15 | | |
| 21 | 357.04 | -0.14 | | |
| 22 | 356.89 | -0.15 | | |
| 23 | 356.75 | -0.14 | | |
| 24 | 356.6 | -0.15 | | |
| 25 | 356.46 | -0.14 | | |
| 26 | 356.31 | -0.15 | | |
| 27 | 356.16 | -0.15 | | |
| 28 | 356.02 | -0.14 | | |
| 29 | 355.87 | -0.15 | | |
| 30 | 355.72 | -0.15 | | |

| | | | | |
|---|---|---|---|---|
| 31 | 355.58 | -0.14 | | |
| Febr. 1 | 355.43 | -0.15 | | |
| 2 | 355.28 | -0.15 | | |
| 3 | 355.14 | -0.14 | | |
| 4 | 354.99 | -0.15 | | |
| 5 | 354.84 | -0.15 | | |
| 6 | 354.69 | -0.15 | | |
| 7 | 354.55 | -0.14 | | |
| 8 | 354.4 | -0.15 | | |
| 9 | 354.25 | -0.15 | | |
| 10 | 354.1 | -0.15 | | |
| 11 | 353.96 | -0.14 | | |
| 12 | 353.81 | -0.15 | | |
| 13 | 353.66 | -0.15 | | |
| 14 | 353.51 | -0.15 | | |
| 15 | 353.37 | -0.14 | | |
| 16 | 353.22 | -0.15 | | |
| 17 | 353.07 | -0.15 | | |
| 18 | 352.92 | -0.15 | | |
| 19 | 352.77 | -0.15 | | |
| 20 | 352.62 | -0.15 | | |
| 21 | 352.48 | -0.14 | | |
| 22 | 352.33 | -0.15 | | |
| 23 | 352.18 | -0.15 | | |
| 24 | 352.03 | -0.15 | | |
| 25 | 351.88 | -0.15 | | |
| 26 | 351.73 | -0.15 | | |
| 27 | 351.59 | -0.14 | | |
| 28 | 351.44 | -0.15 | | |
| 1-Mar | 351.29 | -0.15 | | |
| 2 | 351.14 | -0.15 | | |
| 3 | 350.99 | -0.15 | | |
| 4 | 350.84 | -0.15 | | |
| 5 | 350.69 | -0.15 | | |
| 6 | 350.55 | -0.14 | | |
| 7 | 350.4 | -0.15 | Max diff. and -0.15 | |

| | | | | |
|---|---|---|---|---|
| 8 | 350.25 | -0.15 | | |
| 9 | 350.1 | -0.15 | | |
| 10 | 349.95 | -0.15 | | |
| 11 | 349.8 | -0.15 | | |
| 12 | 349.65 | -0.15 | | |
| 13 | 349.51 | -0.14 | | |
| 14 | 349.36 | -0.15 | | |
| 15 | 349.21 | -0.15 | | |
| 16 | 349.06 | -0.15 | | |
| 17 | 348.91 | -0.15 | | |
| 18 | 348.76 | -0.15 | | |
| 19 | 348.61 | -0.15 | | |
| 20 | 348.47 | -0.14 | | |
| 21 | 348.32 | -0.15 | | |
| 22 | 348.17 | -0.15 | | |
| 23 | 348.02 | -0.15 | | |
| 24 | 347.87 | -0.15 | | |
| 25 | 347.73 | -0.14 | | |
| 26 | 347.58 | -0.15 | | |
| 27 | 347.43 | -0.15 | | |
| 28 | 347.29 | -0.14 | | |
| 29 | 347.14 | -0.15 | | |
| 30 | 346.99 | -0.15 | | |
| 31 | 346.85 | -0.14 | | |
| Apr. 1 | 346.7 | -0.15 | | |
| 2 | 346.55 | -0.15 | | |
| 3 | 346.4 | -0.15 | | |
| 4 | 346.26 | -0.14 | | |
| 5 | 346.11 | -0.15 | | |
| 6 | 345.96 | -0.15 | | |
| 7 | 345.82 | -0.14 | | |
| 8 | 345.67 | -0.15 | | |
| 9 | 345.52 | -0.15 | | |
| 10 | 345.38 | -0.14 | | |
| 11 | 345.23 | -0.15 | | |
| 12 | 345.08 | -0.15 | | |

| | | | | |
|---|---|---|---|---|
| 13 | 344.94 | -0.14 | | |
| 14 | 344.79 | -0.15 | | |
| 15 | 344.65 | -0.14 | | |
| 16 | 344.5 | -0.15 | | |
| 17 | 344.35 | -0.15 | | |
| 18 | 344.21 | -0.14 | | |
| 19 | 344.06 | -0.15 | | |
| 20 | 343.92 | -0.14 | | |
| 21 | 343.77 | -0.15 | | |
| 22 | 343.63 | -0.14 | | |
| 23 | 343.48 | -0.15 | | |
| 24 | 343.34 | -0.14 | | |
| 25 | 343.2 | -0.14 | | |
| 26 | 343.05 | -0.15 | | |
| 27 | 342.91 | -0.14 | | |
| 28 | 342.76 | -0.15 | | |
| 29 | 342.62 | -0.14 | | |
| 30 | 342.48 | -0.14 | | |
| 1-May | 342.33 | -0.15 | | |
| **2** | **342.19** | **-0.14** | | |
| 3 | 342.05 | -0.14 | | |
| 4 | 341.91 | -0.14 | | |
| 5 | 341.76 | -0.15 | | |
| 6 | 341.62 | -0.14 | | |
| 7 | 341.48 | -0.14 | | |
| 8 | 341.34 | -0.14 | | |
| 9 | 341.2 | -0.14 | | |
| 10 | 341.06 | -0.14 | | |
| 11 | 340.92 | -0.14 | | |
| 12 | 340.77 | -0.15 | | |
| 13 | 340.63 | -0.14 | | |
| 14 | 340.49 | -0.14 | | |
| 15 | 340.35 | -0.14 | | |
| 16 | 340.21 | -0.14 | | |

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| 17 | 340.08 | **-0.13** | **-0.13 Anomaly. -0.02 difference from the max (-0.15)** | **Point No3 or rσ (on d3):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 18 | 339.94 | -0.14 | | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 19 | 339.8 | -0.14 | | |
| 20 | 339.66 | -0.14 | | |
| 21 | 339.52 | -0.14 | | |
| 22 | 339.38 | -0.14 | | |
| 23 | 339.24 | -0.14 | | |
| 24 | 339.11 | -0.13 | | |
| 25 | 338.97 | -0.14 | | |
| 26 | 338.83 | -0.14 | | |
| 27 | 338.7 | -0.13 | | |
| 28 | 338.56 | -0.14 | | |
| 29 | 338.42 | -0.14 | | |
| 30 | 338.29 | -0.13 | | |
| 31 | 338.15 | -0.14 | | |
| 1-Jun | 338.02 | -0.13 | | |
| 2 | 337.88 | -0.14 | | |
| 3 | 337.75 | -0.13 | | |
| 4 | 337.62 | -0.13 | | |
| 5 | 337.48 | -0.14 | | |
| 6 | 337.35 | -0.13 | | |
| 7 | 337.22 | -0.13 | | |

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| 8 | 337.08 | -0.14 | | |
| 9 | 336.95 | -0.13 | -0.13 | |
| 10 | 336.82 | -0.13 | | |
| 11 | 336.69 | -0.13 | | |
| 12 | 336.56 | -0.13 | | |
| 13 | 336.42 | -0.14 | | |
| 14 | 336.29 | -0.13 | | |
| 15 | 336.16 | -0.13 | | |
| 16 | 336.03 | -0.13 | | |
| 17 | 335.91 | -0.12 | | |
| 18 | 335.78 | -0.13 | | |
| 19 | 335.65 | -0.13 | | |
| 20 | 335.52 | -0.13 | | |
| 21 | 335.39 | -0.13 | | |
| 22 | 335.26 | -0.13 | | |
| 23 | 335.14 | -0.12 | | |
| 24 | 335.01 | -0.13 | | |
| 25 | 334.88 | -0.13 | | |
| 26 | 334.76 | -0.12 | | |
| 27 | 334.63 | -0.13 | | |
| 28 | 334.51 | -0.12 | | |
| 29 | 334.38 | -0.13 | | |
| 30 | 334.26 | -0.12 | | |
| 1-Jul | 334.14 | -0.12 | | |
| 2 | 334.01 | -0.13 | | |
| 3 | 333.89 | -0.12 | | |
| 4 | 333.77 | -0.12 | | |
| 5 | 333.65 | -0.12 | | |
| 6 | 333.52 | -0.13 | | |
| 7 | 333.4 | -0.12 | -0.12 | |
| 8 | 333.28 | -0.12 | | |
| 9 | 333.16 | -0.12 | | |
| 10 | 333.04 | -0.12 | | |
| 11 | 332.92 | -0.12 | | |
| 12 | 332.8 | -0.12 | | |
| 13 | 332.69 | -0.11 | | |

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| 14 | 332.57 | -0.12 | | |
| 15 | 332.45 | -0.12 | | |
| 16 | 332.33 | -0.12 | | |
| 17 | 332.22 | -0.11 | | |
| 18 | 332.1 | -0.12 | | |
| 19 | 331.99 | -0.11 | | |
| 20 | 331.87 | -0.12 | | |
| 21 | 331.76 | -0.11 | | |
| 22 | 331.64 | -0.12 | | |
| 23 | 331.53 | -0.11 | | |
| 24 | 331.42 | -0.11 | | |
| 25 | 331.31 | -0.11 | | |
| 26 | 331.19 | -0.12 | | |
| 27 | 331.08 | -0.11 | -0.11 | |
| 28 | 330.97 | -0.11 | | |
| 29 | 330.86 | -0.11 | | |
| 30 | 330.75 | -0.11 | | |
| 31 | 330.64 | -0.11 | | |
| Aug. 1 | 330.54 | -0.1 | | |
| 2 | 330.43 | -0.11 | | |
| 3 | 330.32 | -0.11 | | |
| 4 | 330.21 | -0.11 | | |
| 5 | 330.11 | -0.1 | | |
| 6 | 330 | -0.11 | | |
| 7 | 329.9 | -0.1 | | |
| 8 | 329.79 | -0.11 | | |
| 9 | 329.69 | -0.1 | | |
| 10 | 329.58 | -0.11 | | |
| 11 | 329.48 | -0.1 | -0.10 | |
| 12 | 329.38 | -0.1 | | |
| 13 | 329.28 | -0.1 | | |
| 14 | 329.18 | -0.1 | | |
| 15 | 329.08 | -0.1 | | |
| 16 | 328.98 | -0.1 | | |
| 17 | 328.88 | -0.1 | | |
| 18 | 328.78 | -0.1 | | |

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| 19 | 328.68 | -0.1 | | |
| 20 | 328.58 | -0.1 | | |
| 21 | 328.49 | -0.09 | | |
| 22 | 328.39 | -0.1 | | |
| 23 | 328.29 | -0.1 | | |
| 24 | 328.2 | -0.09 | | |
| 25 | 328.1 | -0.1 | | |
| 26 | 328.01 | -0.09 | | |
| 27 | 327.92 | -0.09 | | |
| 28 | 327.82 | -0.1 | | |
| 29 | 327.73 | -0.09 | -0.09 | |
| 30 | 327.64 | -0.09 | | |
| 31 | 327.55 | -0.09 | | |
| Sept. 1 | 327.46 | -0.09 | | |
| 2 | 327.37 | -0.09 | | |
| 3 | 327.28 | -0.09 | | |
| 4 | 327.2 | -0.08 | | |
| 5 | 327.11 | -0.09 | | |
| 6 | 327.02 | -0.09 | | |
| 7 | 326.94 | -0.08 | | |
| 8 | 326.85 | -0.09 | | |
| 9 | 326.77 | -0.08 | | |
| 10 | 326.68 | -0.09 | | |
| 11 | 326.6 | -0.08 | | |
| 12 | 326.52 | -0.08 | | |
| 13 | 326.43 | -0.09 | | |
| 14 | 326.35 | -0.08 | -0.08 | |
| 15 | 326.27 | -0.08 | | |
| 16 | 326.19 | -0.08 | | |
| 17 | 326.11 | -0.08 | | |
| 18 | 326.03 | -0.08 | | |
| 19 | 325.96 | -0.07 | | |
| 20 | 325.88 | -0.08 | | |
| 21 | 325.8 | -0.08 | | |
| 22 | 325.73 | -0.07 | | |
| 23 | 325.65 | -0.08 | | |

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| 24 | 325.58 | -0.07 | | |
| 25 | 325.51 | -0.07 | | |
| 26 | 325.43 | -0.08 | | |
| 27 | 325.36 | -0.07 | -0.07 | |
| 28 | 325.29 | -0.07 | | |
| 29 | 325.22 | -0.07 | | |
| 30 | 325.15 | -0.07 | | |
| Oct. 1 | 325.08 | -0.07 | | |
| 2 | 325.01 | -0.07 | | |
| 3 | 324.94 | -0.07 | | |
| 4 | 324.88 | -0.06 | | |
| 5 | 324.81 | -0.07 | | |
| 6 | 324.74 | -0.07 | | |
| 7 | 324.68 | -0.06 | | |
| 8 | 324.62 | -0.06 | | |
| 9 | 324.55 | -0.07 | | |
| 10 | 324.49 | -0.06 | -0.06 | |
| 11 | 324.43 | -0.06 | | |
| 12 | 324.37 | -0.06 | | |
| 13 | 324.31 | -0.06 | | |
| 14 | 324.25 | -0.06 | | |
| 15 | 324.19 | -0.06 | | |
| 16 | 324.13 | -0.06 | | |
| 17 | 324.07 | -0.06 | | |
| 18 | 324.02 | -0.05 | | |
| 19 | 323.96 | -0.06 | | |
| 20 | 323.91 | -0.05 | | |
| 21 | 323.85 | -0.06 | | |
| 22 | 323.8 | -0.05 | -0.05 | |
| 23 | 323.75 | -0.05 | | |
| 24 | 323.7 | -0.05 | | |
| 25 | 323.64 | -0.06 | | |
| 26 | 323.59 | -0.05 | | |
| 27 | 323.54 | -0.05 | | |
| 28 | 323.5 | -0.04 | | |
| 29 | 323.45 | -0.05 | | |

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| 30 | 323.4 | -0.05 | | |
| 31 | 323.35 | -0.05 | | |
| Nov. 1 | 323.31 | -0.04 | | |
| 2 | 323.26 | -0.05 | | |
| 3 | 323.22 | -0.04 | | |
| 4 | 323.18 | -0.04 | | |
| 5 | 323.13 | -0.05 | | |
| 6 | 323.09 | -0.04 | -0.04 | |
| 7 | 323.05 | -0.04 | | |
| 8 | 323.01 | -0.04 | | |
| 9 | 322.97 | -0.04 | | |
| 10 | 322.94 | -0.03 | | |
| 11 | 322.9 | -0.04 | | |
| 12 | 322.86 | -0.04 | | |
| 13 | 322.83 | -0.03 | | |
| 14 | 322.79 | -0.04 | | |
| 15 | 322.76 | -0.03 | | |
| 16 | 322.72 | -0.04 | | |
| 17 | 322.69 | -0.03 | -0.03 | |
| 18 | 322.66 | -0.03 | | |
| 19 | 322.63 | -0.03 | | |
| 20 | 322.6 | -0.03 | | |
| 21 | 322.57 | -0.03 | | |
| 22 | 322.54 | -0.03 | | |
| 23 | 322.51 | -0.03 | | |
| 24 | 322.49 | -0.02 | | |
| 25 | 322.46 | -0.03 | | |
| 26 | 322.44 | -0.02 | | |
| 27 | 322.41 | -0.03 | | |
| 28 | 322.39 | -0.02 | | |
| 29 | 322.37 | -0.02 | | |
| 30 | 322.34 | -0.03 | | |
| Dec. 1 | 322.32 | -0.02 | -0.02 | |
| 2 | 322.3 | -0.02 | | |
| 3 | 322.28 | -0.02 | | |
| 4 | 322.27 | -0.01 | | |

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| 5 | 322.25 | -0.02 | | |
| 6 | 322.23 | -0.02 | | |
| 7 | 322.21 | -0.02 | | |
| 8 | 322.2 | -0.01 | | |
| 9 | 322.19 | -0.01 | | |
| 10 | 322.17 | -0.02 | | |
| 11 | 322.16 | -0.01 | -0.01 | |
| 12 | 322.15 | -0.01 | | |
| 13 | 322.14 | -0.01 | | |
| 14 | 322.13 | -0.01 | | |
| 15 | 322.12 | -0.01 | | |
| 16 | 322.11 | -0.01 | | |
| 17 | 322.1 | -0.01 | | |
| 18 | 322.1 | 0 | | |
| 19 | 322.09 | -0.01 | | |
| 20 | 322.08 | -0.01 | | |
| 21 | 322.08 | 0 | | |
| 22 | 322.08 | 0 | | **Point No5 or LA (on d5):** Last point with attractive forces between the natural “Satellite” and its natural “Sun”. |
| 23 | 322.07 | -0.01 | | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural “Satellite” by its natural “Sun”. |
| 24 | 322.07 | 0 | 0 | |
| 25 | 322.07 | 0 | | |
| 26 | 322.07 | 0 | | |
| 27 | 322.07 | 0 | | |
| 28 | 322.08 | 0.01 | | **Point No7 or A (on d7):** Here starts the |

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| | | | | repulsion and the natural “Satellite” starts moving farthest by its natural “Sun” with gradual increase of the “Satellite’s Orbital speed” by point No7 up to point No8. |
| 29 | 322.08 | 0 | | |
| 30 | 322.08 | 0 | | |
| 31 | 322.09 | 0.01 | | |
| 2022 Jan. 1 | 322.09 | 0 | | |
| 2 | 322.1 | 0.01 | | |
| 3 | 322.1 | 0 | | |
| 4 | 322.11 | 0.01 | 0.01 | |
| 5 | 322.12 | 0.01 | | |
| 6 | 322.13 | 0.01 | | |
| 7 | 322.14 | 0.01 | | |
| 8 | 322.15 | 0.01 | | |
| 9 | 322.16 | 0.01 | | |
| 10 | 322.17 | 0.01 | | |
| 11 | 322.19 | 0.02 | | |
| 12 | 322.2 | 0.01 | | |
| 13 | 322.22 | 0.02 | | |
| 14 | 322.23 | 0.01 | | |
| 15 | 322.25 | 0.02 | 0.02 | |
| 16 | 322.27 | 0.02 | | |
| 17 | 322.29 | 0.02 | | |
| 18 | 322.31 | 0.02 | | |
| 19 | 322.33 | 0.02 | | |
| 20 | 322.35 | 0.02 | | |
| 21 | 322.37 | 0.02 | | |
| 22 | 322.39 | 0.02 | | |
| 23 | 322.42 | 0.03 | | |
| 24 | 322.44 | 0.02 | | |
| 25 | 322.47 | 0.03 | | |

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| 26 | 322.49 | 0.02 | | |
| 27 | 322.52 | 0.03 | 0.03 | |
| 28 | 322.55 | 0.03 | | |
| 29 | 322.57 | 0.02 | | |
| 30 | 322.6 | 0.03 | | |
| 31 | 322.63 | 0.03 | | |
| Febr. 1 | 322.67 | 0.04 | | |
| 2 | 322.7 | 0.03 | | |
| 3 | 322.73 | 0.03 | | |
| 4 | 322.76 | 0.03 | | |
| 5 | 322.8 | 0.04 | | |
| 6 | 322.83 | 0.03 | | |
| 7 | 322.87 | 0.04 | | |
| 8 | 322.9 | 0.03 | | |
| 9 | 322.94 | 0.04 | 0.04 | |
| 10 | 322.98 | 0.04 | | |
| 11 | 323.02 | 0.04 | | |
| 12 | 323.06 | 0.04 | | |
| 13 | 323.1 | 0.04 | | |
| 14 | 323.14 | 0.04 | | |
| 15 | 323.18 | 0.04 | | |
| 16 | 323.23 | 0.05 | | |
| 17 | 323.27 | 0.04 | | |
| 18 | 323.32 | 0.05 | | |
| 19 | 323.36 | 0.04 | | |
| 20 | 323.41 | 0.05 | | |
| 21 | 323.46 | 0.05 | | |
| 22 | 323.5 | 0.04 | | |
| 23 | 323.55 | 0.05 | 0.05 | |
| 24 | 323.6 | 0.05 | | |
| 25 | 323.65 | 0.05 | | |
| 26 | 323.7 | 0.05 | | |
| 27 | 323.75 | 0.05 | | |
| 28 | 323.81 | 0.06 | | |
| 1-Mar | 323.86 | 0.05 | | |
| 2 | 323.91 | 0.05 | | |

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| 3 | 323.97 | 0.06 | | |
| 4 | 324.03 | 0.06 | | |
| 5 | 324.08 | 0.05 | | |
| 6 | 324.14 | 0.06 | 0.06 | |
| 7 | 324.2 | 0.06 | | |
| 8 | 324.26 | 0.06 | | |
| 9 | 324.32 | 0.06 | | |
| 10 | 324.38 | 0.06 | | |
| 11 | 324.44 | 0.06 | | |
| 12 | 324.5 | 0.06 | | |
| 13 | 324.56 | 0.06 | | |
| 14 | 324.62 | 0.06 | | |
| 15 | 324.69 | 0.07 | | |
| 16 | 324.75 | 0.06 | | |
| 17 | 324.82 | 0.07 | | |
| 18 | 324.89 | 0.07 | | |
| 19 | 324.95 | 0.06 | | |
| 20 | 325.02 | 0.07 | 0.07 | |
| 21 | 325.09 | 0.07 | | |
| 22 | 325.16 | 0.07 | | |
| 23 | 325.23 | 0.07 | | |
| 24 | 325.3 | 0.07 | | |
| 25 | 325.37 | 0.07 | | |
| 26 | 325.44 | 0.07 | | |
| 27 | 325.51 | 0.07 | | |
| 28 | 325.59 | 0.08 | | |
| 29 | 325.66 | 0.07 | | |
| 30 | 325.73 | 0.07 | | |
| 31 | 325.81 | 0.08 | | |
| Apr. 1 | 325.89 | 0.08 | | |
| 2 | 325.96 | 0.07 | | |
| 3 | 326.04 | 0.08 | 0.08 | |
| 4 | 326.12 | 0.08 | | |
| 5 | 326.2 | 0.08 | | |
| 6 | 326.28 | 0.08 | | |
| 7 | 326.36 | 0.08 | | |

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| 8 | 326.44 | 0.08 | | |
| 9 | 326.52 | 0.08 | | |
| 10 | 326.61 | 0.09 | | |
| 11 | 326.69 | 0.08 | | |
| 12 | 326.77 | 0.08 | | |
| 13 | 326.86 | 0.09 | | |
| 14 | 326.94 | 0.08 | | |
| 15 | 327.03 | 0.09 | | |
| 16 | 327.12 | 0.09 | | |
| 17 | 327.2 | 0.08 | | |
| 18 | 327.29 | 0.09 | 0.09 | |
| 19 | 327.38 | 0.09 | | |
| 20 | 327.47 | 0.09 | | |
| 21 | 327.56 | 0.09 | | |
| 22 | 327.65 | 0.09 | | |
| 23 | 327.74 | 0.09 | | |
| 24 | 327.83 | 0.09 | | |
| 25 | 327.93 | 0.1 | | |
| 26 | 328.02 | 0.09 | | |
| 27 | 328.11 | 0.09 | | |
| 28 | 328.21 | 0.1 | | |
| 29 | 328.3 | 0.09 | | |
| 30 | 328.4 | 0.1 | | |
| 1-May | 328.49 | 0.09 | | |
| 2 | 328.59 | 0.1 | 0.10 | |
| 3 | 328.69 | 0.1 | | |
| 4 | 328.79 | 0.1 | | |
| 5 | 328.88 | 0.09 | | |
| 6 | 328.98 | 0.1 | | |
| 7 | 329.08 | 0.1 | | |
| 8 | 329.18 | 0.1 | | |
| 9 | 329.29 | 0.11 | | |
| 10 | 329.39 | 0.1 | | |
| 11 | 329.49 | 0.1 | | |
| 12 | 329.59 | 0.1 | | |
| 13 | 329.7 | 0.11 | | |

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| 14 | 329.8 | 0.1 | | |
| 15 | 329.9 | 0.1 | | |
| 16 | 330.01 | 0.11 | | |
| 17 | 330.12 | 0.11 | | |
| 18 | 330.22 | 0.1 | | |
| 19 | 330.33 | 0.11 | | |
| 20 | 330.44 | 0.11 | | |
| 21 | 330.54 | 0.1 | | |
| 22 | 330.65 | 0.11 | 0.11 | |
| 23 | 330.76 | 0.11 | | |
| 24 | 330.87 | 0.11 | | |
| 25 | 330.98 | 0.11 | | |
| 26 | 331.09 | 0.11 | | |
| 27 | 331.2 | 0.11 | | |
| 28 | 331.31 | 0.11 | | |
| 29 | 331.43 | 0.12 | | |
| 30 | 331.54 | 0.11 | | |
| 31 | 331.65 | 0.11 | | |
| 1-Jun | 331.77 | 0.12 | | |
| 2 | 331.88 | 0.11 | | |
| 3 | 332 | 0.12 | | |
| 4 | 332.11 | 0.11 | | |
| 5 | 332.23 | 0.12 | | |
| 6 | 332.34 | 0.11 | | |
| 7 | 332.46 | 0.12 | | |
| 8 | 332.58 | 0.12 | | |
| 9 | 332.69 | 0.11 | | |
| 10 | 332.81 | 0.12 | 0.12 | |
| 11 | 332.93 | 0.12 | | |
| 12 | 333.05 | 0.12 | | |
| 13 | 333.17 | 0.12 | | |
| 14 | 333.29 | 0.12 | | |
| 15 | 333.41 | 0.12 | | |
| 16 | 333.53 | 0.12 | | |
| 17 | 333.65 | 0.12 | | |
| 18 | 333.78 | 0.13 | | |

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| 19 | 333.9 | 0.12 | | |
| 20 | 334.02 | 0.12 | | |
| 21 | 334.14 | 0.12 | | |
| 22 | 334.27 | 0.13 | | |
| 23 | 334.39 | 0.12 | | |
| 24 | 334.52 | 0.13 | | |
| 25 | 334.64 | 0.12 | | |
| 26 | 334.77 | 0.13 | | |
| 27 | 334.89 | 0.12 | | |
| 28 | 335.02 | 0.13 | | |
| 29 | 335.15 | 0.13 | | |
| 30 | 335.27 | 0.12 | | |
| 1-Jul | 335.4 | 0.13 | | |
| 1 | 335.53 | 0.13 | | |
| 3 | 335.66 | 0.13 | | |
| 4 | 335.78 | 0.12 | | |
| 5 | 335.91 | 0.13 | 0.13 | |
| 6 | 336.04 | 0.13 | | |
| 7 | 336.17 | 0.13 | | |
| 8 | 336.3 | 0.13 | | |
| 9 | 336.43 | 0.13 | | |
| 10 | 336.56 | 0.13 | | |
| 11 | 336.7 | 0.14 | | |
| 12 | 336.83 | 0.13 | | |
| 13 | 336.96 | 0.13 | | |
| 14 | 337.09 | 0.13 | | |
| 15 | 337.22 | 0.13 | | |
| 16 | 337.36 | 0.14 | | |
| 17 | 337.49 | 0.13 | | |
| 18 | 337.62 | 0.13 | | |
| 19 | 337.76 | 0.14 | | |
| 20 | 337.89 | 0.13 | | |
| 21 | 338.03 | 0.14 | | |
| 22 | 338.16 | 0.13 | | |
| 23 | 338.3 | 0.14 | | |
| 24 | 338.43 | 0.13 | | |

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| 25 | 338.57 | 0.14 | | |
| 26 | 338.71 | 0.14 | | |
| 27 | 338.84 | 0.13 | | |
| 28 | 338.98 | 0.14 | | |
| 29 | 339.12 | 0.14 | | |
| 30 | 339.25 | 0.13 | | |
| 31 | 339.39 | 0.14 | | |
| Aug. 1 | 339.53 | 0.14 | | |
| 2 | 339.67 | 0.14 | | |
| 3 | 339.81 | 0.14 | | |
| 4 | 339.94 | 0.13 | | |
| 5 | 340.08 | 0.14 | 0.14 | |
| 6 | 340.22 | 0.14 | | |
| 7 | 340.36 | 0.14 | | |
| 8 | 340.5 | 0.14 | | |
| 9 | 340.64 | 0.14 | | |
| 10 | 340.78 | 0.14 | | |
| 11 | 340.92 | 0.14 | | |
| 12 | 341.06 | 0.14 | | |
| 13 | 341.21 | 0.15 | | |
| 14 | 341.35 | 0.14 | | |
| 15 | 341.49 | 0.14 | | |
| 16 | 341.63 | 0.14 | | |
| 17 | 341.77 | 0.14 | | |
| 18 | 341.92 | 0.15 | | |
| 19 | 342.06 | 0.14 | | |
| 20 | 342.2 | 0.14 | | |
| 21 | 342.34 | 0.14 | | |
| 22 | 342.49 | 0.15 | | |
| 23 | 342.63 | 0.14 | | |
| 24 | 342.77 | 0.14 | | |
| 25 | 342.92 | 0.15 | | |
| 26 | 343.06 | 0.14 | | |
| 27 | 343.2 | 0.14 | | |
| 28 | 343.35 | 0.15 | | |
| 29 | 343.49 | 0.14 | | |

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| 30 | 343.64 | 0.15 | | |
| 31 | 343.78 | 0.14 | | |
| Sept. 1 | 343.93 | 0.15 | | |
| 2 | 344.07 | 0.14 | | |
| 3 | 344.22 | 0.15 | | |
| 4 | 344.36 | 0.14 | | |
| 5 | 344.51 | 0.15 | | |
| 6 | 344.65 | 0.14 | | |
| 7 | 344.8 | 0.15 | | |
| 8 | 344.95 | 0.15 | | |
| 9 | 345.09 | 0.14 | | |
| 10 | 345.24 | 0.15 | | |
| 11 | 345.39 | 0.15 | | |
| 12 | 345.53 | 0.14 | | |
| 13 | 345.68 | 0.15 | | |
| 14 | 345.83 | 0.15 | | |
| 15 | 345.97 | 0.14 | | |
| 16 | 346.12 | 0.15 | | |
| 17 | 346.27 | 0.15 | | |
| 18 | 346.41 | 0.14 | | |
| 19 | 346.56 | 0.15 | | |
| 20 | 346.71 | 0.15 | | |
| 21 | 346.86 | 0.15 | | |
| 22 | 347 | 0.14 | | |
| 23 | 347.15 | 0.15 | | |
| 24 | 347.3 | 0.15 | | |
| 25 | 347.45 | 0.15 | | |
| 26 | 347.59 | 0.14 | | |
| 27 | 347.74 | 0.15 | | |
| 28 | 347.89 | 0.15 | | |
| 29 | 348.04 | 0.15 | | |
| 30 | 348.19 | 0.15 | | |
| Oct. 1 | 348.34 | 0.15 | | |
| 2 | 348.48 | 0.14 | | |
| 3 | 348.63 | 0.15 | | |
| 4 | 348.78 | 0.15 | | |

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|---|---|---|---|---|
| 5 | 348.93 | 0.15 | | |
| 6 | 349.08 | 0.15 | | |
| 7 | 349.23 | 0.15 | | |
| 8 | 349.37 | 0.14 | | |
| 9 | 349.52 | 0.15 | | |
| 10 | 349.67 | 0.15 | | |
| 11 | 349.82 | 0.15 | | |
| 12 | 349.97 | 0.15 | | |
| 13 | 350.12 | 0.15 | | |
| 14 | 350.27 | 0.15 | | |
| 15 | 350.42 | 0.15 | | |
| 16 | 350.56 | 0.14 | | |
| 17 | 350.71 | 0.15 | | |
| 18 | 350.86 | 0.15 | | |
| 19 | 351.01 | 0.15 | | |
| 20 | 351.16 | 0.15 | | |
| 21 | 351.31 | 0.15 | | |
| 22 | 351.46 | 0.15 | | |
| 23 | 351.61 | 0.15 | | |
| 24 | 351.75 | 0.14 | | |
| 25 | 351.9 | 0.15 | Max. diff. & 0.15 | |
| 26 | 352.05 | 0.15 | | |
| 27 | 352.2 | 0.15 | | |
| 28 | 352.35 | 0.15 | | |
| 29 | 352.5 | 0.15 | | |
| 30 | 352.65 | 0.15 | | |
| 31 | 352.8 | 0.15 | | |
| Nov. 1 | 352.95 | 0.15 | | |
| 2 | 353.1 | 0.15 | | |
| 3 | 353.25 | 0.15 | | |
| 4 | 353.39 | 0.14 | | |
| 5 | 353.54 | 0.15 | | |
| 6 | 353.69 | 0.15 | | |
| 7 | 353.84 | 0.15 | | |
| 8 | 353.99 | 0.15 | | |
| 9 | 354.13 | 0.14 | | |

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|---|---|---|---|---|
| 10 | 354.28 | 0.15 | | |
| 11 | 354.43 | 0.15 | | |
| 12 | 354.58 | 0.15 | | |
| 13 | 354.73 | 0.15 | | |
| 14 | 354.87 | 0.14 | | |
| 15 | 355.02 | 0.15 | | |
| 16 | 355.17 | 0.15 | | |
| 17 | 355.31 | 0.14 | | |
| 18 | 355.46 | 0.15 | | |
| 19 | 355.61 | 0.15 | | |
| 20 | 355.76 | 0.15 | | |
| 21 | 355.9 | 0.14 | | |
| 22 | 356.05 | 0.15 | | |
| 23 | 356.2 | 0.15 | | |
| 24 | 356.34 | 0.14 | | |
| 25 | 356.49 | 0.15 | | |
| 26 | 356.64 | 0.15 | | |
| 27 | 356.78 | 0.14 | | |
| 28 | 356.93 | 0.15 | | |
| 29 | 357.07 | 0.14 | | |
| 30 | 357.22 | 0.15 | | |
| Dec. 1 | 357.36 | 0.14 | | |
| 2 | 357.51 | 0.15 | | |
| 3 | 357.66 | 0.15 | | |
| 4 | 357.8 | 0.14 | | |
| 5 | 357.95 | 0.15 | | |
| 6 | 358.09 | 0.14 | | |
| 7 | 358.24 | 0.15 | | |
| 8 | 358.38 | 0.14 | | |
| 9 | 358.52 | 0.14 | | |
| 10 | 358.67 | 0.15 | | |
| 11 | 358.81 | 0.14 | | |
| 12 | 358.96 | 0.15 | | |
| 13 | 359.1 | 0.14 | | |
| 14 | 359.24 | 0.14 | | |
| 15 | 359.39 | 0.15 | | |

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|---|---|---|---|---|
| 16 | 359.53 | 0.14 | | |
| 17 | 359.67 | 0.14 | | |
| 18 | 359.82 | 0.15 | | |
| 19 | 359.96 | 0.14 | | |
| 20 | 360.1 | 0.14 | | |
| 21 | 360.24 | 0.14 | | |
| 22 | 360.39 | 0.15 | | |
| 23 | 360.53 | 0.14 | | |
| 24 | 360.67 | 0.14 | | |
| 25 | 360.81 | 0.14 | | |
| 26 | 360.95 | 0.14 | | |
| 27 | 361.09 | 0.14 | | |
| 28 | 361.23 | 0.14 | | |
| 29 | 361.37 | 0.14 | | |
| 30 | 361.51 | 0.14 | | |
| 31 | 361.65 | 0.14 | | |
| 2023 Jan. 1 | 361.79 | 0.14 | | |
| 2 | 361.93 | 0.14 | | |
| 3 | 362.07 | 0.14 | | |
| 4 | 362.21 | 0.14 | | |
| 5 | 362.35 | 0.14 | | |
| 6 | 362.49 | 0.14 | | |
| 7 | 362.63 | 0.14 | | |
| 8 | 362.77 | 0.14 | | |
| 9 | 362.9 | **0.13** | 0.13 Anomaly. -0.02 difference from the max (0.15) | **Point No8 or rε (on d8):** Rapid change (decrease) on the “Satellite’s” Orbital speed and anomaly on the “Satellite’s” Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 10 | 363.04 | 0.14 | | **Point No9 or NM (on d9):** Gradual |

| | | | | |
|---|---|---|---|---|
| | | | | decrease of the “Satellite’s Orbital speed” by point No9 up to point No10. |
| 11 | 363.18 | 0.14 | | |
| 12 | 363.32 | 0.14 | | |
| 13 | 363.45 | 0.13 | | |
| 14 | 363.59 | 0.14 | | |
| 15 | 363.73 | 0.14 | | |
| 16 | 363.86 | 0.13 | | |
| 17 | 364 | 0.14 | | |
| 18 | 364.14 | 0.14 | | |
| 19 | 364.27 | 0.13 | | |
| 20 | 364.41 | 0.14 | | |
| 21 | 364.54 | 0.13 | | |
| 22 | 364.68 | 0.14 | | |
| 23 | 364.81 | 0.13 | | |
| 24 | 364.94 | 0.13 | | |
| 25 | 365.08 | 0.14 | | |
| 26 | 365.21 | 0.13 | | |
| 27 | 365.34 | 0.13 | | |
| 28 | 365.48 | 0.14 | | |
| 29 | 365.61 | 0.13 | | |
| 30 | 365.74 | 0.13 | | |
| 31 | 365.87 | 0.13 | | |
| Febr. 1 | 366.01 | 0.14 | | |
| 2 | 366.14 | 0.13 | 0.13 | |
| 3 | 366.27 | 0.13 | | |
| 4 | 366.4 | 0.13 | | |
| 5 | 366.53 | 0.13 | | |
| 6 | 366.66 | 0.13 | | |
| 7 | 366.79 | 0.13 | | |
| 8 | 366.92 | 0.13 | | |
| 9 | 367.05 | 0.13 | | |
| 10 | 367.18 | 0.13 | | |
| 11 | 367.3 | 0.12 | | |

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| 12 | 367.43 | 0.13 | | |
| 13 | 367.56 | 0.13 | | |
| 14 | 367.69 | 0.13 | | |
| 15 | 367.82 | 0.13 | | |
| 16 | 367.94 | 0.12 | | |
| 17 | 368.07 | 0.13 | | |
| 18 | 368.2 | 0.13 | | |
| 19 | 368.32 | 0.12 | | |
| 20 | 368.45 | 0.13 | | |
| 21 | 368.57 | 0.12 | | |
| 22 | 368.7 | 0.13 | | |
| 23 | 368.82 | 0.12 | | |
| 24 | 368.94 | 0.12 | | |
| 25 | 369.07 | 0.13 | | |
| 26 | 369.19 | 0.12 | | |
| 27 | 369.32 | 0.13 | | |
| 28 | 369.44 | 0.12 | | |
| 1-Mar | 369.56 | 0.12 | | |
| 2 | 369.68 | 0.12 | | |
| 3 | 369.8 | 0.12 | | |
| 4 | 369.92 | 0.12 | | |
| 5 | 370.05 | 0.13 | | |
| 6 | 370.17 | 0.12 | | |
| 7 | 370.29 | 0.12 | | |
| 8 | 370.41 | 0.12 | | |
| 9 | 370.53 | 0.12 | | |
| 10 | 370.64 | 0.11 | | |
| 11 | 370.76 | 0.12 | | |
| 12 | 370.88 | 0.12 | | |
| 13 | 371 | 0.12 | | |
| 14 | 371.12 | 0.12 | | |
| 15 | 371.23 | 0.11 | | |
| 16 | 371.35 | 0.12 | | |
| 17 | 371.47 | 0.12 | | |
| 18 | 371.58 | 0.11 | | |
| 19 | 371.7 | 0.12 | | |

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| 20 | 371.81 | 0.11 | | |
| 21 | 371.93 | 0.12 | | |
| 22 | 372.04 | 0.11 | | |
| 23 | 372.16 | 0.12 | | |
| 24 | 372.27 | 0.11 | 0.11 | |
| 25 | 372.38 | 0.11 | | |
| 26 | 372.49 | 0.11 | | |
| 27 | 372.6 | 0.11 | | |
| 28 | 372.71 | 0.11 | | |
| 29 | 372.82 | 0.11 | | |
| 30 | 372.94 | 0.12 | | |
| 31 | 373.05 | 0.11 | | |
| Apr. 1 | 373.16 | 0.11 | | |
| 2 | 373.27 | 0.11 | | |
| 3 | 373.38 | 0.11 | | |
| 4 | 373.48 | 0.1 | | |
| 5 | 373.59 | 0.11 | | |
| 6 | 373.7 | 0.11 | | |
| 7 | 373.81 | 0.11 | | |
| 8 | 373.92 | 0.11 | | |
| 9 | 374.02 | 0.1 | | |
| 10 | 374.13 | 0.11 | | |
| 11 | 374.23 | 0.1 | | |
| 12 | 374.34 | 0.11 | | |
| 13 | 374.44 | 0.1 | | |
| 14 | 374.55 | 0.11 | | |
| 15 | 374.65 | 0.1 | | |
| 16 | 374.76 | 0.11 | | |
| 17 | 374.86 | 0.1 | | |
| 18 | 374.96 | 0.1 | | |
| 19 | 375.06 | 0.1 | | |
| 20 | 375.17 | 0.11 | | |
| 21 | 375.27 | 0.1 | 0.10 | |
| 22 | 375.37 | 0.1 | | |
| 23 | 375.47 | 0.1 | | |
| 24 | 375.57 | 0.1 | | |

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| 25 | 375.67 | 0.1 | | |
| 26 | 375.77 | 0.1 | | |
| 27 | 375.87 | 0.1 | | |
| 28 | 375.96 | 0.09 | | |
| 29 | 376.06 | 0.1 | | |
| 30 | 376.16 | 0.1 | | |
| 1-May | 376.26 | 0.1 | | |
| 2 | 376.35 | 0.09 | | |
| 3 | 376.45 | 0.1 | | |
| 4 | 376.54 | 0.09 | | |
| 5 | 376.64 | 0.1 | | |
| 6 | 376.73 | 0.09 | | |
| 7 | 376.83 | 0.1 | | |
| 8 | 376.92 | 0.09 | | |
| 9 | 377.01 | 0.09 | | |
| 10 | 377.1 | 0.09 | | |
| 11 | 377.2 | 0.1 | | |
| 12 | 377.29 | 0.09 | 0.09 | |
| 13 | 377.38 | 0.09 | | |
| 14 | 377.47 | 0.09 | | |
| 15 | 377.56 | 0.09 | | |
| 16 | 377.65 | 0.09 | | |
| 17 | 377.74 | 0.09 | | |
| 18 | 377.83 | 0.09 | | |
| 19 | 377.91 | 0.08 | | |
| 20 | 378 | 0.09 | | |
| 21 | 378.09 | 0.09 | | |
| 22 | 378.18 | 0.09 | | |
| 23 | 378.26 | 0.08 | | |
| 24 | 378.35 | 0.09 | | |
| 25 | 378.43 | 0.08 | | |
| 26 | 378.52 | 0.09 | | |
| 27 | 378.6 | 0.08 | | |
| 28 | 378.68 | 0.08 | | |
| 29 | 378.77 | 0.09 | | |

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| 30 | 378.85 | 0.08 | 0.08 | |
| 31 | 378.93 | 0.08 | | |
| 1-Jun | 379.01 | 0.08 | | |
| 2 | 379.09 | 0.08 | | |
| 3 | 379.17 | 0.08 | | |
| 4 | 379.25 | 0.08 | | |
| 5 | 379.33 | 0.08 | | |
| 6 | 379.41 | 0.08 | | |
| 7 | 379.49 | 0.08 | | |
| 8 | 379.57 | 0.08 | | |
| 9 | 379.65 | 0.08 | | |
| 10 | 379.72 | 0.07 | | |
| 11 | 379.8 | 0.08 | | |
| 12 | 379.87 | 0.07 | | |
| 13 | 379.95 | 0.08 | | |
| 14 | 380.02 | 0.07 | | |
| 15 | 380.1 | 0.08 | | |
| 16 | 380.17 | 0.07 | | |
| 17 | 380.24 | 0.07 | | |
| 18 | 380.32 | 0.08 | | |
| 19 | 380.39 | 0.07 | 0.07 | |
| 20 | 380.46 | 0.07 | | |
| 21 | 380.53 | 0.07 | | |
| 22 | 380.6 | 0.07 | | |
| 23 | 380.67 | 0.07 | | |
| 24 | 380.74 | 0.07 | | |
| 25 | 380.81 | 0.07 | | |
| 26 | 380.88 | 0.07 | | |
| 27 | 380.95 | 0.07 | | |
| 28 | 381.01 | 0.06 | | |
| 29 | 381.08 | 0.07 | | |
| 30 | 381.15 | 0.07 | | |
| 1-Jul | 381.21 | 0.06 | | |
| 2 | 381.28 | 0.07 | | |
| 3 | 381.34 | 0.06 | | |
| 4 | 381.41 | 0.07 | | |

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| 5 | 381.47 | 0.06 | | |
| 6 | 381.53 | 0.06 | | |
| 7 | 381.59 | 0.06 | | |
| 8 | 381.66 | 0.07 | | |
| 9 | 381.72 | 0.06 | 0.06 | |
| 10 | 381.78 | 0.06 | | |
| 11 | 381.84 | 0.06 | | |
| 12 | 381.9 | 0.06 | | |
| 13 | 381.96 | 0.06 | | |
| 14 | 382.01 | 0.05 | | |
| 15 | 382.07 | 0.06 | | |
| 16 | 382.13 | 0.06 | | |
| 17 | 382.19 | 0.06 | | |
| 18 | 382.24 | 0.05 | | |
| 19 | 382.3 | 0.06 | | |
| 20 | 382.35 | 0.05 | | |
| 21 | 382.41 | 0.06 | | |
| 22 | 382.46 | 0.05 | | |
| 23 | 382.52 | 0.06 | | |
| 24 | 382.57 | 0.05 | 0.05 | |
| 25 | 382.62 | 0.05 | | |
| 26 | 382.67 | 0.05 | | |
| 27 | 382.72 | 0.05 | | |
| 28 | 382.77 | 0.05 | | |
| 29 | 382.82 | 0.05 | | |
| 30 | 382.87 | 0.05 | | |
| 31 | 382.92 | 0.05 | | |
| Aug. 1 | 382.97 | 0.05 | | |
| 2 | 383.02 | 0.05 | | |
| 3 | 383.07 | 0.05 | | |
| 4 | 383.11 | 0.04 | | |
| 5 | 383.16 | 0.05 | | |
| 6 | 383.2 | 0.04 | | |
| 7 | 383.25 | 0.05 | | |
| 8 | 383.29 | 0.04 | | |

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| 9 | 383.34 | 0.05 | | |
| 10 | 383.38 | 0.04 | | |
| 11 | 383.42 | 0.04 | | |
| 12 | 383.46 | 0.04 | | |
| 13 | 383.51 | 0.05 | | |
| 14 | 383.55 | 0.04 | 0.04 | |
| 15 | 383.59 | 0.04 | | |
| 16 | 383.63 | 0.04 | | |
| 17 | 383.67 | 0.04 | | |
| 18 | 383.7 | 0.03 | | |
| 19 | 383.74 | 0.04 | | |
| 20 | 383.78 | 0.04 | | |
| 21 | 383.82 | 0.04 | | |
| 22 | 383.85 | 0.03 | | |
| 23 | 383.89 | 0.04 | | |
| 24 | 383.92 | 0.03 | | |
| 25 | 383.96 | 0.04 | | |
| 26 | 383.99 | 0.03 | | |
| 27 | 384.02 | 0.03 | | |
| 28 | 384.06 | 0.04 | | |
| 29 | 384.09 | 0.03 | 0.03 | |
| 30 | 384.12 | 0.03 | | |
| 31 | 384.15 | 0.03 | | |
| Sept. 1 | 384.18 | 0.03 | | |
| 2 | 384.21 | 0.03 | | |
| 3 | 384.24 | 0.03 | | |
| 4 | 384.27 | 0.03 | | |
| 5 | 384.3 | 0.03 | | |
| 6 | 384.33 | 0.03 | | |
| 7 | 384.35 | 0.02 | | |
| 8 | 384.38 | 0.03 | | |
| 9 | 384.4 | 0.02 | | |
| 10 | 384.43 | 0.03 | | |
| 11 | 384.45 | 0.02 | | |
| 12 | 384.48 | 0.03 | | |
| 13 | 384.5 | 0.02 | | |

| | | | | |
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| 14 | 384.52 | 0.02 | | |
| 15 | 384.55 | 0.03 | | |
| 16 | 384.57 | 0.02 | 0.02 | |
| 17 | 384.59 | 0.02 | | |
| 18 | 384.61 | 0.02 | | |
| 19 | 384.63 | 0.02 | | |
| 20 | 384.65 | 0.02 | | |
| 21 | 384.67 | 0.02 | | |
| 22 | 384.68 | 0.01 | | |
| 23 | 384.7 | 0.02 | | |
| 24 | 384.72 | 0.02 | | |
| 25 | 384.73 | 0.01 | | |
| 26 | 384.75 | 0.02 | | |
| 27 | 384.76 | 0.01 | | |
| 28 | 384.78 | 0.02 | | |
| 29 | 384.79 | 0.01 | | |
| 30 | 384.81 | 0.02 | | |
| Oct. 1 | 384.82 | 0.01 | 0.01 | |
| 2 | 384.83 | 0.01 | | |
| 3 | 384.84 | 0.01 | | |
| 4 | 384.85 | 0.01 | | |
| 5 | 384.86 | 0.01 | | |
| 6 | 384.87 | 0.01 | | |
| 7 | 384.88 | 0.01 | | |
| 8 | 384.89 | 0.01 | | |
| 9 | 384.9 | 0.01 | | |
| 10 | 384.9 | 0 | | |
| 11 | 384.91 | 0.01 | | |
| 12 | 384.92 | 0.01 | | |
| 13 | 384.92 | 0 | | |
| 14 | 384.93 | 0.01 | | |
| 15 | 384.93 | 0 | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural |

| | | | | |
|---|---|---|---|---|
| | | | | “Satellite” and its natural “Sun”. |
| 16 | 384.94 | 0.01 | | Aphe-LAEC |
| 17 | 384.94 | 0 | 0 | |
| 18 | 384.94 | 0 | | |
| 19 | 384.94 | 0 | | |
| 20 | 384.94 | 0 | | |
| 21 | 384.94 | 0 | | |
| 22 | 384.94 | 0 | | |
| 23 | 384.94 | 0 | | |
| 24 | 384.94 | 0 | | |
| 25 | 384.94 | 0 | | |
| 26 | 384.94 | 0 | | |
| 27 | 384.94 | 0 | | |
| 28 | 384.93 | -0.01 | | |
| 29 | | -384.93 | | |

## Appendix I

**Step 1:**

I’ll create a table with 5 columns for Asteroid 2 Pallas.
Then, I’ll insert these data on the first 2 columns:
- Column No1: The date
- Column No2: The Asteroid’s 2 Pallas distance from the Sun in million km

**Step 2:**

I’ll find these data for the next 3 columns:
- Column No3: The difference of the Asteroid’s 2 Pallas distance from the Sun from the previous day
- Column No4: The Sequence of the difference (it’s also related to the Orbital Speed)
- Column No5: The 10 Points & comments

| Date 2018 | The Asteroid's 2 Pallas distance from the Sun in million km | The difference of the Asteroid's 2 Pallas distance from the Sun from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| Nov. 7, '20 | 510.39 | | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |
| Nov. 8, '20 | 510.4 | 0.01 | | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 9 | 510.4 | 0 | 0 | |
| 10 | 510.4 | 0 | | |
| 11 | 510.4 | 0 | | |
| 12 | 510.4 | 0 | | |
| 13 | 510.4 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 14 | 510.39 | -0.01 | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| 15 | 510.39 | 0 | | |
| 16 | 510.39 | 0 | | |
| 17 | 510.38 | -0.01 | | |
| 18 | 510.38 | 0 | | |
| 19 | 510.37 | -0.01 | -0.01 | |
| 20 | 510.36 | -0.01 | | |
| 21 | 510.35 | -0.01 | | |
| 22 | 510.34 | -0.01 | | |
| 23 | 510.33 | -0.01 | | |
| 24 | 510.32 | -0.01 | | |
| 25 | 510.31 | -0.01 | | |
| 26 | 510.3 | -0.01 | | |
| 27 | 510.28 | -0.02 | | |
| 28 | 510.27 | -0.01 | | |
| 29 | 510.25 | -0.02 | | |
| 30 | 510.24 | -0.01 | | |
| Dec. 1 | 510.22 | -0.02 | -0.02 | |
| 2 | 510.2 | -0.02 | | |
| 3 | 510.18 | -0.02 | | |
| 4 | 510.16 | -0.02 | | |
| 5 | 510.14 | -0.02 | | |
| 6 | 510.12 | -0.02 | | |

| | | | | |
|---|---|---|---|---|
| 7 | 510.1 | -0.02 | | |
| 8 | 510.07 | -0.03 | | |
| 9 | 510.05 | -0.02 | | |
| 10 | 510.02 | -0.03 | | |
| 11 | 510 | -0.02 | | |
| 12 | 509.97 | -0.03 | -0.03 | |
| 13 | 509.94 | -0.03 | | |
| 14 | 509.91 | -0.03 | | |
| 15 | 509.88 | -0.03 | | |
| 16 | 509.85 | -0.03 | | |
| 17 | 509.82 | -0.03 | | |
| 18 | 509.79 | -0.03 | | |
| 19 | 509.76 | -0.03 | | |
| 20 | 509.72 | -0.04 | | |
| 21 | 509.69 | -0.03 | | |
| 22 | 509.65 | -0.04 | | |
| 23 | 509.62 | -0.03 | | |
| 24 | 509.58 | -0.04 | -0.04 | |
| 25 | 509.54 | -0.04 | | |
| 26 | 509.5 | -0.04 | | |
| 27 | 509.46 | -0.04 | | |
| 28 | 509.42 | -0.04 | | |
| 29 | 509.38 | -0.04 | | |
| 30 | 509.34 | -0.04 | | |
| 31 | 509.29 | -0.05 | | |
| 2021 Jan. 1 | 509.25 | -0.04 | | |
| 2 | 509.21 | -0.04 | | |
| 3 | 509.16 | -0.05 | -0.05 | |
| 4 | 509.11 | -0.05 | | |
| 5 | 509.06 | -0.05 | | |

| | | | | |
|---|---|---|---|---|
| 6 | 509.02 | -0.04 | | |
| 7 | 508.97 | -0.05 | | |
| 8 | 508.92 | -0.05 | | |
| 9 | 508.86 | -0.06 | | |
| 10 | 508.81 | -0.05 | | |
| 11 | 508.76 | -0.05 | | |
| 12 | 508.71 | -0.05 | | |
| 13 | 508.65 | -0.06 | | |
| 14 | 508.6 | -0.05 | | |
| 15 | 508.54 | -0.06 | -0.06 | |
| 16 | 508.48 | -0.06 | | |
| 17 | 508.42 | -0.06 | | |
| 18 | 508.36 | -0.06 | | |
| 19 | 508.31 | -0.05 | | |
| 20 | 508.24 | -0.07 | | |
| 21 | 508.18 | -0.06 | | |
| 22 | 508.12 | -0.06 | | |
| 23 | 508.06 | -0.06 | | |
| 24 | 507.99 | -0.07 | | |
| 25 | 507.93 | -0.06 | | |
| 26 | 507.86 | -0.07 | | |
| 27 | 507.79 | -0.07 | | |
| 28 | 507.73 | -0.06 | | |
| 29 | 507.66 | -0.07 | -0.07 | |
| 30 | 507.59 | -0.07 | | |
| 31 | 507.52 | -0.07 | | |
| Febr. 1 | 507.45 | -0.07 | | |
| 2 | 507.38 | -0.07 | | |
| 3 | 507.3 | -0.08 | | |
| 4 | 507.23 | -0.07 | | |

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|---|---|---|---|---|
| 5 | 507.15 | -0.08 | | |
| 6 | 507.08 | -0.07 | | |
| 7 | 507 | -0.08 | | |
| 8 | 506.93 | -0.07 | | |
| 9 | 506.85 | -0.08 | -0.08 | |
| 10 | 506.77 | -0.08 | | |
| 11 | 506.69 | -0.08 | | |
| 12 | 506.61 | -0.08 | | |
| 13 | 506.53 | -0.08 | | |
| 14 | 506.44 | -0.09 | | |
| 15 | 506.36 | -0.08 | | |
| 16 | 506.28 | -0.08 | | |
| 17 | 506.19 | -0.09 | | |
| 18 | 506.11 | -0.08 | | |
| 19 | 506.02 | -0.09 | -0.09 | |
| 20 | 505.93 | -0.09 | | |
| 21 | 505.84 | -0.09 | | |
| 22 | 505.75 | -0.09 | | |
| 23 | 505.66 | -0.09 | | |
| 24 | 505.57 | -0.09 | | |
| 25 | 505.48 | -0.09 | | |
| 26 | 505.39 | -0.09 | | |
| 27 | 505.3 | -0.09 | | |
| 28 | 505.2 | -0.1 | | |
| 1-Mar | 505.11 | -0.09 | | |
| 2 | 505.01 | -0.1 | -0.10 | |
| 3 | 504.91 | -0.1 | | |
| 4 | 504.81 | -0.1 | | |
| 5 | 504.72 | -0.09 | | |
| 6 | 504.62 | -0.1 | | |

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|---|---|---|---|---|
| 7 | 504.52 | -0.1 | | |
| 8 | 504.41 | -0.11 | | |
| 9 | 504.31 | -0.1 | | |
| 10 | 504.21 | -0.1 | | |
| 11 | 504.11 | -0.1 | | |
| 12 | 504 | -0.11 | | |
| 13 | 503.9 | -0.1 | | |
| 14 | 503.79 | -0.11 | -0.11 | |
| 15 | 503.68 | -0.11 | | |
| 16 | 503.57 | -0.11 | | |
| 17 | 503.46 | -0.11 | | |
| 18 | 503.35 | -0.11 | | |
| 19 | 503.24 | -0.11 | | |
| 20 | 503.13 | -0.11 | | |
| 21 | 503.02 | -0.11 | | |
| 22 | 502.91 | -0.11 | | |
| 23 | 502.79 | -0.12 | | |
| 24 | 502.68 | -0.11 | | |
| 25 | 502.56 | -0.12 | | |
| 26 | 502.45 | -0.11 | | |
| 27 | 502.33 | -0.12 | | |
| 28 | 502.21 | -0.12 | | |
| 29 | 502.1 | -0.11 | | |
| 30 | 501.98 | -0.12 | | |
| 31 | 501.85 | -0.13 | | |
| Apr. 1 | 501.73 | -0.12 | -0.12 | |
| 2 | 501.61 | -0.12 | | |
| 3 | 501.49 | -0.12 | | |
| 4 | 501.36 | -0.13 | | |
| 5 | 501.24 | -0.12 | | |

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|---|---|---|---|---|
| 6 | 501.11 | -0.13 | | |
| 7 | 500.99 | -0.12 | | |
| 8 | 500.86 | -0.13 | -0.13 | |
| 9 | 500.73 | -0.13 | | |
| 10 | 500.6 | -0.13 | | |
| 11 | 500.47 | -0.13 | | |
| 12 | 500.34 | -0.13 | | |
| 13 | 500.21 | -0.13 | | |
| 14 | 500.07 | -0.14 | | |
| 15 | 499.94 | -0.13 | | |
| 16 | 499.81 | -0.13 | | |
| 17 | 499.67 | -0.14 | | |
| 18 | 499.53 | -0.14 | | |
| 19 | 499.4 | -0.13 | | |
| 20 | 499.26 | -0.14 | -0.14 | |
| 21 | 499.12 | -0.14 | | |
| 22 | 498.98 | -0.14 | | |
| 23 | 498.84 | -0.14 | | |
| 24 | 498.7 | -0.14 | | |
| 25 | 498.56 | -0.14 | | |
| 26 | 498.42 | -0.14 | | |
| 27 | 498.27 | -0.15 | | |
| 28 | 498.13 | -0.14 | | |
| 29 | 497.98 | -0.15 | | |
| 30 | 497.84 | -0.14 | | |
| 1-May | 497.69 | -0.15 | -0.15 | |
| 2 | 497.54 | -0.15 | | |
| 3 | 497.39 | -0.15 | | |
| 4 | 497.24 | -0.15 | | |
| 5 | 497.09 | -0.15 | | |

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|---|---|---|---|---|
| 6 | 496.94 | -0.15 | | |
| 7 | 496.79 | -0.15 | | |
| 8 | 496.64 | -0.15 | | |
| 9 | 496.48 | -0.16 | | |
| 10 | 496.33 | -0.15 | | |
| 11 | 496.17 | -0.16 | | |
| 12 | 496.02 | -0.15 | | |
| 13 | 495.86 | -0.16 | -0.16 | |
| 14 | 495.7 | -0.16 | | |
| 15 | 495.54 | -0.16 | | |
| 16 | 495.38 | -0.16 | | |
| 17 | 495.22 | -0.16 | | |
| 18 | 495.06 | -0.16 | | |
| 19 | 494.9 | -0.16 | | |
| 20 | 494.74 | -0.16 | | |
| 21 | 494.57 | -0.17 | | |
| 22 | 494.41 | -0.16 | | |
| 23 | 494.24 | -0.17 | | |
| 24 | 494.08 | -0.16 | | |
| 25 | 493.91 | -0.17 | -0.17 | |
| 26 | 493.74 | -0.17 | | |
| 27 | 493.57 | -0.17 | | |
| 28 | 493.41 | -0.16 | | |
| 29 | 493.24 | -0.17 | | |
| 30 | 493.06 | -0.18 | | |
| 31 | 492.89 | -0.17 | | |
| 1-Jun | 492.72 | -0.17 | | |
| 2 | 492.55 | -0.17 | | |
| 3 | 492.37 | -0.18 | | |
| 4 | 492.2 | -0.17 | | |

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|---|---|---|---|---|
| 5 | 492.02 | -0.18 | | |
| 6 | 491.84 | -0.18 | | |
| 7 | 491.67 | -0.17 | | |
| 8 | 491.49 | -0.18 | -0.18 | |
| 9 | 491.31 | -0.18 | | |
| 10 | 491.13 | -0.18 | | |
| 11 | 490.95 | -0.18 | | |
| 12 | 490.77 | -0.18 | | |
| 13 | 490.58 | -0.19 | | |
| 14 | 490.4 | -0.18 | | |
| 15 | 490.22 | -0.18 | | |
| 16 | 490.03 | -0.19 | | |
| 17 | 489.84 | -0.19 | | |
| 18 | 489.66 | -0.18 | | |
| 19 | 489.47 | -0.19 | -0.19 | |
| 20 | 489.28 | -0.19 | | |
| 21 | 489.09 | -0.19 | | |
| 22 | 488.9 | -0.19 | | |
| 23 | 488.71 | -0.19 | | |
| 24 | 488.52 | -0.19 | | |
| 25 | 488.33 | -0.19 | | |
| 26 | 488.14 | -0.19 | | |
| 27 | 487.94 | -0.2 | | |
| 28 | 487.75 | -0.19 | | |
| 29 | 487.55 | -0.2 | | |
| 30 | 487.36 | -0.19 | | |
| 1-Jul | 487.16 | -0.2 | -0.20 | |
| 2 | 486.96 | -0.2 | | |
| 3 | 486.76 | -0.2 | | |
| 4 | 486.56 | -0.2 | | |

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|---|---|---|---|---|
| 5 | 486.36 | -0.2 | | |
| 6 | 486.16 | -0.2 | | |
| 7 | 485.96 | -0.2 | | |
| 8 | 485.76 | -0.2 | | |
| 9 | 485.55 | -0.21 | | |
| 10 | 485.35 | -0.2 | | |
| 11 | 485.14 | -0.21 | | |
| 12 | 484.94 | -0.2 | | |
| 13 | 484.73 | -0.21 | | |
| 14 | 484.52 | -0.21 | | |
| 15 | 484.32 | -0.2 | | |
| 16 | 484.11 | -0.21 | -0.21 | |
| 17 | 483.9 | -0.21 | | |
| 18 | 483.69 | -0.21 | | |
| 19 | 483.47 | -0.22 | | |
| 20 | 483.26 | -0.21 | | |
| 21 | 483.05 | -0.21 | | |
| 22 | 482.84 | -0.21 | | |
| 23 | 482.62 | -0.22 | | |
| 24 | 482.41 | -0.21 | | |
| 25 | 482.19 | -0.22 | -0.22 | |
| 26 | 481.97 | -0.22 | | |
| 27 | 481.75 | -0.22 | | |
| 28 | 481.54 | -0.21 | | |
| 29 | 481.32 | -0.22 | | |
| 30 | 481.1 | -0.22 | | |
| 31 | 480.88 | -0.22 | | |
| Aug. 1 | 480.65 | -0.23 | | |
| 2 | 480.43 | -0.22 | | |
| 3 | 480.21 | -0.22 | | |

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|---|---|---|---|---|
| 4 | 479.98 | -0.23 | | |
| 5 | 479.76 | -0.22 | | |
| 6 | 479.53 | -0.23 | | |
| 7 | 479.31 | -0.22 | | |
| 8 | 479.08 | -0.23 | | |
| 9 | 478.85 | -0.23 | | |
| 10 | 478.63 | -0.22 | | |
| 11 | 478.4 | -0.23 | | |
| 12 | 478.17 | -0.23 | | |
| 13 | 477.93 | -0.24 | | |
| 14 | 477.7 | -0.23 | -0.23 | |
| 15 | 477.47 | -0.23 | | |
| 16 | 477.24 | -0.23 | | |
| 17 | 477 | -0.24 | | |
| 18 | 476.77 | -0.23 | | |
| 19 | 476.53 | -0.24 | | |
| 20 | 476.3 | -0.23 | | |
| 21 | 476.06 | -0.24 | -0.24 | |
| 22 | 475.82 | -0.24 | | |
| 23 | 475.58 | -0.24 | | |
| 24 | 475.34 | -0.24 | | |
| 25 | 475.1 | -0.24 | | |
| 26 | 474.86 | -0.24 | | |
| 27 | 474.62 | -0.24 | | |
| 28 | 474.38 | -0.24 | | |
| 29 | 474.14 | -0.24 | | |
| 30 | 473.89 | -0.25 | | |
| 31 | 473.65 | -0.24 | | |
| Sept. 1 | 473.4 | -0.25 | | |
| 2 | 473.16 | -0.24 | | |

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|---|---|---|---|---|
| 3 | 472.91 | -0.25 | -0.25 | |
| 4 | 472.66 | -0.25 | | |
| 5 | 472.41 | -0.25 | | |
| 6 | 472.17 | -0.24 | | |
| 7 | 471.92 | -0.25 | | |
| 8 | 471.67 | -0.25 | | |
| 9 | 471.41 | -0.26 | | |
| 10 | 471.16 | -0.25 | | |
| 11 | 470.91 | -0.25 | | |
| 12 | 470.66 | -0.25 | | |
| 13 | 470.4 | -0.26 | | |
| 14 | 470.15 | -0.25 | | |
| 15 | 469.89 | -0.26 | | |
| 16 | 469.64 | -0.25 | | |
| 17 | 469.38 | -0.26 | | |
| 18 | 469.12 | -0.26 | -0.26 | |
| 19 | 468.86 | -0.26 | | |
| 20 | 468.6 | -0.26 | | |
| 21 | 468.34 | -0.26 | | |
| 22 | 468.08 | -0.26 | | |
| 23 | 467.82 | -0.26 | | |
| 24 | 467.56 | -0.26 | | |
| 25 | 467.3 | -0.26 | | |
| 26 | 467.03 | -0.27 | | |
| 27 | 466.77 | -0.26 | | |
| 28 | 466.5 | -0.27 | | |
| 29 | 466.24 | -0.26 | | |
| 30 | 465.97 | -0.27 | -0.27 | |
| Oct. 1 | 465.7 | -0.27 | | |
| 2 | 465.43 | -0.27 | | |

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|---|---|---|---|---|
| 3 | 465.17 | -0.26 | | |
| 4 | 464.9 | -0.27 | | |
| 5 | 464.63 | -0.27 | | |
| 6 | 464.36 | -0.27 | | |
| 7 | 464.08 | -0.28 | | |
| 8 | 463.81 | -0.27 | | |
| 9 | 463.54 | -0.27 | | |
| 10 | 463.27 | -0.27 | | |
| 11 | 462.99 | -0.28 | | |
| 12 | 462.72 | -0.27 | | |
| 13 | 462.44 | -0.28 | | |
| 14 | 462.17 | -0.27 | | |
| 15 | 461.89 | -0.28 | -0.28 | |
| 16 | 461.61 | -0.28 | | |
| 17 | 461.33 | -0.28 | | |
| 18 | 461.05 | -0.28 | | |
| 19 | 460.77 | -0.28 | | |
| 20 | 460.49 | -0.28 | | |
| 21 | 460.21 | -0.28 | | |
| 22 | 459.93 | -0.28 | | |
| 23 | 459.65 | -0.28 | | |
| 24 | 459.36 | -0.29 | | |
| 25 | 459.08 | -0.28 | | |
| 26 | 458.8 | -0.28 | | |
| 27 | 458.51 | -0.29 | | |
| 28 | 458.22 | -0.29 | | |
| 29 | 457.94 | -0.28 | | |
| 30 | 457.65 | -0.29 | | |
| 31 | 457.35 | -0.3 | | |
| Nov. 1 | 457.06 | -0.29 | -0.29 | |

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|---|---|---|---|---|
| 2 | 456.77 | -0.29 | | |
| 3 | 456.48 | -0.29 | | |
| 4 | 456.19 | -0.29 | | |
| 5 | 455.9 | -0.29 | | |
| 6 | 455.61 | -0.29 | | |
| 7 | 455.32 | -0.29 | | |
| 8 | 455.02 | -0.3 | | |
| 9 | 454.73 | -0.29 | | |
| 10 | 454.44 | -0.29 | | |
| 11 | 454.14 | -0.3 | | |
| 12 | 453.84 | -0.3 | | |
| 13 | 453.55 | -0.29 | | |
| 14 | 453.25 | -0.3 | | |
| 15 | 452.95 | -0.3 | | |
| 16 | 452.66 | -0.29 | | |
| 17 | 452.36 | -0.3 | -0.30 | |
| 18 | 452.06 | -0.3 | | |
| 19 | 451.76 | -0.3 | | |
| 20 | 451.46 | -0.3 | | |
| 21 | 451.15 | -0.31 | | |
| 22 | 450.85 | -0.3 | | |
| 23 | 450.55 | -0.3 | | |
| 24 | 450.25 | -0.3 | | |
| 25 | 449.94 | -0.31 | | |
| 26 | 449.64 | -0.3 | | |
| 27 | 449.33 | -0.31 | | |
| 28 | 449.03 | -0.3 | | |
| 29 | 448.72 | -0.31 | | |
| 30 | 448.41 | -0.31 | | |
| Dec. 1 | 448.1 | -0.31 | | |

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|---|---|---|---|---|
| 2 | 447.8 | -0.3 | | |
| 3 | 447.49 | -0.31 | -0.31 | |
| 4 | 447.18 | -0.31 | | |
| 5 | 446.87 | -0.31 | | |
| 6 | 446.56 | -0.31 | | |
| 7 | 446.25 | -0.31 | | |
| 8 | 445.93 | -0.32 | | |
| 9 | 445.62 | -0.31 | | |
| 10 | 445.31 | -0.31 | | |
| 11 | 444.99 | -0.32 | | |
| 12 | 444.68 | -0.31 | | |
| 13 | 444.37 | -0.31 | | |
| 14 | 444.05 | -0.32 | | |
| 15 | 443.73 | -0.32 | | |
| 16 | 443.42 | -0.31 | | |
| 17 | 443.1 | -0.32 | -0.32 | |
| 18 | 442.78 | -0.32 | | |
| 19 | 442.46 | -0.32 | | |
| 20 | 442.15 | -0.31 | | |
| 21 | 441.83 | -0.32 | | |
| 22 | 441.51 | -0.32 | | |
| 23 | 441.19 | -0.32 | | |
| 24 | 440.86 | -0.33 | | |
| 25 | 440.54 | -0.32 | | |
| 26 | 440.22 | -0.32 | | |
| 27 | 439.9 | -0.32 | | |
| 28 | 439.57 | -0.33 | | |
| 29 | 439.25 | -0.32 | | |
| 30 | 438.93 | -0.32 | | |
| 31 | 438.6 | -0.33 | | |

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|---|---|---|---|---|
| 2022 Jan. 1 | 438.28 | -0.32 | | |
| 2 | 437.95 | -0.33 | | |
| 3 | 437.62 | -0.33 | | |
| 4 | 437.3 | -0.32 | | |
| 5 | 436.96 | -0.34 | | |
| 6 | 436.64 | -0.32 | | |
| 7 | 436.31 | -0.33 | -0.33 | |
| 8 | 435.98 | -0.33 | | |
| 9 | 435.65 | -0.33 | | |
| 10 | 435.32 | -0.33 | | |
| 11 | 434.99 | -0.33 | | |
| 12 | 434.66 | -0.33 | | |
| 13 | 434.33 | -0.33 | | |
| 14 | 434 | -0.33 | | |
| 15 | 433.66 | -0.34 | | |
| 16 | 433.33 | -0.33 | | |
| 17 | 433 | -0.33 | | |
| 18 | 432.66 | -0.34 | | |
| 19 | 432.33 | -0.33 | | |
| 20 | 431.99 | -0.34 | | |
| 21 | 431.66 | -0.33 | | |
| 22 | 431.32 | -0.34 | | |
| 23 | 430.99 | -0.33 | | |
| 24 | 430.65 | -0.34 | -0.34 | |
| 25 | 430.31 | -0.34 | | |
| 26 | 429.97 | -0.34 | | |
| 27 | 429.63 | -0.34 | | |
| 28 | 429.3 | -0.33 | | |
| 29 | 428.96 | -0.34 | | |
| 30 | 428.62 | -0.34 | | |

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|---|---|---|---|---|
| 31 | 428.28 | -0.34 | | |
| Febr. 1 | 427.93 | -0.35 | | |
| 2 | 427.59 | -0.34 | | |
| 3 | 427.25 | -0.34 | | |
| 4 | 426.91 | -0.34 | | |
| 5 | 426.57 | -0.34 | | |
| 6 | 426.22 | -0.35 | | |
| 7 | 425.88 | -0.34 | | |
| 8 | 425.54 | -0.34 | | |
| 9 | 425.19 | -0.35 | | |
| 10 | 424.85 | -0.34 | | |
| 11 | 424.5 | -0.35 | | |
| 12 | 424.16 | -0.34 | | |
| 13 | 423.81 | -0.35 | | |
| 14 | 423.47 | -0.34 | | |
| 15 | 423.12 | -0.35 | | |
| 16 | 422.77 | -0.35 | | |
| 17 | 422.42 | -0.35 | | |
| 18 | 422.08 | -0.34 | | |
| 19 | 421.73 | -0.35 | -0.35 | |
| 20 | 421.38 | -0.35 | | |
| 21 | 421.03 | -0.35 | | |
| 22 | 420.68 | -0.35 | | |
| 23 | 420.33 | -0.35 | | |
| 24 | 419.98 | -0.35 | | |
| 25 | 419.63 | -0.35 | | |
| 26 | 419.28 | -0.35 | | |
| 27 | 418.93 | -0.35 | | |
| 28 | 418.58 | -0.35 | | |
| 1-Mar | 418.22 | -0.36 | | |

| | | | | |
|---|---|---|---|---|
| 2 | 417.87 | -0.35 | | |
| 3 | 417.52 | -0.35 | | |
| 4 | 417.17 | -0.35 | | |
| 5 | 416.81 | -0.36 | | |
| 6 | 416.46 | -0.35 | | |
| 7 | 416.11 | -0.35 | | |
| 8 | 415.75 | -0.36 | | |
| 9 | 415.4 | -0.35 | | |
| 10 | 415.04 | -0.36 | | |
| 11 | 414.69 | -0.35 | | |
| 12 | 414.33 | -0.36 | | |
| 13 | 413.98 | -0.35 | | |
| 14 | 413.62 | -0.36 | | |
| 15 | 413.26 | -0.36 | | |
| 16 | 412.91 | -0.35 | | |
| 17 | 412.55 | -0.36 | | |
| 18 | 412.19 | -0.36 | | |
| 19 | 411.83 | -0.36 | | |
| 20 | 411.48 | -0.35 | | |
| 21 | 411.12 | -0.36 | -0.36 | |
| 22 | 410.76 | -0.36 | | |
| 23 | 410.4 | -0.36 | | |
| 24 | 410.04 | -0.36 | | |
| 25 | 409.68 | -0.36 | | |
| 26 | 409.32 | -0.36 | | |
| 27 | 408.98 | -0.34 | | |
| 28 | 408.62 | -0.36 | | |
| 29 | 408.26 | -0.36 | | |
| 30 | 407.9 | -0.36 | | |
| 31 | 407.54 | -0.36 | | |

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|---|---|---|---|---|
| Apr. 1 | 407.18 | -0.36 | | |
| 2 | 406.82 | -0.36 | | |
| 3 | 406.46 | -0.36 | | |
| 4 | 406.09 | -0.37 | | |
| 5 | 405.73 | -0.36 | | |
| 6 | 405.37 | -0.36 | | |
| 7 | 405.01 | -0.36 | | |
| 8 | 404.65 | -0.36 | | |
| 9 | 404.28 | -0.37 | | |
| 10 | 403.92 | -0.36 | | |
| 11 | 403.56 | -0.36 | | |
| 12 | 403.2 | -0.36 | | |
| 13 | 402.83 | -0.37 | | |
| 14 | 402.47 | -0.36 | | |
| 15 | 402.11 | -0.36 | | |
| 16 | 401.74 | -0.37 | | |
| 17 | 401.38 | -0.36 | | |
| 18 | 401.02 | -0.36 | | |
| 19 | 400.65 | -0.37 | | |
| 20 | 400.29 | -0.36 | | |
| 21 | 399.92 | -0.37 | | |
| 22 | 399.56 | -0.36 | | |
| 23 | 399.19 | -0.37 | | |
| 24 | 398.83 | -0.36 | | |
| 25 | 398.47 | -0.36 | | |
| 26 | 398.1 | -0.37 | | |
| 27 | 397.74 | -0.36 | | |
| 28 | 397.37 | -0.37 | | |
| 29 | 397.01 | -0.36 | | |
| 30 | 396.64 | -0.37 | | |
| 1-May | 396.28 | -0.36 | | |

| | | | | |
|---|---|---|---|---|
| 2 | 395.91 | -0.37 | | |
| 3 | 395.55 | -0.36 | | |
| 4 | 395.18 | -0.37 | | |
| 5 | 394.82 | -0.36 | | |
| 6 | 394.45 | -0.37 | -0.37 (max) | |
| 7 | 394.08 | -0.37 | | |
| 8 | 393.72 | -0.36 | | |
| 9 | 393.35 | -0.37 | | |
| 10 | 392.99 | -0.36 | | |
| 11 | 392.62 | -0.37 | | |
| 12 | 392.26 | -0.36 | | |
| 13 | 391.89 | -0.37 | | |
| 14 | 391.53 | -0.36 | | |
| 15 | 391.16 | -0.37 | | |
| 16 | 390.8 | -0.36 | | |
| 17 | 390.43 | -0.37 | | |
| 18 | 390.07 | -0.36 | | |
| 19 | 389.7 | -0.37 | | |
| 20 | 389.33 | -0.37 | | |
| 21 | 388.97 | -0.36 | | |
| 22 | 388.6 | -0.37 | | |
| 23 | 388.24 | -0.36 | | |
| 24 | 387.87 | -0.37 | | |
| 25 | 387.51 | -0.36 | | |
| 26 | 387.14 | -0.37 | | |
| 27 | 386.78 | -0.36 | | |
| 28 | 386.42 | -0.36 | | |
| 29 | 386.05 | -0.37 | | |
| 30 | 385.69 | -0.36 | | |
| 31 | 385.32 | -0.37 | | |

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| 1-Jun | 384.96 | -0.36 | | |
| 2 | 384.59 | -0.37 | | |
| 3 | 384.23 | -0.36 | | |
| 4 | 383.87 | -0.36 | | |
| 5 | 383.5 | -0.37 | | |
| 6 | 383.14 | -0.36 | | |
| 7 | 382.78 | -0.36 | | |
| 8 | 382.41 | -0.37 | | |
| 9 | 382.05 | -0.36 | | |
| 10 | 381.69 | -0.36 | | |
| 11 | 381.32 | -0.37 | | |
| 12 | 380.96 | -0.36 | | |
| 13 | 380.6 | -0.36 | | |
| 14 | 380.24 | -0.36 | | |
| 15 | 379.88 | -0.36 | | |
| 16 | 379.51 | -0.37 | | |
| 17 | 379.15 | -0.36 | -0.36 | |
| 18 | 378.79 | -0.36 | | |
| 19 | 378.43 | -0.36 | | |
| 20 | 378.07 | -0.36 | | |
| 21 | 377.71 | -0.36 | | |
| 22 | 377.35 | -0.36 | | |
| 23 | 376.99 | -0.36 | | |
| 24 | 376.63 | -0.36 | | |
| 25 | 376.27 | -0.36 | | |
| 26 | 375.91 | -0.36 | | |
| 27 | 375.55 | -0.36 | | |
| 28 | 375.2 | **-0.35** | -0.02 difference from the max (-0.37) | **Point No3 or rσ (on d3):** Rapid change (decrease) on the |

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| | | | | "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 29 | 374.84 | -0.36 | | **Point No4 or MS (on d4):** Gradual decrease of the "Satellite's Orbital speed" by point No4 up to point No6. |
| 30 | 374.48 | -0.36 | | |
| 1-Jul | 374.12 | -0.36 | | |
| 2 | 373.77 | -0.35 | | |
| 3 | 373.41 | -0.36 | | |
| 4 | 373.05 | -0.36 | | |
| 5 | 372.7 | -0.35 | | |
| 6 | 372.34 | -0.36 | | |
| 7 | 371.99 | -0.35 | | |
| 8 | 371.63 | -0.36 | | |
| 9 | 371.28 | -0.35 | | |
| 10 | 370.92 | -0.36 | | |
| 11 | 370.57 | -0.35 | | |
| 12 | 370.22 | -0.35 | | |
| 13 | 369.86 | -0.36 | | |
| 14 | 369.51 | -0.35 | -0.35 | |
| 15 | 369.16 | -0.35 | | |
| 16 | 368.81 | -0.35 | | |
| 17 | 368.46 | -0.35 | | |
| 18 | 368.11 | -0.35 | | |
| 19 | 367.76 | -0.35 | | |

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| 20 | 367.41 | -0.35 | | |
| 21 | 367.06 | -0.35 | | |
| 22 | 366.71 | -0.35 | | |
| 23 | 366.36 | -0.35 | | |
| 24 | 366.02 | -0.34 | | |
| 25 | 365.67 | -0.35 | | |
| 26 | 365.32 | -0.35 | | |
| 27 | 364.98 | -0.34 | | |
| 28 | 364.63 | -0.35 | | |
| 29 | 364.29 | -0.34 | | |
| 30 | 363.94 | -0.35 | | |
| 31 | 363.6 | -0.34 | | |
| Aug. 1 | 363.26 | -0.34 | | |
| 2 | 362.92 | -0.34 | | |
| 3 | 362.57 | -0.35 | | |
| 4 | 362.23 | -0.34 | -0.34 | |
| 5 | 361.89 | -0.34 | | |
| 6 | 361.55 | -0.34 | | |
| 7 | 361.21 | -0.34 | | |
| 8 | 360.88 | -0.33 | | |
| 9 | 360.54 | -0.34 | | |
| 10 | 360.2 | -0.34 | | |
| 11 | 359.86 | -0.34 | | |
| 12 | 359.53 | -0.33 | | |
| 13 | 359.19 | -0.34 | | |
| 14 | 358.86 | -0.33 | | |
| 15 | 358.53 | -0.33 | | |
| 16 | 358.19 | -0.34 | | |
| 17 | 357.86 | -0.33 | -0.33 | |
| 18 | 357.53 | -0.33 | | |

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| 19 | 357.2 | -0.33 | | |
| 20 | 356.87 | -0.33 | | |
| 21 | 356.54 | -0.33 | | |
| 22 | 356.21 | -0.33 | | |
| 23 | 355.88 | -0.33 | | |
| 24 | 355.56 | -0.32 | | |
| 25 | 355.23 | -0.33 | | |
| 26 | 354.91 | -0.32 | | |
| 27 | 354.58 | -0.33 | | |
| 28 | 354.26 | -0.32 | | |
| 29 | 353.94 | -0.32 | | |
| 30 | 353.62 | -0.32 | | |
| 31 | 353.29 | -0.33 | | |
| Sept. 1 | 352.97 | -0.32 | | |
| 2 | 352.66 | -0.31 | | |
| 3 | 352.34 | -0.32 | -0.32 | |
| 4 | 352.02 | -0.32 | | |
| 5 | 351.7 | -0.32 | | |
| 6 | 351.39 | -0.31 | | |
| 7 | 351.07 | -0.32 | | |
| 8 | 350.76 | -0.31 | -0.31 | |
| 9 | 350.45 | -0.31 | | |
| 10 | 350.14 | -0.31 | | |
| 11 | 349.83 | -0.31 | | |
| 12 | 349.52 | -0.31 | | |
| 13 | 349.21 | -0.31 | | |
| 14 | 348.9 | -0.31 | | |
| 15 | 348.59 | -0.31 | | |
| 16 | 348.29 | -0.3 | | |
| 17 | 347.98 | -0.31 | | |

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| 18 | 347.68 | -0.3 | | |
| 19 | 347.38 | -0.3 | | |
| 20 | 347.07 | -0.31 | | |
| 21 | 346.77 | -0.3 | | |
| 22 | 346.48 | -0.29 | | |
| 23 | 346.18 | -0.3 | -0.30 | |
| 24 | 345.88 | -0.3 | | |
| 25 | 345.58 | -0.3 | | |
| 26 | 345.29 | -0.29 | | |
| 27 | 345 | -0.29 | | |
| 28 | 344.7 | -0.3 | | |
| 29 | 344.41 | -0.29 | -0.29 | |
| 30 | 344.12 | -0.29 | | |
| Oct. 1 | 343.83 | -0.29 | | |
| 2 | 343.54 | -0.29 | | |
| 3 | 343.26 | -0.28 | | |
| 4 | 342.97 | -0.29 | | |
| 5 | 342.69 | -0.28 | | |
| 6 | 342.4 | -0.29 | | |
| 7 | 342.12 | -0.28 | -0.28 | |
| 8 | 341.84 | -0.28 | | |
| 9 | 341.56 | -0.28 | | |
| 10 | 341.28 | -0.28 | | |
| 11 | 341.01 | -0.27 | | |
| 12 | 340.73 | -0.28 | | |
| 13 | 340.46 | -0.27 | | |
| 14 | 340.18 | -0.28 | | |
| 15 | 339.91 | -0.27 | -0.27 | |
| 16 | 339.64 | -0.27 | | |
| 17 | 339.37 | -0.27 | | |

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| 18 | 339.11 | -0.26 | | |
| 19 | 338.84 | -0.27 | | |
| 20 | 338.58 | -0.26 | | |
| 21 | 338.31 | -0.27 | | |
| 22 | 338.05 | -0.26 | -0.26 | |
| 23 | 337.79 | -0.26 | | |
| 24 | 337.53 | -0.26 | | |
| 25 | 337.27 | -0.26 | | |
| 26 | 337.01 | -0.26 | | |
| 27 | 336.76 | -0.25 | -0.25 | |
| 28 | 336.51 | -0.25 | | |
| 29 | 336.25 | -0.26 | | |
| 30 | 335.99 | -0.26 | | |
| 31 | 335.74 | -0.25 | | |
| Nov. 1 | 335.5 | -0.24 | | |
| 2 | 335.25 | -0.25 | | |
| 3 | 335 | -0.25 | | |
| 4 | 334.76 | -0.24 | -0.24 | |
| 5 | 334.52 | -0.24 | | |
| 6 | 334.28 | -0.24 | | |
| 7 | 334.04 | -0.24 | | |
| 8 | 333.8 | -0.24 | | |
| 9 | 333.57 | -0.23 | | |
| 10 | 333.33 | -0.24 | | |
| 11 | 333.1 | -0.23 | -0.23 | |
| 12 | 332.87 | -0.23 | | |
| 13 | 332.64 | -0.23 | | |
| 14 | 332.41 | -0.23 | | |
| 15 | 332.19 | -0.22 | | |
| 16 | 331.96 | -0.23 | | |

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| 17 | 331.74 | -0.22 | -0.22 | |
| 18 | 331.52 | -0.22 | | |
| 19 | 331.3 | -0.22 | | |
| 20 | 331.08 | -0.22 | | |
| 21 | 330.87 | -0.21 | | |
| 22 | 330.65 | -0.22 | | |
| 23 | 330.44 | -0.21 | -0.21 | |
| 24 | 330.23 | -0.21 | | |
| 25 | 330.02 | -0.21 | | |
| 26 | 329.81 | -0.21 | | |
| 27 | 329.61 | -0.2 | | |
| 28 | 329.4 | -0.21 | | |
| 29 | 329.2 | -0.2 | -0.20 | |
| 30 | 329 | -0.2 | | |
| Dec. 1 | 328.8 | -0.2 | | |
| 2 | 328.6 | -0.2 | | |
| 3 | 328.41 | -0.19 | | |
| 4 | 328.21 | -0.2 | | |
| 5 | 328.02 | -0.19 | -0.19 | |
| 6 | 327.83 | -0.19 | | |
| 7 | 327.65 | -0.18 | | |
| 8 | 327.46 | -0.19 | | |
| 9 | 327.27 | -0.19 | | |
| 10 | 327.09 | -0.18 | -0.18 | |
| 11 | 326.91 | -0.18 | | |
| 12 | 326.73 | -0.18 | | |
| 13 | 326.56 | -0.17 | | |
| 14 | 326.38 | -0.18 | | |
| 15 | 326.21 | -0.17 | -0.17 | |
| 16 | 326.04 | -0.17 | | |

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| 17 | 325.87 | -0.17 | | |
| 18 | 325.7 | -0.17 | | |
| 19 | 325.53 | -0.17 | | |
| 20 | 325.37 | -0.16 | -0.16 | |
| 21 | 325.21 | -0.16 | | |
| 22 | 325.05 | -0.16 | | |
| 23 | 324.89 | -0.16 | | |
| 24 | 324.73 | -0.16 | | |
| 25 | 324.58 | -0.15 | -0.15 | |
| 26 | 324.43 | -0.15 | | |
| 27 | 324.28 | -0.15 | | |
| 28 | 324.13 | -0.15 | | |
| 29 | 323.98 | -0.15 | | |
| 30 | 323.84 | -0.14 | -0.14 | |
| 31 | 323.7 | -0.14 | | |
| 2023 Jan. 1 | 323.56 | -0.14 | | |
| 2 | 323.42 | -0.14 | | |
| 3 | 323.28 | -0.14 | | |
| 4 | 323.15 | -0.13 | -0.13 | |
| 5 | 323.02 | -0.13 | | |
| 6 | 322.89 | -0.13 | | |
| 7 | 322.76 | -0.13 | | |
| 8 | 322.63 | -0.13 | | |
| 9 | 322.51 | -0.12 | -0.12 | |
| 10 | 322.39 | -0.12 | | |
| 11 | 322.27 | -0.12 | | |
| 12 | 322.15 | -0.12 | | |
| 13 | 322.03 | -0.12 | | |
| 14 | 321.92 | -0.11 | -0.11 | |
| 15 | 321.81 | -0.11 | | |

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| 16 | 321.7 | -0.11 | | |
| 17 | 321.59 | -0.11 | | |
| 18 | 321.49 | -0.1 | | |
| 19 | 321.38 | -0.11 | | |
| 20 | 321.28 | -0.1 | -0.10 | |
| 21 | 321.18 | -0.1 | | |
| 22 | 321.09 | -0.09 | | |
| 23 | 320.99 | -0.1 | | |
| 24 | 320.9 | -0.09 | -0.09 | |
| 25 | 320.81 | -0.09 | | |
| 26 | 320.72 | -0.09 | | |
| 27 | 320.64 | -0.08 | | |
| 28 | 320.55 | -0.09 | | |
| 29 | 320.47 | -0.08 | -0.08 | |
| 30 | 320.39 | -0.08 | | |
| 31 | 320.31 | -0.08 | | |
| Febr. 1 | 320.24 | -0.07 | -0.07 | |
| 2 | 320.17 | -0.07 | | |
| 3 | 320.1 | -0.07 | | |
| 4 | 320.03 | -0.07 | | |
| 5 | 319.96 | -0.07 | | |
| 6 | 319.9 | -0.06 | -0.06 | |
| 7 | 319.84 | -0.06 | | |
| 8 | 319.78 | -0.06 | | |
| 9 | 319.72 | -0.06 | | |
| 10 | 319.66 | -0.06 | | |
| 11 | 319.61 | -0.05 | -0.05 | |
| 12 | 319.56 | -0.05 | | |
| 13 | 319.51 | -0.05 | | |
| 14 | 319.46 | -0.05 | | |

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| 15 | 319.42 | -0.04 | -0.04 | |
| 16 | 319.38 | -0.04 | | |
| 17 | 319.34 | -0.04 | | |
| 18 | 319.3 | -0.04 | | |
| 19 | 319.26 | -0.04 | | |
| 20 | 319.23 | -0.03 | -0.03 | |
| 21 | 319.2 | -0.03 | | |
| 22 | 319.17 | -0.03 | | |
| 23 | 319.14 | -0.03 | | |
| 24 | 319.12 | -0.02 | -0.02 | |
| 25 | 319.1 | -0.02 | | |
| 26 | 319.08 | -0.02 | | |
| 27 | 319.06 | -0.02 | | |
| 28 | 319.05 | -0.03 | | |
| 1-Mar | 319.03 | -0.02 | | |
| 2 | 319.02 | -0.01 | -0.01 | |
| 3 | 319.01 | -0.01 | | |
| 4 | 319.01 | 0 | | **Point No5 or LA (on d5):** Last point with attractive forces between the natural "Satellite" and its natural "Sun". |
| 5 | 319 | -0.01 | | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun". |
| 6 | 319 | 0 | 0 | |
| 7 | 319 | 0 | | |
| 8 | 319 | 0 | | |

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| 9 | 319.01 | 0.01 | | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 10 | 319.01 | 0 | | |
| 11 | 319.02 | 0.01 | 0.01 | |
| 12 | 319.04 | 0.02 | | |
| 13 | 319.05 | 0.01 | | |
| 14 | 319.07 | 0.02 | | |
| 15 | 319.08 | 0.01 | 0.02 | |
| 16 | 319.1 | 0.02 | | |
| 17 | 319.13 | 0.03 | | |
| 18 | 319.15 | 0.02 | | |
| 19 | 319.18 | 0.03 | 0.03 | |
| 20 | 319.21 | 0.03 | | |
| 21 | 319.24 | 0.03 | | |
| 22 | 319.27 | 0.03 | | |
| 23 | 319.31 | 0.04 | 0.04 | |
| 24 | 319.35 | 0.04 | | |
| 25 | 319.39 | 0.04 | | |
| 26 | 319.43 | 0.04 | | |
| 27 | 319.47 | 0.04 | | |
| 28 | 319.52 | 0.05 | 0.05 | |
| 29 | 319.57 | 0.05 | | |
| 30 | 319.62 | 0.05 | | |
| 31 | 319.68 | 0.06 | | |

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| Apr. 1 | 319.73 | 0.05 | | |
| 2 | 319.79 | 0.06 | 0.06 | |
| 3 | 319.85 | 0.06 | | |
| 4 | 319.91 | 0.06 | | |
| 5 | 319.98 | 0.07 | | |
| 6 | 320.04 | 0.06 | | |
| 7 | 320.11 | 0.07 | 0.07 | |
| 8 | 320.18 | 0.07 | | |
| 9 | 320.26 | 0.08 | | |
| 10 | 320.33 | 0.07 | | |
| 11 | 320.41 | 0.08 | 0.08 | |
| 12 | 320.49 | 0.08 | | |
| 13 | 320.57 | 0.08 | | |
| 14 | 320.66 | 0.09 | | |
| 15 | 320.74 | 0.08 | | |
| 16 | 320.83 | 0.09 | 0.09 | |
| 17 | 320.92 | 0.09 | | |
| 18 | 321.02 | 0.1 | | |
| 19 | 321.11 | 0.09 | | |
| 20 | 321.21 | 0.1 | 0.10 | |
| 21 | 321.31 | 0.1 | | |
| 22 | 321.41 | 0.1 | | |
| 23 | 321.51 | 0.1 | | |
| 24 | 321.62 | 0.11 | 0.11 | |
| 25 | 321.73 | 0.11 | | |
| 26 | 321.84 | 0.11 | | |
| 27 | 321.95 | 0.11 | | |
| 28 | 322.06 | 0.11 | | |
| 29 | 322.18 | 0.12 | 0.12 | |
| 30 | 322.3 | 0.12 | | |

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| 1-May | 322.42 | 0.12 | | |
| 2 | 322.54 | 0.12 | | |
| 3 | 322.66 | 0.12 | | |
| 4 | 322.79 | 0.13 | 0.13 | |
| 5 | 322.92 | 0.13 | | |
| 6 | 323.05 | 0.13 | | |
| 7 | 323.18 | 0.13 | | |
| 8 | 323.32 | 0.14 | | |
| 9 | 323.45 | 0.13 | | |
| 10 | 323.59 | 0.14 | 0.14 | |
| 11 | 323.73 | 0.14 | | |
| 12 | 323.87 | 0.14 | | |
| 13 | 324.02 | 0.15 | | |
| 14 | 324.17 | 0.15 | | |
| 15 | 324.31 | 0.14 | | |
| 16 | 324.47 | 0.16 | | |
| 17 | 324.62 | 0.15 | | |
| 18 | 324.77 | 0.15 | | |
| 19 | 324.93 | 0.16 | 0.16 | |
| 20 | 325.09 | 0.16 | | |
| 21 | 325.25 | 0.16 | | |
| 22 | 325.41 | 0.16 | | |
| 23 | 325.57 | 0.16 | | |
| 24 | 325.74 | 0.17 | | |
| 25 | 325.91 | 0.17 | | |
| 26 | 326.08 | 0.17 | | |
| 27 | 326.25 | 0.17 | | |
| 28 | 326.42 | 0.17 | | |
| 29 | 326.6 | 0.18 | | |
| 30 | 326.78 | 0.18 | | |

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| 31 | 326.96 | 0.18 | | |
| 1-Jun | 327.14 | 0.18 | | |
| 2 | 327.32 | 0.18 | | |
| 3 | 327.51 | 0.19 | | |
| 4 | 327.69 | 0.18 | | |
| 5 | 327.88 | 0.19 | 0.19 | |
| 6 | 328.07 | 0.19 | | |
| 7 | 328.26 | 0.19 | | |
| 8 | 328.46 | 0.2 | | |
| 9 | 328.65 | 0.19 | | |
| 10 | 328.85 | 0.2 | 0.20 | |
| 11 | 329.05 | 0.2 | | |
| 12 | 329.25 | 0.2 | | |
| 13 | 329.46 | 0.21 | | |
| 14 | 329.66 | 0.2 | | |
| 15 | 329.87 | 0.21 | | |
| 16 | 330.07 | 0.2 | | |
| 17 | 330.28 | 0.21 | | |
| 18 | 330.5 | 0.22 | | |
| 19 | 330.71 | 0.21 | 0.21 | |
| 20 | 330.92 | 0.21 | | |
| 21 | 331.14 | 0.22 | 0.22 | |
| 22 | 331.36 | 0.22 | | |
| 23 | 331.58 | 0.22 | | |
| 24 | 331.8 | 0.22 | | |
| 25 | 332.02 | 0.22 | | |
| 26 | 332.25 | 0.23 | | |
| 27 | 332.47 | 0.22 | | |
| 28 | 332.7 | 0.23 | 0.23 | |
| 29 | 332.93 | 0.23 | | |

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| 30 | 333.16 | 0.23 | | |
| 1-Jul | 333.4 | 0.24 | | |
| 2 | 333.63 | 0.23 | | |
| 3 | 333.87 | 0.24 | 0.24 | |
| 4 | 334.11 | 0.24 | | |
| 5 | 334.34 | 0.23 | | |
| 6 | 334.58 | 0.24 | | |
| 7 | 334.83 | 0.25 | | |
| 8 | 335.07 | 0.24 | | |
| 9 | 335.32 | 0.25 | | |
| 10 | 335.56 | 0.24 | | |
| 11 | 335.81 | 0.25 | 0.25 | |
| 12 | 336.06 | 0.25 | | |
| 13 | 336.31 | 0.25 | | |
| 14 | 336.56 | 0.25 | | |
| 15 | 336.82 | 0.26 | | |
| 16 | 337.07 | 0.25 | | |
| 17 | 337.33 | 0.26 | 0.26 | |
| 18 | 337.59 | 0.26 | | |
| 19 | 337.85 | 0.26 | | |
| 20 | 338.11 | 0.26 | | |
| 21 | 338.37 | 0.26 | | |
| 22 | 338.64 | 0.27 | | |
| 23 | 338.9 | 0.26 | | |
| 24 | 339.17 | 0.27 | 0.27 | |
| 25 | 339.44 | 0.27 | | |
| 26 | 339.71 | 0.27 | | |
| 27 | 339.98 | 0.27 | | |
| 28 | 340.25 | 0.27 | | |
| 29 | 340.52 | 0.27 | | |

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| 30 | 340.8 | 0.28 | | |
| 31 | 341.07 | 0.27 | | |
| Aug. 1 | 341.35 | 0.28 | 0.28 | |
| 2 | 341.63 | 0.28 | | |
| 3 | 341.91 | 0.28 | | |
| 4 | 342.19 | 0.28 | | |
| 5 | 342.47 | 0.28 | | |
| 6 | 342.76 | 0.29 | | |
| 7 | 343.04 | 0.28 | | |
| 8 | 343.33 | 0.29 | | |
| 9 | 343.61 | 0.28 | | |
| 10 | 343.9 | 0.29 | 0.29 | |
| 11 | 344.19 | 0.29 | | |
| 12 | 344.48 | 0.29 | | |
| 13 | 344.77 | 0.29 | | |
| 14 | 345.07 | 0.3 | | |
| 15 | 345.36 | 0.29 | | |
| 16 | 345.66 | 0.3 | | |
| 17 | 345.95 | 0.29 | | |
| 18 | 346.25 | 0.3 | 0.30 | |
| 19 | 346.55 | 0.3 | | |
| 20 | 346.85 | 0.3 | | |
| 21 | 347.15 | 0.3 | | |
| 22 | 347.45 | 0.3 | | |
| 23 | 347.76 | 0.31 | | |
| 24 | 348.06 | 0.3 | | |
| 25 | 348.36 | 0.3 | | |
| 26 | 348.67 | 0.31 | 0.31 | |
| 27 | 348.98 | 0.31 | | |
| 28 | 349.29 | 0.31 | | |

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| 29 | 349.59 | 0.3 | | |
| 30 | 349.91 | 0.32 | | |
| 31 | 350.22 | 0.31 | | |
| Sept. 1 | 350.53 | 0.31 | | |
| 2 | 350.84 | 0.31 | | |
| 3 | 351.16 | 0.32 | | |
| 4 | 351.47 | 0.31 | | |
| 5 | 351.79 | 0.32 | | |
| 6 | 352.1 | 0.31 | | |
| 7 | 352.42 | 0.32 | 0.32 | |
| 8 | 352.74 | 0.32 | | |
| 9 | 353.06 | 0.32 | | |
| 10 | 353.38 | 0.32 | | |
| 11 | 353.7 | 0.32 | | |
| 12 | 354.02 | 0.32 | | |
| 13 | 354.35 | 0.33 | | |
| 14 | 354.67 | 0.32 | | |
| 15 | 354.99 | 0.32 | | |
| 16 | 355.32 | 0.33 | | |
| 17 | 355.65 | 0.33 | | |
| 18 | 355.97 | 0.32 | | |
| 19 | 356.3 | 0.33 | 0.33 | |
| 20 | 356.63 | 0.33 | | |
| 21 | 356.96 | 0.33 | | |
| 22 | 357.29 | 0.33 | | |
| 23 | 357.62 | 0.33 | | |
| 24 | 357.95 | 0.33 | | |
| 25 | 358.29 | 0.34 | | |
| 26 | 358.62 | 0.33 | | |
| 27 | 358.95 | 0.33 | | |

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| 28 | 359.29 | 0.34 | | |
| 29 | 359.62 | 0.33 | | |
| 30 | 359.96 | 0.34 | | |
| Oct. 1 | 360.3 | 0.34 | | |
| 2 | 360.63 | 0.33 | | |
| 3 | 360.97 | 0.34 | 0.34 | |
| 4 | 361.31 | 0.34 | | |
| 5 | 361.65 | 0.34 | | |
| 6 | 361.99 | 0.34 | | |
| 7 | 362.33 | 0.34 | | |
| 8 | 362.67 | 0.34 | | |
| 9 | 363.02 | 0.35 | | |
| 10 | 363.36 | 0.34 | | |
| 11 | 363.7 | 0.34 | | |
| 12 | 364.05 | 0.35 | | |
| 13 | 364.39 | 0.34 | | |
| 14 | 364.74 | 0.35 | | |
| 15 | 365.08 | 0.34 | | |
| 16 | 365.43 | 0.35 | | |
| 17 | 365.77 | 0.34 | | |
| 18 | 366.12 | 0.35 | 0.35 | |
| 19 | 366.47 | 0.35 | | |
| 20 | 366.82 | 0.35 | | |
| 21 | 367.17 | 0.35 | | |
| 22 | 367.52 | 0.35 | | |
| 23 | 367.87 | 0.35 | | |
| 24 | 368.22 | 0.35 | | |
| 25 | 368.57 | 0.35 | | |
| 26 | 368.92 | 0.35 | | |
| 27 | 369.27 | 0.35 | | |

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| 28 | 369.62 | 0.35 | | |
| 29 | 369.99 | 0.36 | | |
| 30 | 370.34 | 0.35 | | |
| 31 | 370.7 | 0.36 | | |
| Nov. 1 | 371.05 | 0.35 | | |
| 2 | 371.4 | 0.35 | | |
| 3 | 371.76 | 0.36 | | |
| 4 | 372.11 | 0.35 | | |
| 5 | 372.47 | 0.36 | | |
| 6 | 372.83 | 0.36 | | |
| 7 | 373.18 | 0.35 | | |
| 8 | 373.54 | 0.36 | | |
| 9 | 373.9 | 0.36 | | |
| 10 | 374.25 | 0.35 | | |
| 11 | 374.61 | 0.36 | 0.36 | |
| 12 | 374.97 | 0.36 | | |
| 13 | 375.33 | 0.36 | | |
| 14 | 375.69 | 0.36 | | |
| 15 | 376.05 | 0.36 | | |
| 16 | 376.41 | 0.36 | | |
| 17 | 376.77 | 0.36 | | |
| 18 | 377.13 | 0.36 | | |
| 19 | 377.49 | 0.36 | | |
| 20 | 377.85 | 0.36 | | |
| 21 | 378.21 | 0.36 | | |
| 22 | 378.57 | 0.36 | | |
| 23 | 378.93 | 0.36 | | |
| 24 | 379.29 | 0.36 | | |
| 25 | 379.65 | 0.36 | | |
| 26 | 380.01 | 0.36 | | |

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| 27 | 380.38 | 0.37 | | |
| 28 | 380.74 | 0.36 | | |
| 29 | 381.1 | 0.36 | | |
| 30 | 381.47 | 0.37 | | |
| Dec. 1 | 381.83 | 0.36 | | |
| 2 | 382.19 | 0.36 | | |
| 3 | 382.55 | 0.36 | | |
| 4 | 382.92 | 0.37 | | |
| 5 | 383.28 | 0.36 | | |
| 6 | 383.65 | 0.37 | | |
| 7 | 384.01 | 0.36 | | |
| 8 | 384.37 | 0.36 | | |
| 9 | 384.74 | 0.37 | | |
| 10 | 385.1 | 0.36 | | |
| 11 | 385.47 | 0.37 | | |
| 12 | 385.83 | 0.36 | | |
| 13 | 386.2 | 0.37 | | |
| 14 | 386.56 | 0.36 | | |
| 15 | 386.93 | 0.37 | | |
| 16 | 387.29 | 0.36 | | |
| 17 | 387.66 | 0.37 | | |
| 18 | 388.02 | 0.36 | | |
| 19 | 388.39 | 0.37 | Max. difference 0.37 | |
| 20 | 388.76 | 0.37 | | |
| 21 | 389.12 | 0.36 | | |
| 22 | 389.49 | 0.37 | | |
| 23 | 389.85 | 0.36 | | |
| 24 | 390.22 | 0.37 | | |
| 25 | 390.58 | 0.36 | | |

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| 26 | 390.95 | 0.37 | | |
| 27 | 391.32 | 0.37 | | |
| 28 | 391.68 | 0.36 | | |
| 29 | 392.05 | 0.37 | | |
| 30 | 392.41 | 0.36 | | |
| 31 | 392.78 | 0.37 | | |
| 2024 Jan. 1 | 393.15 | 0.37 | | |
| 2 | 393.51 | 0.36 | | |
| 3 | 393.88 | 0.37 | | |
| 4 | 394.24 | 0.36 | | |
| 5 | 394.61 | 0.37 | | |
| 6 | 394.98 | 0.37 | | |
| 7 | 395.34 | 0.36 | | |
| 8 | 395.71 | 0.37 | | |
| 9 | 396.07 | 0.36 | | |
| 10 | 396.44 | 0.37 | | |
| 11 | 396.8 | 0.36 | | |
| 12 | 397.17 | 0.37 | | |
| 13 | 397.53 | 0.36 | | |
| 14 | 397.9 | 0.37 | | |
| 15 | 398.27 | 0.37 | | |
| 16 | 398.63 | 0.36 | | |
| 17 | 399 | 0.37 | | |
| 18 | 399.36 | 0.36 | | |
| 19 | 399.73 | 0.37 | | |
| 20 | 400.09 | 0.36 | | |
| 21 | 400.45 | 0.36 | | |
| 22 | 400.82 | 0.37 | | |
| 23 | 401.18 | 0.36 | | |
| 24 | 401.55 | 0.37 | | |
| 25 | 401.91 | 0.36 | | |

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| 26 | 402.28 | 0.37 | | |
| 27 | 402.64 | 0.36 | | |
| 28 | 403 | 0.36 | | |
| 29 | 403.37 | 0.37 | | |
| 30 | 403.73 | 0.36 | | |
| 31 | 404.09 | 0.36 | | |
| Febr. 1 | 404.46 | 0.37 | | |
| 2 | 404.82 | 0.36 | | |
| 3 | 405.18 | 0.36 | | |
| 4 | 405.54 | 0.36 | | |
| 5 | 405.91 | 0.37 | | |
| 6 | 406.27 | 0.36 | | |
| 7 | 406.63 | 0.36 | | |
| 8 | 406.99 | 0.36 | | |
| 9 | 407.35 | 0.36 | | |
| 10 | 407.71 | 0.36 | | |
| 11 | 408.08 | 0.37 | | |
| 12 | 408.44 | 0.36 | | |
| 13 | 408.8 | 0.36 | 0.36 | |
| 14 | 409.16 | 0.36 | | |
| 15 | 409.52 | 0.36 | | |
| 16 | 409.88 | 0.36 | | |
| 17 | 410.24 | 0.36 | | |
| 18 | 410.6 | 0.36 | | |
| 19 | 410.95 | **0.35** | Anomaly. -0.02 difference from the max (0.37) | **Point No8 or rε (on d8):** Rapid change (decrease) on the “Satellite’s” Orbital speed and anomaly on the “Satellite’s” Orbital speed sequence. Manifests always after the |

| | | | | |
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| | | | | maximum increment of the Orbital Speed. |
| 20 | 411.31 | 0.36 | | **Point No9 or NM (on d9):** Gradual decrease of the “Satellite’s Orbital speed” by point No9 up to point No10. |
| 21 | 411.67 | 0.36 | | |
| 22 | 412.03 | 0.36 | | |
| 23 | 412.39 | 0.36 | | |
| 24 | 412.75 | 0.36 | | |
| 25 | 413.1 | 0.35 | | |
| 26 | 413.46 | 0.36 | | |
| 27 | 413.82 | 0.36 | | |
| 28 | 414.17 | 0.35 | | |
| 29 | 414.53 | 0.36 | | |
| 1-Mar | 414.89 | 0.36 | | |
| 2 | 415.24 | 0.35 | | |
| 3 | 415.6 | 0.36 | | |
| 4 | 415.95 | 0.35 | | |
| 5 | 416.31 | 0.36 | | |
| 6 | 416.66 | 0.35 | | |
| 7 | 417.01 | 0.35 | | |
| 8 | 417.37 | 0.36 | | |
| 9 | 417.72 | 0.35 | | |
| 10 | 418.07 | 0.35 | | |
| 11 | 418.43 | 0.36 | | |
| 12 | 418.78 | 0.35 | 0.35 | |
| 13 | 419.13 | 0.35 | | |
| 14 | 419.48 | 0.35 | | |
| 15 | 419.83 | 0.35 | | |

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| 16 | 420.18 | 0.35 | | |
| 17 | 420.54 | 0.36 | | |
| 18 | 420.89 | 0.35 | | |
| 19 | 421.23 | 0.34 | | |
| 20 | 421.58 | 0.35 | | |
| 21 | 421.93 | 0.35 | | |
| 22 | 422.28 | 0.35 | | |
| 23 | 422.63 | 0.35 | | |
| 24 | 422.98 | 0.35 | | |
| 25 | 423.32 | 0.34 | | |
| 26 | 423.67 | 0.35 | | |
| 27 | 424.02 | 0.35 | | |
| 28 | 424.36 | 0.34 | | |
| 29 | 424.71 | 0.35 | | |
| 30 | 425.06 | 0.35 | | |
| 31 | 425.39 | 0.33 | | |
| Apr. 1 | 425.73 | 0.34 | | |
| 2 | 426.07 | 0.34 | | |
| 3 | 426.42 | 0.35 | | |
| 4 | 426.76 | 0.34 | | |
| 5 | 427.1 | 0.34 | | |
| 6 | 427.45 | 0.35 | | |
| 7 | 427.79 | 0.34 | 0.34 | |
| 8 | 428.13 | 0.34 | | |
| 9 | 428.47 | 0.34 | | |
| 10 | 428.81 | 0.34 | | |
| 11 | 429.15 | 0.34 | | |
| 12 | 429.49 | 0.34 | | |
| 13 | 429.83 | 0.34 | | |
| 14 | 430.17 | 0.34 | | |

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| 15 | 430.51 | 0.34 | | |
| 16 | 430.84 | 0.33 | | |
| 17 | 431.18 | 0.34 | | |
| 18 | 431.52 | 0.34 | | |
| 19 | 431.86 | 0.34 | | |
| 20 | 432.19 | 0.33 | | |
| 21 | 432.53 | 0.34 | | |
| 22 | 432.86 | 0.33 | | |
| 23 | 433.2 | 0.34 | | |
| 24 | 433.53 | 0.33 | | |
| 25 | 433.86 | 0.33 | | |
| 26 | 434.2 | 0.34 | | |
| 27 | 434.53 | 0.33 | 0.33 | |
| 28 | 434.86 | 0.33 | | |
| 29 | 435.19 | 0.33 | | |
| 30 | 435.52 | 0.33 | | |
| 1-May | 435.85 | 0.33 | | |
| 2 | 436.18 | 0.33 | | |
| 3 | 436.51 | 0.33 | | |
| 4 | 436.84 | 0.33 | | |
| 5 | 437.17 | 0.33 | | |
| 6 | 437.5 | 0.33 | | |
| 7 | 437.82 | 0.32 | | |
| 8 | 438.15 | 0.33 | | |
| 9 | 438.48 | 0.33 | | |
| 10 | 438.8 | 0.32 | | |
| 11 | 439.13 | 0.33 | | |
| 12 | 439.45 | 0.32 | | |
| 13 | 439.77 | 0.32 | | |
| 14 | 440.1 | 0.33 | | |

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| 15 | 440.42 | 0.32 | 0.32 | |
| 16 | 440.74 | 0.32 | | |
| 17 | 441.06 | 0.32 | | |
| 18 | 441.39 | 0.33 | | |
| 19 | 441.71 | 0.32 | | |
| 20 | 442.03 | 0.32 | | |
| 21 | 442.35 | 0.32 | | |
| 22 | 442.66 | 0.31 | | |
| 23 | 442.98 | 0.32 | | |
| 24 | 443.3 | 0.32 | | |
| 25 | 443.62 | 0.32 | | |
| 26 | 443.93 | 0.31 | | |
| 27 | 444.25 | 0.32 | | |
| 28 | 444.57 | 0.32 | | |
| 29 | 444.88 | 0.31 | | |
| 30 | 445.19 | 0.31 | | |
| 31 | 445.51 | 0.32 | | |
| 1-Jun | 445.82 | 0.31 | | |
| 2 | 446.13 | 0.31 | | |
| 3 | 446.45 | 0.32 | | |
| 4 | 446.76 | 0.31 | 0.31 | |
| 5 | 447.07 | 0.31 | | |
| 6 | 447.38 | 0.31 | | |
| 7 | 447.69 | 0.31 | | |
| 8 | 448 | 0.31 | | |
| 9 | 448.3 | 0.3 | | |
| 10 | 448.61 | 0.31 | | |
| 11 | 448.92 | 0.31 | | |
| 12 | 449.22 | 0.3 | | |
| 13 | 449.53 | 0.31 | | |

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| 14 | 449.84 | 0.31 | | |
| 15 | 450.14 | 0.3 | | |
| 16 | 450.44 | 0.3 | | |
| 17 | 450.75 | 0.31 | | |
| 18 | 451.05 | 0.3 | 0.30 | |
| 19 | 451.35 | 0.3 | | |
| 20 | 451.65 | 0.3 | | |
| 21 | 451.95 | 0.3 | | |
| 22 | 452.25 | 0.3 | | |
| 23 | 452.55 | 0.3 | | |
| 24 | 452.85 | 0.3 | | |
| 25 | 453.15 | 0.3 | | |
| 26 | 453.45 | 0.3 | | |
| 27 | 453.74 | 0.29 | | |
| 28 | 454.04 | 0.3 | | |
| 29 | 454.34 | 0.3 | | |
| 30 | 454.63 | 0.29 | | |
| 1-Jul | 454.92 | 0.29 | | |
| 2 | 455.22 | 0.3 | | |
| 3 | 455.51 | 0.29 | | |
| 4 | 455.8 | 0.29 | | |
| 5 | 456.1 | 0.3 | | |
| 6 | 456.39 | 0.29 | 0.29 | |
| 7 | 456.68 | 0.29 | | |
| 8 | 456.97 | 0.29 | | |
| 9 | 457.25 | 0.28 | | |
| 10 | 457.54 | 0.29 | | |
| 11 | 457.83 | 0.29 | | |
| 12 | 458.12 | 0.29 | | |
| 13 | 458.4 | 0.28 | | |

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| 14 | 458.69 | 0.29 | | |
| 15 | 458.97 | 0.28 | | |
| 16 | 459.26 | 0.29 | | |
| 17 | 459.54 | 0.28 | | |
| 18 | 459.82 | 0.28 | | |
| 19 | 460.11 | 0.29 | | |
| 20 | 460.39 | 0.28 | 0.28 | |
| 21 | 460.67 | 0.28 | | |
| 22 | 460.95 | 0.28 | | |
| 23 | 461.23 | 0.28 | | |
| 24 | 461.51 | 0.28 | | |
| 25 | 461.78 | 0.27 | | |
| 26 | 462.06 | 0.28 | | |
| 27 | 462.34 | 0.28 | | |
| 28 | 462.61 | 0.27 | | |
| 29 | 462.89 | 0.28 | | |
| 30 | 463.16 | 0.27 | | |
| 31 | 463.44 | 0.28 | | |
| Aug. 1 | 463.71 | 0.27 | | |
| 2 | 463.98 | 0.27 | | |
| 3 | 464.26 | 0.28 | | |
| 4 | 464.53 | 0.27 | | |
| 5 | 464.8 | 0.27 | | |
| 6 | 465.07 | 0.27 | | |
| 7 | 465.33 | 0.26 | | |
| 8 | 465.6 | 0.27 | 0.27 | |
| 9 | 465.87 | 0.27 | | |
| 10 | 466.14 | 0.27 | | |
| 11 | 466.4 | 0.26 | | |
| 12 | 466.67 | 0.27 | | |

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| 13 | 466.93 | 0.26 | | |
| 14 | 467.2 | 0.27 | | |
| 15 | 467.46 | 0.26 | 0.26 | |
| 16 | 467.72 | 0.26 | | |
| 17 | 467.98 | 0.26 | | |
| 18 | 468.24 | 0.26 | | |
| 19 | 468.5 | 0.26 | | |
| 20 | 468.76 | 0.26 | | |
| 21 | 469.02 | 0.26 | | |
| 22 | 469.28 | 0.26 | | |
| 23 | 469.54 | 0.26 | | |
| 24 | 469.79 | 0.25 | | |
| 25 | 470.05 | 0.26 | | |
| 26 | 470.3 | 0.25 | | |
| 27 | 470.56 | 0.26 | | |
| 28 | 470.81 | 0.25 | | |
| 29 | 471.06 | 0.25 | | |
| 30 | 471.32 | 0.26 | | |
| 31 | 471.57 | 0.25 | 0.25 | |
| Sept. 1 | 471.82 | 0.25 | | |
| 2 | 472.07 | 0.25 | | |
| 3 | 472.32 | 0.25 | | |
| 4 | 472.57 | 0.25 | | |
| 5 | 472.81 | 0.24 | | |
| 6 | 473.06 | 0.25 | | |
| 7 | 473.31 | 0.25 | | |
| 8 | 473.55 | 0.24 | | |
| 9 | 473.8 | 0.25 | | |
| 10 | 474.04 | 0.24 | 0.24 | |
| 11 | 474.28 | 0.24 | | |

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| 12 | 474.52 | 0.24 | | |
| 13 | 474.77 | 0.25 | | |
| 14 | 475.01 | 0.24 | | |
| 15 | 475.25 | 0.24 | | |
| 16 | 475.49 | 0.24 | | |
| 17 | 475.72 | 0.23 | | |
| 18 | 475.96 | 0.24 | | |
| 19 | 476.2 | 0.24 | | |
| 20 | 476.43 | 0.23 | | |
| 21 | 476.67 | 0.24 | | |
| 22 | 476.9 | 0.23 | | |
| 23 | 477.14 | 0.24 | | |
| 24 | 477.37 | 0.23 | 0.23 | |
| 25 | 477.6 | 0.23 | | |
| 26 | 477.83 | 0.23 | | |
| 27 | 478.07 | 0.24 | | |
| 28 | 478.3 | 0.23 | | |
| 29 | 478.52 | 0.22 | | |
| 30 | 478.75 | 0.23 | | |
| Oct. 1 | 478.98 | 0.23 | | |
| 2 | 479.21 | 0.23 | | |
| 3 | 479.43 | 0.22 | | |
| 4 | 479.66 | 0.23 | | |
| 5 | 479.88 | 0.22 | | |
| 6 | 480.11 | 0.23 | | |
| 7 | 480.33 | 0.22 | 0.22 | |
| 8 | 480.55 | 0.22 | | |
| 9 | 480.77 | 0.22 | | |
| 10 | 480.99 | 0.22 | | |
| 11 | 481.21 | 0.22 | | |

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| 12 | 481.43 | 0.22 | | |
| 13 | 481.65 | 0.22 | | |
| 14 | 481.87 | 0.22 | | |
| 15 | 482.08 | 0.21 | | |
| 16 | 482.3 | 0.22 | | |
| 17 | 482.52 | 0.22 | | |
| 18 | 482.73 | 0.21 | | |
| 19 | 482.94 | 0.21 | | |
| 20 | 483.16 | 0.22 | | |
| 21 | 483.37 | 0.21 | 0.21 | |
| 22 | 483.58 | 0.21 | | |
| 23 | 483.79 | 0.21 | | |
| 24 | 484 | 0.21 | | |
| 25 | 484.21 | 0.21 | | |
| 26 | 484.41 | 0.2 | | |
| 27 | 484.63 | 0.22 | | |
| 28 | 484.84 | 0.21 | | |
| 29 | 485.04 | 0.2 | | |
| 30 | 485.25 | 0.21 | | |
| 31 | 485.45 | 0.2 | | |
| Nov. 1 | 485.65 | 0.2 | | |
| 2 | 485.86 | 0.21 | | |
| 3 | 486.06 | 0.2 | 0.2 | |
| 4 | 486.26 | 0.2 | | |
| 5 | 486.46 | 0.2 | | |
| 6 | 486.66 | 0.2 | | |
| 7 | 486.85 | 0.19 | | |
| 8 | 487.05 | 0.2 | | |
| 9 | 487.25 | 0.2 | | |
| 10 | 487.44 | 0.19 | | |

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| 11 | 487.64 | 0.2 | | |
| 12 | 487.83 | 0.19 | | |
| 13 | 488.03 | 0.2 | | |
| 14 | 488.22 | 0.19 | 0.19 | |
| 15 | 488.41 | 0.19 | | |
| 16 | 488.6 | 0.19 | | |
| 17 | 488.79 | 0.19 | | |
| 18 | 488.98 | 0.19 | | |
| 19 | 489.17 | 0.19 | | |
| 20 | 489.36 | 0.19 | | |
| 21 | 489.54 | 0.18 | | |
| 22 | 489.73 | 0.19 | | |
| 23 | 489.91 | 0.18 | | |
| 24 | 490.1 | 0.19 | | |
| 25 | 490.28 | 0.18 | | |
| 26 | 490.46 | 0.18 | | |
| 27 | 490.65 | 0.19 | | |
| 28 | 490.83 | 0.18 | 0.18 | |
| 29 | 491.01 | 0.18 | | |
| 30 | 491.19 | 0.18 | | |
| Dec. 1 | 491.36 | 0.17 | | |
| 2 | 491.54 | 0.18 | | |
| 3 | 491.72 | 0.18 | | |
| 4 | 491.9 | 0.18 | | |
| 5 | 492.07 | 0.17 | | |
| 6 | 492.24 | 0.17 | | |
| 7 | 492.42 | 0.18 | | |
| 8 | 492.59 | 0.17 | 0.17 | |
| 9 | 492.76 | 0.17 | | |
| 10 | 492.93 | 0.17 | | |

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| 11 | 493.1 | 0.17 | | |
| 12 | 493.27 | 0.17 | | |
| 13 | 493.44 | 0.17 | | |
| 14 | 493.61 | 0.17 | | |
| 15 | 493.78 | 0.17 | | |
| 16 | 493.94 | 0.16 | | |
| 17 | 494.11 | 0.17 | | |
| 18 | 494.27 | 0.16 | | |
| 19 | 494.44 | 0.17 | | |
| 20 | 494.6 | 0.16 | 0.16 | |
| 21 | 494.76 | 0.16 | | |
| 22 | 494.92 | 0.16 | | |
| 23 | 495.08 | 0.16 | | |
| 24 | 495.24 | 0.16 | | |
| 25 | 495.4 | 0.16 | | |
| 26 | 495.56 | 0.16 | | |
| 27 | 495.71 | 0.15 | | |
| 28 | 495.87 | 0.16 | | |
| 29 | 496.03 | 0.16 | | |
| 30 | 496.18 | 0.15 | | |
| 31 | 496.33 | 0.15 | | |
| 2025 Jan. 1 | 496.49 | 0.16 | | |
| 2 | 496.64 | 0.15 | 0.15 | |
| 3 | 496.79 | 0.15 | | |
| 4 | 496.94 | 0.15 | | |
| 5 | 497.09 | 0.15 | | |
| 6 | 497.24 | 0.15 | | |
| 7 | 497.38 | 0.14 | | |
| 8 | 497.53 | 0.15 | | |
| 9 | 497.68 | 0.15 | | |

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| 10 | 497.82 | 0.14 | | |
| 11 | 497.97 | 0.15 | | |
| 12 | 498.11 | 0.14 | 0.14 | |
| 13 | 498.25 | 0.14 | | |
| 14 | 498.39 | 0.14 | | |
| 15 | 498.53 | 0.14 | | |
| 16 | 498.67 | 0.14 | | |
| 17 | 498.81 | 0.14 | | |
| 18 | 498.95 | 0.14 | | |
| 19 | 499.09 | 0.14 | | |
| 20 | 499.23 | 0.14 | | |
| 21 | 499.36 | 0.13 | | |
| 22 | 499.5 | 0.14 | | |
| 23 | 499.63 | 0.13 | | |
| 24 | 499.76 | 0.13 | | |
| 25 | 499.9 | 0.14 | | |
| 26 | 500.03 | 0.13 | 0.13 | |
| 27 | 500.16 | 0.13 | | |
| 28 | 500.29 | 0.13 | | |
| 29 | 500.42 | 0.13 | | |
| 30 | 500.55 | 0.13 | | |
| 31 | 500.67 | 0.12 | | |
| Febr. 1 | 500.8 | 0.13 | | |
| 2 | 500.92 | 0.12 | | |
| 3 | 501.05 | 0.13 | | |
| 4 | 501.17 | 0.12 | | |
| 5 | 501.3 | 0.13 | | |
| 6 | 501.42 | 0.12 | 0.12 | |
| 7 | 501.54 | 0.12 | | |
| 8 | 501.66 | 0.12 | | |

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|---|---|---|---|---|
| 9 | 501.78 | 0.12 | | |
| 10 | 501.9 | 0.12 | | |
| 11 | 502.02 | 0.12 | | |
| 12 | 502.13 | 0.11 | | |
| 13 | 502.25 | 0.12 | | |
| 14 | 502.36 | 0.11 | | |
| 15 | 502.48 | 0.12 | | |
| 16 | 502.59 | 0.11 | | |
| 17 | 502.71 | 0.12 | | |
| 18 | 502.82 | 0.11 | 0.11 | |
| 19 | 502.93 | 0.11 | | |
| 20 | 503.04 | 0.11 | | |
| 21 | 503.15 | 0.11 | | |
| 22 | 503.26 | 0.11 | | |
| 23 | 503.36 | 0.1 | | |
| 24 | 503.47 | 0.11 | | |
| 25 | 503.58 | 0.11 | | |
| 26 | 503.68 | 0.1 | | |
| 27 | 503.78 | 0.1 | | |
| 28 | 503.89 | 0.11 | | |
| 1-Mar | 503.99 | 0.1 | 0.10 | |
| 2 | 504.09 | 0.1 | | |
| 3 | 504.19 | 0.1 | | |
| 4 | 504.29 | 0.1 | | |
| 5 | 504.39 | 0.1 | | |
| 6 | 504.49 | 0.1 | | |
| 7 | 504.59 | 0.1 | | |
| 8 | 504.68 | 0.09 | | |
| 9 | 504.78 | 0.1 | | |
| 10 | 504.87 | 0.09 | | |

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|---|---|---|---|---|
| 11 | 504.97 | 0.1 | | |
| 12 | 505.06 | 0.09 | 0.09 | |
| 13 | 505.15 | 0.09 | | |
| 14 | 505.24 | 0.09 | | |
| 15 | 505.33 | 0.09 | | |
| 16 | 505.42 | 0.09 | | |
| 17 | 505.51 | 0.09 | | |
| 18 | 505.6 | 0.09 | | |
| 19 | 505.68 | 0.08 | | |
| 20 | 505.77 | 0.09 | | |
| 21 | 505.86 | 0.09 | | |
| 22 | 505.94 | 0.08 | | |
| 23 | 506.02 | 0.08 | | |
| 24 | 506.11 | 0.09 | | |
| 25 | 506.19 | 0.08 | 0.08 | |
| 26 | 506.27 | 0.08 | | |
| 27 | 506.35 | 0.08 | | |
| 28 | 506.43 | 0.08 | | |
| 29 | 506.5 | 0.07 | | |
| 30 | 506.58 | 0.08 | | |
| 31 | 506.65 | 0.07 | | |
| Apr. 1 | 506.73 | 0.08 | | |
| 2 | 506.81 | 0.08 | | |
| 3 | 506.88 | 0.07 | 0.07 | |
| 4 | 506.95 | 0.07 | | |
| 5 | 507.02 | 0.07 | | |
| 6 | 507.09 | 0.07 | | |
| 7 | 507.17 | 0.08 | | |
| 8 | 507.23 | 0.06 | | |
| 9 | 507.3 | 0.07 | | |

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|---|---|---|---|---|
| 10 | 507.37 | 0.07 | | |
| 11 | 507.44 | 0.07 | | |
| 12 | 507.5 | 0.06 | | |
| 13 | 507.57 | 0.07 | | |
| 14 | 507.63 | 0.06 | | |
| 15 | 507.7 | 0.07 | | |
| 16 | 507.76 | 0.06 | 0.06 | |
| 17 | 507.82 | 0.06 | | |
| 18 | 507.88 | 0.06 | | |
| 19 | 507.94 | 0.06 | | |
| 20 | 508 | 0.06 | | |
| 21 | 508.06 | 0.06 | | |
| 22 | 508.12 | 0.06 | | |
| 23 | 508.17 | 0.05 | | |
| 24 | 508.23 | 0.06 | | |
| 25 | 508.28 | 0.05 | | |
| 26 | 508.34 | 0.06 | | |
| 27 | 508.39 | 0.05 | 0.05 | |
| 28 | 508.44 | 0.05 | | |
| 29 | 508.49 | 0.05 | | |
| 30 | 508.54 | 0.05 | | |
| 1-May | 508.59 | 0.05 | | |
| 2 | 508.64 | 0.05 | | |
| 3 | 508.69 | 0.05 | | |
| 4 | 508.73 | 0.04 | | |
| 5 | 508.78 | 0.05 | | |
| 6 | 508.82 | 0.04 | | |
| 7 | 508.87 | 0.05 | | |
| 8 | 508.91 | 0.04 | | |
| 9 | 508.95 | 0.04 | | |

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|---|---|---|---|---|
| 10 | 509 | 0.05 | | |
| 11 | 509.04 | 0.04 | | |
| 12 | 509.08 | 0.04 | | |
| 13 | 509.11 | 0.03 | | |
| 14 | 509.15 | 0.04 | 0.04 | |
| 15 | 509.19 | 0.04 | | |
| 16 | 509.23 | 0.04 | | |
| 17 | 509.26 | 0.03 | | |
| 18 | 509.3 | 0.04 | | |
| 19 | 509.33 | 0.03 | 0.03 | |
| 20 | 509.36 | 0.03 | | |
| 21 | 509.39 | 0.03 | | |
| 22 | 509.42 | 0.03 | | |
| 23 | 509.45 | 0.03 | | |
| 24 | 509.48 | 0.03 | | |
| 25 | 509.51 | 0.03 | | |
| 26 | 509.54 | 0.03 | | |
| 27 | 509.57 | 0.03 | | |
| 28 | 509.59 | 0.02 | | |
| 29 | 509.62 | 0.03 | | |
| 30 | 509.64 | 0.02 | | |
| 31 | 509.66 | 0.02 | | |
| 1-Jun | 509.69 | 0.03 | | |
| 2 | 509.71 | 0.02 | 0.02 | |
| 3 | 509.73 | 0.02 | | |
| 4 | 509.75 | 0.02 | | |
| 5 | 509.77 | 0.02 | | |
| 6 | 509.78 | 0.01 | | |
| 7 | 509.8 | 0.02 | | |
| 8 | 509.82 | 0.02 | | |

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|---|---|---|---|---|
| 9 | 509.83 | 0.01 | | |
| 10 | 509.85 | 0.02 | | |
| 11 | 509.86 | 0.01 | 0.01 | |
| 12 | 509.87 | 0.01 | | |
| 13 | 509.88 | 0.01 | | |
| 14 | 509.89 | 0.01 | | |
| 15 | 509.9 | 0.01 | | |
| 16 | 509.91 | 0.01 | | |
| 17 | 509.92 | 0.01 | | |
| 18 | 509.93 | 0.01 | | |
| 19 | 509.93 | 0 | | |
| 20 | 509.94 | 0.01 | | |
| 21 | 509.94 | 0 | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |
| 22 | 509.95 | 0.01 | | Aphe-LAEC |
| 23 | 509.95 | 0 | 0 | |
| 24 | 509.95 | 0 | | |
| 25 | 509.95 | 0 | | |
| 26 | 509.95 | 0 | | |
| 27 | 509.95 | 0 | | |
| 28 | 509.95 | 0 | | |
| 29 | 509.95 | 0 | | |
| 30 | 509.95 | 0 | | |
| 1-Jul | 509.94 | -0.01 | | |

## Appendix J

**Step 1:**

I'll create a table with 5 columns for Asteroid 2020 CD3.

Then, I'll insert these data on the first 2 columns:

- Column No1: The date
- Column No2: The Asteroid's 2020 CD3 distance from the Sun in million km

**Step 2:**

I'll find these data for the next 3 columns:

- Column No3: The difference of the Asteroid's 2020 CD3 distance from the Sun from the previous day
- Column No4: The Sequence of the difference (it's also related to the Orbital Speed)
- Column No5: The 10 Points & comments

| Date 2021 | The Asteroid's 2020 CD3 distance from the Sun in million km | The difference of the Asteroid's 2020 CD3 distance from the Sun from the previous day | The Sequence of the difference | The 10 Points & comments |
|---|---|---|---|---|
| Aug. 17, '21 | 155.81 | | | |
| Aug. 18, '21 | 155.81 | | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural "Satellite" and its natural "Sun". |
| Aug. 19, '21 | 155.82 | +0.01 | | **Point No1 or Aphe-LAEC (on d1):** The farthest distance of the natural "Satellite" by its natural "Sun".<br>Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| Aug. 20, '21 | 155.82 | | 0 | |
| Aug. 21, '21 | 155.82 | | | |
| Aug. 22, '21 | 155.82 | | | |
| Aug. 23, '21 | 155.82 | | | |

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|---|---|---|---|---|
| Aug. 24, '21 | 155.82 | | | |
| Aug. 25, '21 | 155.82 | | | |
| Aug. 26, '21 | 155.82 | | | |
| Aug. 27, '21 | 155.82 | | | |
| Aug. 28, '21 | 155.82 | | | |
| Aug. 29, '21 | 155.81 | -0.01 | | **Point No2 or E (on d2):** Here starts the attraction and the natural "Satellite" starts moving closer to its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No2 up to point No3. |
| Aug. 30, '21 | 155.81 | | | |
| Aug. 31, '21 | 155.81 | | | |
| Sep. 01, '21 | 155.8 | 0.01 | | |
| 2 | 155.8 | 0 | | |
| 3 | 155.79 | -0.01 | | |
| 4 | 155.78 | -0.01 | | |
| 5 | 155.78 | 0 | | |
| 6 | 155.77 | -0.01 | | |
| 7 | 155.76 | -0.01 | | |
| 8 | 155.76 | 0 | | |
| 9 | 155.75 | -0.01 | -0.01 | |
| 10 | 155.74 | -0.01 | | |

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|---|---|---|---|---|
| 11 | 155.73 | -0.01 | | |
| 12 | 155.72 | -0.01 | | |
| 13 | 155.71 | -0.01 | | |
| 14 | 155.7 | -0.01 | | |
| 15 | 155.69 | -0.01 | | |
| 16 | 155.68 | -0.01 | | |
| 17 | 155.67 | -0.01 | | |
| 18 | 155.65 | -0.02 | | |
| 19 | 155.64 | -0.01 | | |
| 20 | 155.63 | -0.01 | | |
| 21 | 155.61 | -0.02 | | |
| 22 | 155.6 | -0.01 | | |
| 23 | 155.58 | -0.02 | | |
| 24 | 155.57 | -0.01 | | |
| 25 | 155.55 | -0.02 | | |
| 26 | 155.54 | -0.01 | | |
| 27 | 155.52 | -0.02 | | |
| 28 | 155.5 | -0.02 | | |
| 29 | 155.49 | -0.01 | | |
| 30 | 155.47 | -0.02 | -0.02 | |
| Oct. 1 | 155.45 | -0.02 | | |
| 2 | 155.43 | -0.02 | | |
| 3 | 155.41 | -0.02 | | |
| 4 | 155.39 | -0.02 | | |
| 5 | 155.37 | -0.02 | | |
| 6 | 155.35 | -0.02 | | |
| 7 | 155.33 | -0.02 | | |
| 8 | 155.31 | -0.02 | | |
| 9 | 155.29 | -0.02 | | |
| 10 | 155.27 | -0.02 | | |

| | | | | |
|---|---|---|---|---|
| 11 | 155.25 | -0.02 | | |
| 12 | 155.22 | -0.03 | | |
| 13 | 155.2 | -0.02 | | |
| 14 | 155.18 | -0.02 | | |
| 15 | 155.15 | -0.03 | | |
| 16 | 155.13 | -0.02 | | |
| 17 | 155.11 | -0.02 | | |
| 18 | 155.08 | -0.03 | | |
| 19 | 155.06 | -0.02 | | |
| 20 | 155.03 | -0.03 | | |
| 21 | 155.01 | -0.02 | | |
| 22 | 154.98 | -0.03 | | |
| 23 | 154.95 | -0.03 | | |
| 24 | 154.93 | -0.02 | | |
| 25 | 154.9 | -0.03 | | |
| 26 | 154.87 | -0.03 | | |
| 27 | 154.85 | -0.02 | | |
| 28 | 154.82 | -0.03 | | |
| 29 | 154.79 | -0.03 | | |
| 30 | 154.76 | -0.03 | | |
| 31 | 154.74 | -0.02 | | |
| Nov. 1 | 154.71 | -0.03 | -0.03 | |
| 2 | 154.68 | -0.03 | | |
| 3 | 154.65 | -0.03 | | |
| 4 | 154.62 | -0.03 | | |
| 5 | 154.59 | -0.03 | | |
| 6 | 154.56 | -0.03 | | |
| 7 | 154.53 | -0.03 | | |
| 8 | 154.5 | -0.03 | | |
| 9 | 154.47 | -0.03 | | |

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|---|---|---|---|---|
| 10 | 154.44 | -0.03 | | |
| 11 | 154.41 | -0.03 | | |
| 12 | 154.38 | -0.03 | | |
| 13 | 154.35 | -0.03 | | |
| 14 | 154.32 | -0.03 | | |
| 15 | 154.29 | -0.03 | | |
| 16 | 154.26 | -0.03 | | |
| 17 | 154.23 | -0.03 | | |
| 18 | 154.2 | -0.03 | | |
| 19 | 154.17 | -0.03 | | |
| 20 | 154.14 | -0.03 | | |
| 21 | 154.11 | -0.03 | | |
| 22 | 154.07 | **-0.04** | | |
| 23 | 154.04 | -0.03 | | |
| 24 | 154.01 | -0.03 | | |
| 25 | 153.98 | -0.03 | | |
| 26 | 153.95 | -0.03 | | |
| 27 | 153.92 | -0.03 | | |
| 28 | 153.89 | -0.03 | | |
| 29 | 153.86 | -0.03 | | |
| 30 | 153.82 | **-0.04** | | |
| Dec. 1 | 153.79 | -0.03 | | |
| 2 | 153.76 | -0.03 | | |
| 3 | 153.73 | -0.03 | | |
| 4 | 153.7 | -0.03 | | |
| 5 | 153.67 | -0.03 | | |
| 6 | 153.64 | -0.03 | | |
| 7 | 153.61 | -0.03 | | |
| 8 | 153.57 | **-0.04** | (max) | |

| | | | | |
|---|---|---|---|---|
| 9 | 153.54 | -0.03 | -0.03 | **Point No3 or rσ (on d3):** Rapid change (decrease) on the “Satellite’s” Orbital speed and anomaly on the “Satellite’s” Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 10 | 153.51 | -0.03 | | |
| 11 | 153.48 | -0.03 | | |
| 12 | 153.45 | -0.03 | | |
| 13 | 153.42 | -0.03 | | |
| 14 | 153.39 | -0.03 | | |
| 15 | 153.36 | -0.03 | | |
| 16 | 153.33 | -0.03 | | |
| 17 | 153.3 | -0.03 | | |
| 18 | 153.27 | -0.03 | | |
| 19 | 153.24 | -0.03 | | |
| 20 | 153.21 | -0.03 | | |
| 21 | 153.18 | -0.03 | | |
| 22 | 153.15 | -0.03 | | |
| 23 | 153.13 | -0.02 | | **Point No4 or MS (on d4):** Gradual decrease of the “Satellite’s Orbital speed” by point No4 up to point No6. |
| 24 | 153.1 | -0.03 | | |
| 25 | 153.07 | -0.03 | | |
| 26 | 153.04 | -0.03 | | |
| 27 | 153.01 | -0.03 | | |

| | | | | |
|---|---|---|---|---|
| 28 | 152.98 | -0.03 | | |
| 29 | 152.96 | -0.02 | | |
| 30 | 152.93 | -0.03 | | |
| 31 | 152.9 | -0.03 | | |
| 2022 Jan. 1 | 152.88 | -0.02 | | |
| 2 | 152.85 | -0.03 | | |
| 3 | 152.82 | -0.03 | | |
| 4 | 152.8 | -0.02 | | |
| 5 | 152.77 | -0.03 | | |
| 6 | 152.75 | -0.02 | | |
| 7 | 152.72 | -0.03 | | |
| 8 | 152.7 | -0.02 | | |
| 9 | 152.67 | -0.03 | | |
| 10 | 152.65 | -0.02 | | |
| 11 | 152.63 | -0.02 | | |
| 12 | 152.6 | -0.03 | | |
| 13 | 152.58 | -0.02 | | |
| 14 | 152.56 | -0.02 | | |
| 15 | 152.54 | -0.02 | | |
| 16 | 152.52 | -0.02 | | |
| 17 | 152.49 | -0.03 | | |
| 18 | 152.47 | -0.02 | -0.02 | |
| 19 | 152.45 | -0.02 | | |
| 20 | 152.43 | -0.02 | | |
| 21 | 152.41 | -0.02 | | |
| 22 | 152.39 | -0.02 | | |
| 23 | 152.38 | -0.01 | | |
| 24 | 152.36 | -0.02 | | |
| 25 | 152.34 | -0.02 | | |
| 26 | 152.32 | -0.02 | | |

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|---|---|---|---|---|
| 27 | 152.3 | -0.02 | | |
| 28 | 152.29 | -0.01 | | |
| 29 | 152.27 | -0.02 | | |
| 30 | 152.26 | -0.01 | | |
| 31 | 152.24 | -0.02 | | |
| Febr. 1 | 152.23 | -0.01 | | |
| 2 | 152.21 | -0.02 | | |
| 3 | 152.2 | -0.01 | | |
| 4 | 152.19 | -0.01 | | |
| 5 | 152.17 | -0.02 | | |
| 6 | 152.16 | -0.01 | -0.01 | |
| 7 | 152.15 | -0.01 | | |
| 8 | 152.14 | -0.01 | | |
| 9 | 152.13 | -0.01 | | |
| 10 | 152.12 | -0.01 | | |
| 11 | 152.11 | -0.01 | | |
| 12 | 152.1 | -0.01 | | |
| 13 | 152.09 | -0.01 | | |
| 14 | 152.08 | -0.01 | | |
| 15 | 152.07 | -0.01 | | |
| 16 | 152.06 | -0.01 | | |
| 17 | 152.06 | 0 | | |
| 18 | 152.05 | -0.01 | | |
| 19 | 152.05 | 0 | | |
| 20 | 152.04 | -0.01 | | |
| 21 | 152.04 | 0 | | |
| 22 | 152.03 | -0.01 | | |
| 23 | 152.03 | 0 | | **Point No5 or LA (on d5):** Last point with attractive forces |

| | | | | |
|---|---|---|---|---|
| | | | | between the natural "Satellite" and its natural "Sun". |
| 24 | 152.02 | -0.01 | | **Point No6 or Peri-LAEC (on d6):** The closest distance of the natural "Satellite" by its natural "Sun". Balance between the attractive & repulsive forces – net force is zero - the "Satellite" does not go farther or closer to its "Sun". |
| 25 | 152.02 | 0 | 0 | |
| 26 | 152.02 | 0 | | |
| 27 | 152.02 | 0 | | |
| 28 | 152.02 | 0 | | |
| 1-Mar | 152.02 | 0 | | |
| 2 | 152.02 | 0 | | |
| 3 | 152.02 | 0 | | |
| 4 | 152.02 | 0 | | |
| 5 | 152.02 | 0 | | |
| 6 | 152.02 | 0 | | |
| 7 | 152.03 | 0.01 | | **Point No7 or A (on d7):** Here starts the repulsion and the natural "Satellite" starts moving farthest by its natural "Sun" with gradual increase of the "Satellite's Orbital speed" by point No7 up to point No8. |
| 8 | 152.03 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 9 | 152.03 | 0 | | |
| 10 | 152.04 | 0.01 | | |
| 11 | 152.04 | 0 | | |
| 12 | 152.05 | 0.01 | | |
| 13 | 152.05 | 0 | | |
| 14 | 152.06 | 0.01 | | |
| 15 | 152.07 | 0.01 | | |
| 16 | 152.07 | 0 | | |
| 17 | 152.08 | 0.01 | | |
| 18 | 152.09 | 0.01 | 0.01 | |
| 19 | 152.1 | 0.01 | | |
| 20 | 152.11 | 0.01 | | |
| 21 | 152.12 | 0.01 | | |
| 22 | 152.13 | 0.01 | | |
| 23 | 152.14 | 0.01 | | |
| 24 | 152.15 | 0.01 | | |
| 25 | 152.16 | 0.01 | | |
| 26 | 152.18 | 0.02 | | |
| 27 | 152.19 | 0.01 | | |
| 28 | 152.2 | 0.01 | | |
| 29 | 152.22 | 0.02 | | |
| 30 | 152.23 | 0.01 | | |
| 31 | 152.25 | 0.02 | | |
| Apr. 1 | 152.26 | 0.01 | | |
| 2 | 152.28 | 0.02 | | |
| 3 | 152.29 | 0.01 | | |
| 4 | 152.31 | 0.02 | | |
| 5 | 152.33 | 0.02 | | |
| 6 | 152.35 | 0.02 | | |
| 7 | 152.36 | 0.01 | | |
| 8 | 152.38 | 0.02 | 0.02 | |

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| 9 | 152.4 | 0.02 | | |
| 10 | 152.42 | 0.02 | | |
| 11 | 152.44 | 0.02 | | |
| 12 | 152.46 | 0.02 | | |
| 13 | 152.48 | 0.02 | | |
| 14 | 152.5 | 0.02 | | |
| 15 | 152.52 | 0.02 | | |
| 16 | 152.54 | 0.02 | | |
| 17 | 152.57 | 0.03 | | |
| 18 | 152.59 | 0.02 | | |
| 19 | 152.61 | 0.02 | | |
| 20 | 152.64 | 0.03 | | |
| 21 | 152.66 | 0.02 | | |
| 22 | 152.68 | 0.02 | | |
| 23 | 152.71 | 0.03 | | |
| 24 | 152.73 | 0.02 | | |
| 25 | 152.76 | 0.03 | | |
| 26 | 152.78 | 0.02 | | |
| 27 | 152.81 | 0.03 | | |
| 28 | 152.83 | 0.02 | | |
| 29 | 152.86 | 0.03 | | |
| 30 | 152.89 | 0.03 | | |
| 1-May | 152.91 | 0.02 | | |
| 2 | 152.94 | 0.03 | | |
| 3 | 152.97 | 0.03 | | |
| 4 | 153 | 0.03 | | |
| 5 | 153.02 | 0.02 | | |
| 6 | 153.05 | 0.03 | 0.03 | |
| 7 | 153.08 | 0.03 | | |
| 8 | 153.11 | 0.03 | | |

| | | | | |
|---|---|---|---|---|
| 9 | 153.14 | 0.03 | | |
| 10 | 153.17 | 0.03 | | |
| 11 | 153.2 | 0.03 | | |
| 12 | 153.22 | 0.02 | | |
| 13 | 153.25 | 0.03 | | |
| 14 | 153.28 | 0.03 | | |
| 15 | 153.31 | 0.03 | | |
| 16 | 153.34 | 0.03 | | |
| 17 | 153.37 | 0.03 | | |
| 18 | 153.4 | 0.03 | | |
| 19 | 153.44 | **0.04** | | |
| 20 | 153.47 | 0.03 | | |
| 21 | 153.5 | 0.03 | | |
| 22 | 153.53 | 0.03 | | |
| 23 | 153.56 | 0.03 | | |
| 24 | 153.59 | 0.03 | | |
| 25 | 153.62 | 0.03 | | |
| 26 | 153.65 | 0.03 | | |
| 27 | 153.68 | 0.03 | | |
| 28 | 153.72 | **0.04** | | |
| 29 | 153.75 | 0.03 | | |
| 30 | 153.78 | 0.03 | | |
| 31 | 153.81 | 0.03 | | |
| 1-Jun | 153.84 | 0.03 | | |
| 2 | 153.87 | 0.03 | | |
| 3 | 153.9 | 0.03 | | |
| 4 | 153.94 | **0.04** | | |
| 5 | 153.97 | 0.03 | | |
| 6 | 154 | 0.03 | | |
| 7 | 154.03 | 0.03 | | |
| 8 | 154.06 | 0.03 | | |

| | | | | |
|---|---|---|---|---|
| 9 | 154.09 | 0.03 | | |
| 10 | 154.13 | **0.04** | | |
| 11 | 154.16 | 0.03 | | |
| 12 | 154.19 | 0.03 | | |
| 13 | 154.22 | 0.03 | | |
| 14 | 154.25 | 0.03 | | |
| 15 | 154.28 | 0.03 | | |
| 16 | 154.31 | 0.03 | | |
| 17 | 154.34 | 0.03 | | |
| 18 | 154.37 | 0.03 | | |
| 19 | 154.4 | 0.03 | | |
| 20 | 154.43 | 0.03 | | |
| 21 | 154.47 | **0.04** | (max) | |
| 22 | 154.5 | 0.03 | | |
| 23 | 154.53 | 0.03 | | |
| 24 | 154.56 | 0.03 | | |
| 25 | 154.58 | **0.02** | | **Point No8 or rε (on d8):** Rapid change (decrease) on the "Satellite's" Orbital speed and anomaly on the "Satellite's" Orbital speed sequence. Manifests always after the maximum increment of the Orbital Speed. |
| 26 | 154.61 | 0.03 | | **Point No9 or NM (on d9):** Gradual decrease of the "Satellite's Orbital speed" by point No9 up to point No10. |
| 27 | 154.64 | 0.03 | | |

| | | | | |
|---|---|---|---|---|
| 28 | 154.67 | 0.03 | | |
| 29 | 154.7 | 0.03 | | |
| 30 | 154.73 | 0.03 | | |
| 1-Jul | 154.76 | 0.03 | | |
| 2 | 154.79 | 0.03 | | |
| 3 | 154.82 | 0.03 | | |
| 4 | 154.84 | 0.02 | | |
| 5 | 154.87 | 0.03 | | |
| 6 | 154.9 | 0.03 | | |
| 7 | 154.92 | 0.02 | | |
| 8 | 154.95 | 0.03 | | |
| 9 | 154.98 | 0.03 | | |
| 10 | 155 | 0.02 | | |
| 11 | 155.03 | 0.03 | | |
| 12 | 155.06 | 0.03 | | |
| 13 | 155.08 | 0.02 | | |
| 14 | 155.11 | 0.03 | | |
| 15 | 155.13 | 0.02 | | |
| 16 | 155.15 | 0.02 | | |
| 17 | 155.18 | 0.03 | | |
| 18 | 155.2 | 0.02 | | |
| 19 | 155.23 | 0.03 | | |
| 20 | 155.25 | 0.02 | | |
| 21 | 155.27 | 0.02 | | |
| 22 | 155.29 | 0.02 | | |
| 23 | 155.32 | 0.03 | | |
| 24 | 155.34 | 0.02 | 0.02 | |
| 25 | 155.36 | 0.02 | | |
| 26 | 155.38 | 0.02 | | |
| 27 | 155.4 | 0.02 | | |
| 28 | 155.42 | 0.02 | | |

| | | | | |
|---|---|---|---|---|
| 29 | 155.44 | 0.02 | | |
| 30 | 155.46 | 0.02 | | |
| 31 | 155.48 | 0.02 | | |
| Aug. 1 | 155.49 | 0.01 | | |
| 2 | 155.51 | 0.02 | | |
| 3 | 155.53 | 0.02 | | |
| 4 | 155.55 | 0.02 | | |
| 5 | 155.56 | 0.01 | | |
| 6 | 155.58 | 0.02 | | |
| 7 | 155.6 | 0.02 | | |
| 8 | 155.61 | 0.01 | | |
| 9 | 155.63 | 0.02 | | |
| 10 | 155.64 | 0.01 | | |
| 11 | 155.65 | 0.01 | | |
| 12 | 155.67 | 0.02 | | |
| 13 | 155.68 | 0.01 | | |
| 14 | 155.69 | 0.01 | | |
| 15 | 155.71 | 0.02 | | |
| 16 | 155.72 | 0.01 | 0.01 | |
| 17 | 155.73 | 0.01 | | |
| 18 | 155.74 | 0.01 | | |
| 19 | 155.75 | 0.01 | | |
| 20 | 155.76 | 0.01 | | |
| 21 | 155.77 | 0.01 | | |
| 22 | 155.78 | 0.01 | | |
| 23 | 155.79 | 0.01 | | |
| 24 | 155.79 | 0 | | |
| 25 | 155.8 | 0.01 | | |
| 26 | 155.81 | 0.01 | | |
| 27 | 155.81 | 0 | | |

| | | | | |
|---|---|---|---|---|
| 28 | 155.82 | 0.01 | | |
| 29 | 155.82 | 0 | | |
| 30 | 155.83 | 0.01 | | |
| 31 | 155.83 | 0 | | |
| Sept. 1 | 155.84 | 0.01 | | |
| 2 | 155.84 | 0 | | |
| 3 | 155.84 | 0 | | **Point No10 or LR (on d10):** Last point with repulsive forces between the natural “Satellite” and its natural “Sun”. |
| 4 | 155.85 | 0.01 | | **Point No1 or Aphe-LAEC (“Aphelion”) again.** |
| 5 | 155.85 | 0 | 0 | |
| 6 | 155.85 | 0 | | |
| 7 | 155.85 | 0 | | |
| 8 | 155.85 | 0 | | |
| 9 | 155.85 | 0 | | |
| 10 | 155.85 | 0 | | |
| 11 | 155.85 | 0 | | |
| 12 | 155.84 | -0.01 | | |
| 13 | | -155.84 | | |

# Appendix K

| | | | |
|---|---|---|---|
| October 18, 2021 | 415.67 | -0.12 | |
| 19 | 415.55 | -0.12 | |
| 20 | 415.43 | -0.12 | |
| 21 | 415.31 | -0.12 | |

| | | | |
|---|---|---|---|
| 22 | 415.19 | -0.12 | |
| 23 | 415.07 | -0.12 | |
| 24 | 414.95 | -0.12 | |
| 25 | 414.83 | -0.12 | |
| 26 | 414.71 | -0.12 | |
| 27 | 414.59 | -0.12 | |
| 28 | 414.47 | -0.12 | |
| 29 | 414.34 | **-0.13** | |
| 30 | 414.22 | -0.12 | |
| 31 | 414.1 | -0.12 | |
| Nov. 1 | 413.98 | -0.12 | |
| 2 | 413.85 | **-0.13** | |
| 3 | 413.73 | -0.12 | |
| 4 | 413.61 | -0.12 | |
| 5 | 413.49 | -0.12 | |
| 6 | 413.37 | -0.12 | |
| 7 | 413.25 | -0.12 | |
| 8 | 413.13 | -0.12 | |
| 9 | 413 | **-0.13** | |
| 10 | 412.88 | -0.12 | |
| 11 | 412.76 | -0.12 | |
| 12 | 412.64 | -0.12 | |
| 13 | 412.52 | -0.12 | |
| 14 | 412.4 | -0.12 | |
| 15 | 412.27 | **-0.13** | |
| 16 | 412.15 | -0.12 | |

| | | | |
|---|---|---|---|
| 17 | 412.03 | -0.12 | |
| 18 | 411.91 | -0.12 | |
| 19 | 411.79 | -0.12 | |
| 20 | 411.67 | -0.12 | |
| 21 | 411.54 | **-0.13** | |
| 22 | 411.42 | -0.12 | |
| 23 | 411.3 | -0.12 | |
| 24 | 411.18 | -0.12 | |
| 25 | 411.06 | -0.12 | |
| 26 | 410.93 | **-0.13** | |
| 27 | 410.81 | -0.12 | |
| 28 | 410.69 | -0.12 | |
| 29 | 410.57 | -0.12 | |
| 30 | 410.45 | -0.12 | |
| Dec. 1 | 410.33 | -0.12 | |
| 2 | 410.2 | **-0.13** | |
| 3 | 410.08 | -0.12 | |
| 4 | 409.96 | -0.12 | |
| 5 | 409.84 | -0.12 | |
| 6 | 409.72 | -0.12 | |
| 7 | 409.6 | -0.12 | |
| 8 | 409.47 | **-0.13** | |
| 9 | 409.35 | -0.12 | |
| 10 | 409.23 | -0.12 | |
| 11 | 409.11 | -0.12 | |
| 12 | 408.99 | -0.12 | |

| | | | |
|---|---|---|---|
| 13 | 408.87 | -0.12 | |
| 14 | 408.74 | **-0.13** | |
| 15 | 408.62 | -0.12 | |
| 16 | 408.5 | -0.12 | |
| 17 | 408.38 | -0.12 | |
| 18 | 408.26 | -0.12 | |
| 19 | 408.14 | -0.12 | |
| 20 | 408.02 | -0.12 | |
| 21 | 407.9 | -0.12 | |
| 22 | 407.77 | **-0.13** | |
| 23 | 407.65 | -0.12 | |
| 24 | 407.53 | -0.12 | |
| 25 | 407.41 | -0.12 | |
| 26 | 407.29 | -0.12 | |
| 27 | 407.17 | -0.12 | |
| 28 | 407.05 | -0.12 | |
| 29 | 406.93 | -0.12 | |
| 30 | 406.81 | -0.12 | |
| 31 | 406.69 | -0.12 | |
| 2022 Jan. 1 | 406.57 | -0.12 | |
| 2 | 406.45 | -0.12 | |
| 3 | 406.33 | -0.12 | |
| 4 | 406.21 | -0.12 | |
| 5 | 406.08 | **-0.13** | This is the 1st Max, -0.13, a Negative Sign Number |
| 6 | 405.96 | -0.12 | |

| | | | |
|---|---|---|---|
| 7 | 405.84 | -0.12 | |
| 8 | 405.72 | -0.12 | |
| 9 | 405.6 | -0.12 | |
| 10 | 405.48 | -0.12 | |
| 11 | 405.37 | -0.11 | See the –o.o2 difference of the -0.11 from the -0.13 of the 1st Max.<br><br>This is the **Point No3** |
| 12 | 405.25 | -0.12 | **Point No4** – again a sequence of -0.12, same as the last sequence before the Max and from this Point we expect to see gradual decrease |
| 13 | 405.13 | -0.12 | |
| 14 | 405.01 | -0.12 | |
| **Total rows: 88** | | | |

# Appendix L

| | | | |
|---|---|---|---|
| December 18, 2023 | 411.3 | 0.12 | |
| 19 | 411.42 | 0.12 | |
| 20 | 411.54 | 0.12 | |
| 21 | 411.66 | **0.13** | |
| 22 | 411.79 | 0.12 | |
| 23 | 411.91 | 0.12 | |
| 24 | 412.03 | 0.12 | |
| 25 | 412.15 | **0.13** | |

| | | | |
|---|---|---|---|
| 26 | 412.28 | 0.12 | |
| 27 | 412.4 | 0.12 | |
| 28 | 412.52 | 0.12 | |
| 29 | 412.64 | **0.13** | |
| 30 | 412.77 | 0.12 | |
| 31 | 412.89 | 0.12 | |
| 2024 Jan. 1 | 413.01 | 0.12 | |
| 2 | 413.13 | **0.13** | |
| 3 | 413.26 | 0.12 | |
| 4 | 413.38 | 0.12 | |
| 5 | 413.5 | 0.12 | |
| 6 | 413.62 | **0.13** | |
| 7 | 413.75 | 0.12 | |
| 8 | 413.87 | 0.12 | |
| 9 | 413.99 | 0.12 | |
| 10 | 414.11 | 0.12 | |
| 11 | 414.23 | **0.13** | |
| 12 | 414.36 | 0.12 | |
| 13 | 414.48 | 0.12 | |
| 14 | 414.6 | 0.12 | |
| 15 | 414.72 | 0.12 | |
| 16 | 414.84 | **0.13** | |
| 17 | 414.97 | 0.12 | |
| 18 | 415.09 | 0.12 | |
| 19 | 415.21 | 0.12 | |
| 20 | 415.33 | 0.12 | |
| 21 | 415.45 | **0.13** | |
| 22 | 415.58 | 0.12 | |
| 23 | 415.7 | 0.12 | |
| 24 | 415.82 | 0.12 | |
| 25 | 415.94 | 0.12 | |
| 26 | 416.06 | 0.12 | |
| 27 | 416.18 | 0.12 | |
| 28 | 416.3 | 0.12 | |
| 29 | 416.42 | **0.13** | 0.13 (max) |
| 30 | 416.55 | **0.12** | **Point No8**. A huge sequence of 0.12. Anomaly. |

| | | | More than 12 same numbers on a row with -0.01 difference from the max 0.13 |
|---|---|---|---|
| 31 | 416.67 | **0.12** | |
| Febr. 1 | 416.79 | **0.12** | |
| 2 | 416.91 | **0.12** | |
| 3 | 417.03 | **0.12** | |
| 4 | 417.15 | **0.12** | |
| 5 | 417.27 | **0.12** | |
| 6 | 417.39 | **0.12** | |
| 7 | 417.51 | **0.12** | |
| 8 | 417.63 | **0.12** | |
| 9 | 417.75 | **0.12** | |
| 10 | 417.87 | **0.12** | |
| 11 | 417.99 | **0.12** | |
| 12 | 418.11 | **0.12** | |
| 13 | 418.23 | **0.12** | |
| 14 | 418.35 | **0.12** | |
| 15 | 418.47 | **0.12** | |
| 16 | 418.59 | **0.12** | |
| 17 | 418.71 | **0.12** | |
| 18 | 418.83 | **0.12** | |
| 19 | 418.95 | **0.12** | |
| 20 | 419.07 | **0.12** | |
| 21 | 419.19 | **0.12** | |
| 22 | 419.31 | **0.12** | |
| 23 | 419.43 | **0.12** | |
| 24 | 419.55 | **0.12** | |
| 25 | 419.67 | **0.11** | **Point No9** |
| 26 | 419.78 | 0.12 | |
| 27 | 419.9 | 0.12 | |
| 28 | 420.02 | 0.12 | |
| **Total rows: 73** | | | |

# Appendix M

**Asteroid's 3 Juno Aphe-LAEC:** 16 September, 2016 on 05:12

| | | | |
|---|---|---|---|
| 2016 September,15 | 501.69 | 501.69 | |

| | | | |
|---|---|---|---|
| 2016<br>September,16 | 501.7 | **0.01** | Do you see this Pattern **+/-** ?<br>The number with the Positive Sign number (0.01) and then the Negative Sign number (-0.38)?<br>Here is always the **Group A** (Points No10, No1 –the Aphe-LAEC- and No2) – On September 15 the Point No10, on September 16 the Point No1 (the Aphe-LAEC) and between September 16 to October 16, the Point No2. |
| October, 16 | 501.32 | **-0.38** | |
| November, 16 | 499.97 | -1.35 | |
| December, 16 | 497.75 | -2.22 | |
| 2017 January, 16 | 494.5 | -3.25 | |
| February, 16 | 490.3 | -4.2 | |
| March, 16 | 485.69 | -4.61 | |
| April, 16 | 479.7 | -5.99 | |
| May, 16 | 473.01 | -6.69 | |
| June, 16 | 465.22 | -7.79 | |
| July, 16 | 456.85 | -8.37 | |
| August, 16 | 447.37 | -9.48 | |
| September, 16 | 437.1 | -10.27 | |
| October, 16 | 426.47 | -10.63 | |
| November, 16 | 414.82 | -11.65 | |
| December, 16 | 403.03 | -11.79 | |
| 2018 January, 16 | 390.42 | **-12.61** | Here is always the **Group B** (1st Max and Points No3 and No4)<br>See the "1st Max's Pyramid" with the Negative Sign numbers, where -12.89 is the max and before and after the max, two smaller numbers. |
| February, 16 | 377.53 | **-12.89** | |
| March, 16 | 365.82 | **-11.71** | |
| April, 16 | 353 | -12.82 | |
| May, 16 | 341 | -12 | |
| June, 16 | 329.36 | -11.64 | |

| | | | |
|---|---|---|---|
| July, 16 | 319.2 | -10.16 | |
| August, 16 | 310.25 | -8.95 | |
| September, 16 | 303.3 | -6.95 | |
| October, 16 | 298.82 | -4.48 | Do you see this Pattern **- -/+** ? The first number with the Negative Sign number (-4.48), the second number with the Negative Sign (-2.03) and then the Positive Sign number (0.66)? Here is always the **Group C** (Points No5, No6 –the Peri-LAEC- and No7). |
| November, 16 | 296.79 | -2.03 | |
| December, 16 | 297.45 | 0.66 | |
| 2019 January, 16 | 300.81 | 3.36 | |
| February, 16 | 306.69 | 5.88 | |
| March, 16 | 313.88 | 7.19 | |
| April, 16 | 323.54 | 9.66 | |
| May, 16 | 334.23 | 10.69 | |
| June, 16 | 346.25 | 12.02 | |
| July, 16 | 358.47 | 12.22 | |
| August, 16 | 371.39 | **12.92** | Here is always the **Group D** (2nd Max and Points No8 and No9)<br>See the "2nd Max's Pyramid" with the Positive Sign numbers, where 12.96 is the max and before and after the max, two smaller numbers. |
| September, 16 | 384.35 | **12.96** | |
| October, 16 | 396.71 | **12.36** | |
| November, 16 | 409.14 | 12.43 | |
| December, 16 | 420.68 | 11.54 | |
| 2020 January, 16 | 432 | 11.32 | |
| February, 16 | 442.63 | 10.63 | |
| March, 16 | 451.87 | 9.24 | |
| April, 16 | 460.96 | 9.09 | |
| May, 16 | 468.95 | 7.99 | |
| June, 16 | 476.32 | 7.37 | |
| July, 16 | 482.6 | 6.28 | |

| | | | |
|---|---|---|---|
| August, 16 | 488.16 | 5.56 | |
| September, 16 | 492.79 | 4.63 | |
| October, 16 | 496.35 | 3.56 | |
| November, 16 | 499.09 | 2.74 | |
| December, 16 | 500.82 | 1.73 | |
| 2021 January, 16 | 501.64 | 0.82 | And between these two dates is the Second Aphe-LAEC – 3 Juno enters into a new orbital period. |
| February, 16 | 501.49 | -0.15 | |

Let's find the 10 important Points.

## $I. Group\ A\ (Points\ No10, No1 - Aphe - LAEC - \ and\ No2)$

I know already the dates for Point No10, which is on September 15, 2016 & Point No1 (Aphe-LAEC), that is on September 16, 2016 so, I'll search only for Point No2 between these dates:

| | | |
|---|---|---|
| 2016 September,16 | 501.7 | **0.01** |
| October, 16 | 501.32 | **-0.38** |

| | | | |
|---|---|---|---|
| 16-Sep-16 | 501.7 | 0 | **Point No1** |
| 17 | 501.7 | 0 | |
| 18 | 501.7 | 0 | |
| 19 | 501.7 | 0 | |
| 20 | 501.7 | 0 | |
| 21 | 501.69 | -0.01 | **Point No2** |

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 15/9/16 | 501.69 |
| No1 | 16/9/16 | 501.70 |
| No2 | 21/9/16 | 501.69 |

## II. Group B (1st Max and Points No3 and No4)

My dates to search for these 3 Points:

| | | |
|---|---|---|
| 2018 January, 16 | 390.42 | -12.61 |
| February, 16 | 377.53 | **-12.89** |
| March, 16 | 365.82 | -11.71 |

I will start searching by January 16, 2018 and I'll stop only when I'll see a -0.02 difference by the 1st Max on the numbers of the 3rd column. This way, I'm 100% sure that I've passed my 1st Max and from this point, I must see gradual decrease on the numbers of the 3rd column.

| 16-Jan-18 | 390.2 | | |
|---|---|---|---|
| 17 | 389.79 | -0.41 | |
| 18 | 389.38 | -0.41 | |
| 19 | 388.96 | -0.42 | |
| 20 | 388.55 | -0.41 | |
| 21 | 388.14 | -0.41 | |
| 22 | 387.72 | -0.42 | |
| 23 | 387.31 | -0.41 | |
| 24 | 386.89 | -0.42 | |
| 25 | 386.48 | -0.41 | |
| 26 | 386.06 | -0.42 | |
| 27 | 385.65 | -0.41 | |
| 28 | 385.23 | -0.42 | |
| 29 | 384.82 | -0.41 | |
| 30 | 384.4 | -0.42 | |
| 31 | 383.99 | -0.41 | |

| | | | |
|---|---|---|---|
| Febr. 1 | 383.57 | -0.42 | |
| 2 | 383.15 | -0.42 | |
| 3 | 382.74 | -0.41 | |
| 4 | 382.32 | -0.42 | |
| 5 | 381.9 | -0.42 | |
| 6 | 381.49 | -0.41 | |
| 7 | 381.07 | -0.42 | |
| 8 | 380.65 | -0.42 | |
| 9 | 380.23 | -0.42 | |
| 10 | 379.82 | -0.41 | |
| 11 | 379.4 | -0.42 | |
| 12 | 378.98 | -0.42 | |
| 13 | 378.56 | -0.42 | |
| 14 | 378.15 | -0.41 | |
| 15 | 377.73 | -0.42 | |
| 16 | 377.31 | -0.42 | |
| 17 | 376.89 | -0.42 | |
| 18 | 376.47 | -0.42 | |
| 19 | 376.05 | -0.42 | |
| 20 | 375.64 | -0.41 | |
| 21 | 375.22 | -0.42 | |
| 22 | 374.8 | -0.42 | |
| 23 | 374.38 | -0.42 | |
| 24 | 373.96 | -0.42 | |
| 25 | 373.54 | -0.42 | |
| 26 | 373.12 | -0.42 | |
| 27 | 372.7 | -0.42 | |
| 28 | 372.29 | -0.41 | |
| 1-Mar | 371.87 | -0.42 | |
| 2 | 371.45 | -0.42 | |
| 3 | 371.03 | -0.42 | |
| 4 | 370.61 | -0.42 | |
| 5 | 370.19 | -0.42 | |
| 6 | 369.77 | -0.42 | |

| | | | |
|---|---|---|---|
| 7 | 369.36 | -0.41 | |
| 8 | 368.94 | -0.42 | |
| 9 | 368.52 | -0.42 | |
| 10 | 368.1 | -0.42 | |
| 11 | 367.68 | -0.42 | |
| 12 | 367.26 | -0.42 | |
| 13 | 366.85 | -0.41 | |
| 14 | 366.43 | -0.42 | |
| 15 | 366.01 | -0.42 | |
| 16 | 365.59 | -0.42 | |
| 17 | 365.18 | -0.41 | |
| 18 | 364.76 | -0.42 | |
| 19 | 364.34 | -0.42 | |
| 20 | 363.93 | -0.41 | |
| 21 | 363.51 | -0.42 | |
| 22 | 363.09 | -0.42 | |
| 23 | 362.68 | -0.41 | |
| 24 | 362.26 | -0.42 | **1st Max** |
| 25 | 361.86 | -0.4 | **Point No3** |
| 26 | 361.45 | -0.41 | **Point No4** |

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 24/3/18 | 362.26 |
| No3 | 25/3/18 | 361.86 |
| No4 | 26/3/18 | 361.45 |

## *III. Group C (Points No5, No6 – Peri – LAEC – and No7)*

My dates to search for these 3 Points:

| | | |
|---|---|---|
| October, 16, 2018 | 298.82 | -4.48 |
| November, 16 | 296.79 | -2.03 |
| December, 16 | 297.45 | 0.66 |

I'll create my table to check day by day starting from October 16, 2018 and I'll stop when I'll see the 0.01 on the 3rd Column (fact that means that 3 Juno exits the Peri-LAEC and it will move farthest from the Sun).

| | | | |
|---|---|---|---|
| 16-Oct-18 | 298.76 | | |
| 17 | 298.66 | -0.1 | |
| 18 | 298.56 | -0.1 | |
| 19 | 298.45 | -0.11 | |
| 20 | 298.36 | -0.09 | |
| 21 | 298.26 | -0.1 | |
| 22 | 298.17 | -0.09 | |
| 23 | 298.08 | -0.09 | |
| 24 | 297.99 | -0.09 | |
| 25 | 297.91 | -0.08 | |
| 26 | 297.83 | -0.08 | |
| 27 | 297.75 | -0.08 | |
| 28 | 297.67 | -0.08 | |
| 29 | 297.6 | -0.07 | |
| 30 | 297.53 | -0.07 | |
| 31 | 297.46 | -0.07 | |
| Nov. 1 | 297.4 | -0.06 | |
| 2 | 297.34 | -0.06 | |
| 3 | 297.28 | -0.06 | |

| | | | |
|---|---|---|---|
| 4 | 297.22 | -0.06 | |
| 5 | 297.17 | -0.05 | |
| 6 | 297.12 | -0.05 | |
| 7 | 297.07 | -0.05 | |
| 8 | 297.03 | -0.04 | |
| 9 | 296.99 | -0.04 | |
| 10 | 296.95 | -0.04 | |
| 11 | 296.91 | -0.04 | |
| 12 | 296.88 | -0.03 | |
| 13 | 296.85 | -0.03 | |
| 14 | 296.82 | -0.03 | |
| 15 | 296.8 | -0.02 | |
| 16 | 296.78 | -0.02 | |
| 17 | 296.76 | -0.02 | |
| 18 | 296.75 | -0.01 | |
| 19 | 296.73 | -0.02 | |
| 20 | 296.72 | -0.01 | |
| 21 | 296.72 | 0 | **Point No5** |
| 22 | 296.71 | -0.01 | **Point No6 (Peri-LAEC)** |
| 23 | 296.71 | 0 | |
| 24 | 296.71 | 0 | |
| 25 | 296.72 | 0.01 | **Point No7** |

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 21/11/18 | 296.72 |
| No6 | 22/11/18 | 296.71 |

| | | |
|---|---|---|
| No7 | 25/11/18 | 296.72 |

# IV. Group D (2nd Max and Points No8 and No9)

My dates to search for these 3 Points:

| | | |
|---|---|---|
| August, 16, 2019 | 371.39 | 12.92 |
| September, 16 | 384.35 | 12.96 |
| October, 16 | 396.71 | 12.36 |

I will start searching by August 16, 2019 and I'll stop only when I'll see the second smaller number after the 2nd Max – a -0.02 difference from the Max or, a big sequence (which will be the Point No8 and if it has a big sequence, this sequence must be equal or more than 12 on a row same numbers) with -0.01 difference by the 2nd Max on the numbers of the 3rd column. This way, I'm 100% sure that I've passed my 2nd Max and from this point, I must see gradual decrease on the numbers of the 3rd column.

| | | | |
|---|---|---|---|
| 16-Aug-19 | 371.61 | 0.42 | |
| 17 | 372.03 | 0.42 | |
| 18 | 372.45 | 0.42 | |
| 19 | 372.87 | 0.42 | |
| 20 | 373.29 | 0.42 | |
| 21 | 373.71 | 0.42 | |
| 22 | 374.13 | 0.41 | |
| 23 | 374.54 | 0.42 | |
| 24 | 374.96 | 0.42 | |

| | | | |
|---|---|---|---|
| 25 | 375.38 | 0.42 | |
| 26 | 375.8 | 0.42 | |
| 27 | 376.22 | 0.42 | |
| 28 | 376.64 | 0.42 | |
| 29 | 377.06 | 0.41 | |
| 30 | 377.47 | 0.42 | |
| 31 | 377.89 | 0.42 | |
| Sept. 1 | 378.31 | 0.42 | |
| 2 | 378.73 | 0.42 | |
| 3 | 379.15 | 0.41 | |
| 4 | 379.56 | 0.42 | |
| 5 | 379.98 | 0.42 | |
| 6 | 380.4 | 0.42 | |
| 7 | 380.82 | 0.41 | |
| 8 | 381.23 | 0.42 | |
| 9 | 381.65 | 0.42 | |
| 10 | 382.07 | 0.42 | |
| 11 | 382.49 | 0.41 | |
| 12 | 382.9 | 0.42 | |
| 13 | 383.32 | 0.42 | |
| 14 | 383.74 | 0.41 | |
| 15 | 384.15 | 0.42 | |
| 16 | 384.57 | 0.41 | |
| 17 | 384.98 | 0.42 | |
| 18 | 385.4 | 0.41 | |
| 19 | 385.81 | 0.42 | |

| | | | |
|---|---|---|---|
| 20 | 386.23 | 0.41 | |
| 21 | 386.64 | 0.42 | |
| 22 | 387.06 | 0.41 | |
| 23 | 387.47 | 0.42 | |
| 24 | 387.89 | 0.41 | |
| 25 | 388.3 | 0.41 | |
| 26 | 388.71 | 0.42 | |
| 27 | 389.13 | 0.41 | |
| 28 | 389.54 | 0.41 | |
| 29 | 389.95 | 0.42 | |
| 30 | 390.37 | 0.41 | |
| Oct. 1 | 390.78 | 0.41 | |
| 2 | 391.19 | 0.41 | |
| 3 | 391.6 | 0.41 | |
| 4 | 392.01 | 0.41 | |
| 5 | 392.42 | 0.41 | |
| 6 | 392.83 | 0.42 | **2nd Max** |
| 7 | 393.25 | 0.41 | |
| 8 | 393.66 | 0.41 | |
| 9 | 394.07 | 0.4 | **Point No8** |
| 10 | 394.47 | 0.4 | |
| 11 | 394.88 | 0.41 | **Point No9** |

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max | 6/10/19 | 392.83 |
| No8 | 9/10/19 | 394.07 |

| | | |
|---|---|---|
| No9 | 11/10/19 | 394.88 |

## Appendix N

| | | | |
|---|---|---|---|
| 23-May-14 | 568.34 | - | Point No10 |
| 24-May-14 | 568.35 | 0.01 | Point No1 (Aphe-LAEC) |
| 24-Jul | 567.86 | -0.49 | Between 23-May-14 and 24-Jul-14 the **GROUP A** (Points No10, No1 & No2) |
| 24-Sep | 566.3 | -1.56 | |
| 24-Nov | 563.74 | -2.56 | |
| 2015 January 24 | 560.2 | -3.54 | |
| 24-Mar | 555.9 | -4.3 | |
| 24-May | 550.61 | -5.29 | |
| 24-Jul | 544.56 | -6.05 | |
| 24-Sep | 537.74 | -6.82 | |
| 24-Nov | 530.5 | -7.24 | |
| 2016 January 24 | 522.91 | -7.59 | |
| 24-Mar | 515.28 | **-7.63** | Here is always the **Group B** (1st Max and Points No3 and No4) See the "1st Max's Pyramid" with the Negative Sign numbers, where -7.74 is the max and before and after the max, two smaller numbers. |
| 24-May | 507.54 | **-7.74** | |

| | | | |
|---|---|---|---|
| 24-Jul | 500.04 | **-7.5** | |
| 24-Sep | 492.9 | -7.14 | |
| 24-Nov | 486.6 | -6.3 | |
| 2017 January 24 | 481.24 | -5.36 | |
| 24-Mar | 477.15 | -4.09 | |
| 24-May | 474.23 | -2.92 | Do you see this Pattern **- -/+** ? The first number with the Negative Sign number (-2.92), the second number with the Negative Sign (-1.48) and then the Positive Sign number (0.05)? Here is always the **Group C** (Points No5, No6 –the Peri-LAEC- and No7). |
| 24-Jul | 472.75 | -1.48 | |
| 24-Sep | 472.8 | 0.05 | |
| 24-Nov | 474.38 | 1.58 | |
| 2018 January 24 | 477.4 | 3.02 | |
| 24-Mar | 481.58 | 4.18 | |
| 24-May | 487.03 | 5.45 | |
| 24-Jul | 493.42 | 6.39 | |
| 24-Sep | 500.64 | 7.22 | |
| 24-Nov | 508.22 | **7.58** | Here is always the **Group D** ($2^{nd}$ Max and Points No8 and No9) See the "$2^{nd}$ Max's Pyramid" with the Positive Sign numbers, where 7.81 is the max and before and after the |

| | | | |
|---|---|---|---|
| | | | max, two smaller numbers. |
| 2019 January 24 | 516.03 | **7.81** | |
| 24-Mar | 523.6 | **7.57** | |
| 24-May | 531.25 | 7.65 | |
| 24-Jul | 538.55 | 7.3 | |
| 24-Sep | 545.44 | 6.89 | |
| 24-Nov | 551.56 | 6.12 | |
| 2020 January 24 | 556.92 | 5.36 | |
| 24-Mar | 561.34 | 4.42 | |
| 24-May | 564.92 | 3.58 | |
| 24-Jul | 567.5 | 2.58 | |
| 24-Sep | 569.08 | 1.58 | |
| 24-Nov | 569.58 | 0.5 | |
| 2021 January | 569.01 | -0.57 | |

Let's find the 10 Points.

## *I. Group A (Points No10, No1 – Aphe – LAEC – and No2)*

I know already the dates for Point No10, which is on May 23, 2014 & Point No1 (Aphe-LAEC), that is on May 24, 2014 so, I'll search only for Point No2 between these dates:

| | | |
|---|---|---|
| 24-May-14 | 568.35 | **0.01** |
| 24-Jul | 567.86 | **-0.49** |

| | | | |
|---|---|---|---|
| 23-May-14 | 568.34 | | **Point No10** |
| 24 | 568.35 | 0.01 | **Point No1 (Aphe-LAEC)** |
| 25 | 568.35 | 0 | |
| 26 | 568.35 | 0 | |

| | | | |
|---|---|---|---|
| 27 | 568.35 | 0 | |
| 28 | 568.35 | 0 | |
| 29 | 568.34 | -0.01 | **Point No2** |

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 23/5/14 | 568.34 |
| No1 | 24/5/14 | 568.35 |
| No2 | 29/5/14 | 568.34 |

## *II. Group B (1st Max and Points No3 and No4)*

My dates to search for these 3 Points:

| | | |
|---|---|---|
| 24-Mar, 2016 | 515.28 | **-7.63** |
| 24-May | 507.54 | **-7.74** |
| 24-Jul | 500.04 | **-7.5** |

I will start searching by March 24, 2016 and I'll stop only when I'll see a -0.02 difference by the 1st Max on the numbers of the 3rd column. This way, I'm 100% sure that I've passed my 1st Max and from this point, I must see gradual decrease on the numbers of the 3rd column.

| | | | |
|---|---|---|---|
| 24-Mar-16 | 515.28 | | |

| | | | |
|---|---|---|---|
| 25 | 515.15 | -0.13 | |
| 26 | 515.02 | -0.13 | |
| 27 | 514.9 | -0.12 | |
| 28 | 514.77 | -0.13 | |
| 29 | 514.64 | -0.13 | |
| 30 | 514.52 | -0.12 | |
| 31 | 514.39 | -0.13 | |
| Apr. 1 | 514.26 | -0.13 | |
| 2 | 514.13 | -0.13 | |
| 3 | 514.01 | -0.12 | |
| 4 | 513.88 | -0.13 | |
| 5 | 513.75 | -0.13 | |
| 6 | 513.62 | -0.13 | |
| 7 | 513.5 | -0.12 | |
| 8 | 513.37 | -0.13 | |
| 9 | 513.24 | -0.13 | |
| 10 | 513.11 | -0.13 | |
| 11 | 512.99 | -0.12 | |
| 12 | 512.86 | -0.13 | |
| 13 | 512.73 | -0.13 | |
| 14 | 512.6 | -0.13 | |
| 15 | 512.48 | -0.12 | |
| 16 | 512.35 | -0.13 | |
| 17 | 512.22 | -0.13 | |
| 18 | 512.09 | -0.13 | |
| 19 | 511.97 | -0.12 | |
| 20 | 511.84 | -0.13 | |
| 21 | 511.71 | -0.13 | |
| 22 | 511.59 | -0.12 | |
| 23 | 511.46 | -0.13 | |
| 24 | 511.33 | -0.13 | |
| 25 | 511.21 | -0.12 | |
| 26 | 511.08 | -0.13 | |

| | | | |
|---|---|---|---|
| 27 | 510.95 | -0.13 | |
| 28 | 510.82 | -0.13 | |
| 29 | 510.7 | -0.12 | |
| 30 | 510.57 | -0.13 | |
| 1-May | 510.44 | -0.13 | |
| 2 | 510.32 | -0.12 | |
| 3 | 510.19 | -0.13 | |
| 4 | 510.06 | -0.13 | |
| 5 | 509.94 | -0.12 | |
| 6 | 509.81 | -0.13 | |
| 7 | 509.68 | -0.13 | |
| 8 | 509.56 | -0.12 | |
| 9 | 509.43 | -0.13 | |
| 10 | 509.3 | -0.13 | |
| 11 | 509.18 | -0.12 | |
| 12 | 509.05 | -0.13 | |
| 13 | 508.93 | -0.12 | |
| 14 | 508.8 | -0.13 | |
| 15 | 508.67 | -0.13 | |
| 16 | 508.55 | -0.12 | |
| 17 | 508.42 | -0.13 | |
| 18 | 508.3 | -0.12 | |
| 19 | 508.17 | -0.13 | |
| 20 | 508.04 | -0.13 | |
| 21 | 507.92 | -0.12 | |
| 22 | 507.79 | -0.13 | |
| 23 | 507.67 | -0.12 | |
| 24 | 507.54 | -0.13 | |
| 25 | 507.42 | -0.12 | |
| 26 | 507.29 | -0.13 | |
| 27 | 507.16 | -0.13 | |
| 28 | 507.04 | -0.12 | |
| 29 | 506.91 | -0.13 | |

| | | | |
|---|---|---|---|
| 30 | 506.79 | -0.12 | |
| 31 | 506.66 | -0.13 | |
| 1-Jun | 506.54 | -0.12 | |
| 2 | 506.41 | -0.13 | |
| 3 | 506.29 | -0.12 | |
| 4 | 506.16 | -0.13 | |
| 5 | 506.04 | -0.12 | |
| 6 | 505.91 | -0.13 | |
| 7 | 505.79 | -0.12 | |
| 8 | 505.67 | -0.12 | |
| 9 | 505.54 | -0.13 | |
| 10 | 505.42 | -0.12 | |
| 11 | 505.29 | -0.13 | |
| 12 | 505.17 | -0.12 | |
| 13 | 505.04 | -0.13 | |
| 14 | 504.92 | -0.12 | |
| 15 | 504.8 | -0.12 | |
| 16 | 504.67 | -0.13 | |
| 17 | 504.55 | -0.12 | |
| 18 | 504.42 | -0.13 | |
| 19 | 504.3 | -0.12 | |
| 20 | 504.18 | -0.12 | |
| 21 | 504.05 | -0.13 | |
| 22 | 503.93 | -0.12 | |
| 23 | 503.81 | -0.12 | |
| 24 | 503.68 | -0.13 | |
| 25 | 503.56 | -0.12 | |
| 26 | 503.44 | -0.12 | |
| 27 | 503.32 | -0.12 | |
| 28 | 503.19 | -0.13 | |
| 29 | 503.07 | -0.12 | |
| 30 | 502.95 | -0.12 | |
| 1-Jul | 502.83 | -0.12 | |

| | | | |
|---|---|---|---|
| 2 | 502.7 | -0.13 | |
| 3 | 502.58 | -0.12 | |
| 4 | 502.46 | -0.12 | |
| 5 | 502.34 | -0.12 | |
| 6 | 502.22 | -0.12 | |
| 7 | 502.09 | -0.13 | |
| 8 | 501.97 | -0.12 | |
| 9 | 501.85 | -0.12 | |
| 10 | 501.73 | -0.12 | |
| 11 | 501.61 | -0.12 | |
| 12 | 501.49 | -0.12 | |
| **13** | **501.36** | **-0.13** | **1st Max** |
| 14 | 501.24 | -0.12 | |
| 15 | 501.12 | -0.12 | |
| 16 | 501 | -0.12 | |
| 17 | 500.88 | -0.12 | |
| 18 | 500.76 | -0.12 | |
| 19 | 500.64 | -0.12 | |
| 20 | 500.52 | -0.12 | |
| 21 | 500.4 | -0.12 | |
| 22 | 500.28 | -0.12 | |
| 23 | 500.16 | -0.12 | |
| 24 | 500.04 | -0.12 | |
| 25 | 499.92 | -0.12 | |
| 26 | 499.8 | -0.12 | |
| 27 | 499.68 | -0.12 | |
| 28 | 499.56 | -0.12 | |
| 29 | 499.44 | -0.12 | |
| 30 | 499.32 | -0.12 | |
| **31** | **499.21** | **-0.11** | **Point No3** |
| **Aug. 1** | **499.09** | **-0.12** | **Point No4** |

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max | 13/7/16 | 501.36 |
| No3 | 31/7/16 | 499.21 |
| No4 | 1/8/16 | 499.09 |

## $III. Group\ C\ (Points\ No5, No6 - \ Peri - LAEC - \ and\ No7)$

This time, as I know already when it's the Peri-LAEC of the "Asteroid" 87 Sylvia (August 17, 2017), I'll focus to the dates from August 10, 2017 (1 week before the Peri-LAEC. Note: Sometimes it needs to start searching 2 weeks before) up to September 7, 2017 (2 weeks after the Peri-LAEC), to find super-fast the 3 Points.

| Aug. 10 2017 | 472.61 | 472.61 | |
|---|---|---|---|
| 11 | 472.6 | -0.01 | |
| 12 | 472.6 | 0 | |
| 13 | 472.59 | -0.01 | |
| 14 | 472.59 | 0 | |
| 15 | 472.59 | 0 | |
| **16** | **472.59** | **0** | **Point No5** |
| **17** | **472.58** | **-0.01** | **Point No6** |
| 18 | 472.58 | 0 | |
| 19 | 472.58 | 0 | |
| 20 | 472.58 | 0 | |
| 21 | 472.58 | 0 | |
| 22 | 472.58 | 0 | |

| | | | |
|---|---|---|---|
| 23 | 472.58 | 0 | |
| 24 | 472.58 | 0 | |
| 25 | 472.58 | 0 | |
| 26 | 472.58 | 0 | |
| 27 | 472.58 | 0 | |
| **28** | **472.59** | **0.01** | **Point No7** |

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 16/8/17 | 472.59 |
| No6 | 17/8/17 | 472.58 |
| No7 | 28/8/17 | 472.59 |

## *IV. Group D (2nd Max and Points No8 and No9)*

My dates to search for these 3 Points:

| | | |
|---|---|---|
| 24-Nov, 2018 | 508.22 | **7.58** |
| 2019 January 24 | 516.03 | **7.81** |
| 24-Mar | 523.6 | **7.57** |

I will start searching by November 24, 2018 and I'll stop only when I'll see the second smaller number after the 2nd Max – a -0.02 difference from the Max or, a big sequence (which will be the Point No8 and if it has a big sequence, this sequence must be equal or more than 12 on a row same numbers) with -0.01 difference by the 2nd Max on the numbers of the 3rd column. This way, I'm 100% sure that I've passed my 2nd Max and from this point, I must see gradual decrease on the numbers of the 3rd column. However, this period is quite lengthy (almost 5 months), so I will demonstrate my practical approach to dealing with such a long period.

Step 1:
Starting on November 24, 2018, I will search every 10 days on the first table to locate the "2nd Max's Pyramid".

| | | | |
|---|---|---|---|
| 24-Nov-18 | 508.22 | | |
| 4-Dec | 509.49 | 1.27 | |
| 14-Dec-18 | 510.76 | 1.27 | |
| 24-Dec-18 | 512.04 | 1.28 | |
| 3-Jan-19 | 513.33 | 1.29 | |
| 13-Jan | 514.61 | 1.28 | |
| 23 | 515.9 | 1.29 | |
| 2-Feb | 517.19 | 1.29 | |
| 12-Feb | 518.48 | 1.29 | |
| 22-Feb | 519.76 | 1.28 | I'll focus to these dates (from 22 of February up to 24 of March) because I see the Max, |
| 4-Mar-19 | 521.05 | 1.29 | and I see and the decrease – after the 1.28 is the 1.27 |
| 14-Mar-19 | 522.33 | 1.28 | fact that means that the Point No9 must be about these 2 dates (14 to 24 of March) |
| 24 | 523.6 | 1.27 | |

Now, I'll search day by day to find the 3 Points. I'll stop only when I'll see the second smaller number after the 2nd Max – a -0.02 difference from the Max or, a big sequence (which will be the Point No8 and if it has a big sequence, this sequence must be equal or more than 12 on a row same numbers) with -0.01 difference by the 2nd Max on the numbers of the 3rd column. This way, I'm 100% sure that I've passed my 2nd Max and from this point, I must see gradual decrease on the numbers of the 3rd column.

| | | | |
|---|---|---|---|
| 22-Feb-19 | 519.76 | | |
| 23 | 519.89 | 0.13 | |
| 24 | 520.02 | 0.13 | |
| 25 | 520.15 | 0.13 | |
| 26 | 520.28 | 0.13 | |
| 27 | 520.4 | 0.12 | |
| 28 | 520.53 | 0.13 | |
| 1-Mar | 520.66 | 0.13 | |
| 2 | 520.79 | 0.13 | |
| 3 | 520.92 | 0.13 | |
| 4 | 521.05 | 0.13 | |
| 5 | 521.17 | 0.12 | |
| 6 | 521.3 | 0.13 | |
| 7 | 521.43 | 0.13 | |
| 8 | 521.56 | 0.13 | |
| 9 | 521.69 | 0.13 | |
| 10 | 521.81 | 0.12 | |
| 11 | 521.94 | 0.13 | |
| 12 | 522.07 | 0.13 | |
| 13 | 522.2 | 0.13 | |
| 14 | 522.33 | 0.13 | |
| 15 | 522.45 | 0.12 | |
| 16 | 522.58 | 0.13 | |
| 17 | 522.71 | 0.13 | |
| 18 | 522.84 | 0.13 | |
| 19 | 522.97 | 0.13 | |
| 20 | 523.09 | 0.12 | |
| 21 | 523.22 | 0.13 | |
| 22 | 523.35 | 0.13 | |
| 23 | 523.48 | 0.13 | |
| 24 | 523.6 | 0.12 | |
| 25 | 523.73 | 0.13 | |
| 26 | 523.86 | 0.13 | |

| | | | |
|---|---|---|---|
| 27 | 523.99 | 0.13 | |
| 28 | 524.11 | 0.12 | |
| 29 | 524.24 | 0.13 | |
| 30 | 524.37 | 0.13 | |
| 31 | 524.49 | 0.12 | |
| Apr. 1 | 524.62 | 0.13 | |
| 2 | 524.74 | 0.12 | |
| 3 | 524.87 | 0.13 | |
| 4 | 525 | 0.13 | |
| 5 | 525.12 | 0.12 | |
| 6 | 525.25 | 0.13 | |
| 7 | 525.38 | 0.13 | |
| 8 | 525.5 | 0.12 | |
| 9 | 525.63 | 0.13 | |
| 10 | 525.76 | 0.13 | |
| 11 | 525.88 | 0.12 | |
| 12 | 526.01 | 0.13 | |
| 13 | 526.14 | 0.13 | |
| 14 | 526.26 | 0.12 | |
| 15 | 526.39 | 0.13 | |
| 16 | 526.52 | 0.13 | |
| 17 | 526.64 | 0.12 | |
| 18 | 526.77 | 0.13 | |
| 19 | 526.89 | 0.12 | |
| 20 | 527.02 | 0.13 | |
| 21 | 527.14 | 0.12 | |
| 22 | 527.27 | 0.13 | |
| 23 | 527.4 | 0.13 | |
| 24 | 527.52 | 0.12 | |
| 25 | 527.65 | 0.13 | |
| 26 | 527.77 | 0.12 | |
| 27 | 527.9 | 0.13 | |
| 28 | 528.02 | 0.12 | |

| | | | |
|---|---|---|---|
| 29 | 528.15 | 0.13 | |
| 30 | 528.27 | 0.12 | |
| 1-May | 528.4 | 0.13 | |
| 2 | 528.52 | 0.12 | |
| 3 | 528.65 | 0.13 | |
| 4 | 528.77 | 0.12 | |
| 5 | 528.9 | 0.13 | |
| 6 | 529.02 | 0.12 | |
| 7 | 529.15 | 0.13 | |
| 8 | 529.27 | 0.12 | |
| 9 | 529.4 | 0.13 | |
| 10 | 529.52 | 0.12 | |
| 11 | 529.65 | 0.13 | |
| 12 | 529.77 | 0.12 | |
| 13 | 529.89 | 0.12 | |
| 14 | 530.02 | 0.13 | |
| 15 | 530.14 | 0.12 | |
| 16 | 530.27 | 0.13 | |
| 17 | 530.39 | 0.12 | |
| 18 | 530.51 | 0.12 | |
| 19 | 530.64 | 0.13 | |
| 20 | 530.76 | 0.12 | |
| 21 | 530.88 | 0.12 | |
| 22 | 531.01 | 0.13 | |
| 23 | 531.13 | 0.12 | |
| 24 | 531.25 | 0.12 | |
| 25 | 531.38 | 0.13 | |
| 26 | 531.5 | 0.12 | |
| 27 | 531.62 | 0.12 | |
| 28 | 531.74 | 0.12 | |
| 29 | 531.87 | 0.13 | |
| 30 | 531.99 | 0.12 | |
| 31 | 532.11 | 0.12 | |

| | | | |
|---|---|---|---|
| 1-Jun | 532.23 | 0.12 | |
| 2 | 532.36 | 0.13 | |
| 3 | 532.48 | 0.12 | |
| 4 | 532.6 | 0.12 | |
| 5 | 532.72 | 0.12 | |
| 6 | 532.84 | 0.12 | |
| 7 | 532.97 | 0.13 | |
| 8 | 533.09 | 0.12 | |
| 9 | 533.21 | 0.12 | |
| 10 | 533.33 | 0.12 | |
| 11 | 533.45 | 0.12 | |
| 12 | 533.57 | 0.12 | |
| 13 | 533.69 | 0.12 | |
| 14 | 533.81 | 0.12 | |
| 15 | 533.93 | 0.12 | |
| **16** | **534.06** | **0.13** | **2nd Max** |
| 17 | 534.18 | 0.12 | |
| 18 | 534.3 | 0.12 | |
| 19 | 534.42 | 0.12 | |
| 20 | 534.54 | 0.12 | |
| 21 | 534.66 | 0.12 | |
| 22 | 534.78 | 0.12 | |
| 23 | 534.9 | 0.12 | |
| 24 | 535.02 | 0.12 | |
| 25 | 535.14 | 0.12 | |
| 26 | 535.26 | 0.12 | |
| **27** | **535.37** | **0.11** | **Point No8** |
| **28** | **535.49** | **0.12** | **Point No9** |

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max | 16/6/19 | 534.06 |

| | | |
|---|---|---|
| No8 | 27/6/19 | 535.37 |
| No9 | 28/6/19 | 535.49 |

# Appendix O

## Step 1

I'll create a table for Pluto to check the distance by year.

| Date | Distance from the Sun in million km | Diff. with the previous distance (watch the **RED** numbers – scalar/smooth pattern. Note: Some "gaps" are normal here because we check year-by-year and there are no such "gaps" when we check month-by- month or even better, day-by-day as we should check) | Comments |
|---|---|---|---|
| 01/4/1866 | 7375.49 | | Here is the Point No10 – the last Point before the Point No1 (Aphe-LAEC) |
| 2/4/1866 | 7375.5 | +0.01 | Point No1 (Aphe-LAEC) |
| 67 | 7375.32 | **-0**.18 | Up to this date is and the Point No2. These 3 Points (No10, No1 & No2) belong to **Group A.** |
| 68 | 7374.52 | -0.8 | |
| 69 | 7373.02 | **-1**.5 | |

| | | | |
|---|---|---|---|
| 70 | 7370.73 | **-2**.29 | |
| 71 | 7367.66 | **-3**.07 | |
| 72 | 7363.83 | -3.83 | |
| 73 | 7359.37 | **-4**.46 | |
| 74 | 7354.34 | **-5**.03 | |
| 75 | 7348.81 | -5.53 | |
| 76 | 7342.81 | **-6** | |
| 77 | 7336.4 | -6.41 | |
| 78 | 7329.54 | -6.86 | |
| 79 | 7322.18 | **-7**.36 | |
| 80 | 7314.18 | **-8** | |
| 81 | 7305.49 | -8.69 | |
| 82 | 7296.01 | **-9**.48 | |
| 83 | 7285.71 | **-10**.3 | |
| 84 | 7274.61 | **-11**.1 | |
| 85 | 7262.86 | -11.75 | |
| 86 | 7250.5 | **-12**.36 | |
| 87 | 7237.61 | -12.89 | |
| 88 | 7224.23 | **-13**.38 | |
| 89 | 7210.46 | -13.77 | |
| 90 | 7196.27 | **-14**.19 | |
| 91 | 7181.61 | -14.66 | |
| 92 | 7166.35 | **-15**.26 | |
| 93 | 7150.47 | -15.88 | |

| | | | |
|---|---|---|---|
| 94 | 7133.84 | -16.63 | |
| 95 | 7116.45 | -17.39 | |
| 96 | 7098.27 | -18.18 | |
| 97 | 7079.48 | -18.79 | |
| 98 | 7060.11 | -19.37 | |
| 99 | 7040.25 | -19.86 | |
| 1900 | 7019.97 | -20.28 | |
| 1 | 6999.3 | -20.67 | |
| 2 | 6978.27 | -21.03 | |
| 3 | 6956.83 | -21.44 | |
| 4 | 6934.83 | -22 | |
| 5 | 6912.29 | -22.54 | |
| 6 | 6889.05 | -23.24 | |
| 7 | 6865.07 | -23.98 | |
| 8 | 6840.31 | -24.76 | |
| 9 | 6814.96 | -25.35 | |
| 10 | 6789.04 | -25.92 | |
| 11 | 6762.62 | -26.42 | |
| 12 | 6735.7 | -26.92 | |
| 13 | 6708.49 | -27.21 | |
| 14 | 6680.94 | -27.55 | |
| 15 | 6653.03 | -27.91 | |
| 16 | 6624.6 | -28.43 | |
| 17 | 6595.71 | -28.89 | |

| | | | |
|---|---|---|---|
| 18 | 6566.19 | -29.52 | |
| 19 | 6535.98 | -30.21 | |
| 20 | 6505.02 | -30.96 | |
| 21 | 6473.54 | -31.48 | |
| 22 | 6441.54 | -32 | |
| 23 | 6409.1 | -32.44 | |
| 24 | 6376.23 | -32.87 | |
| 25 | 6343.18 | -33.05 | |
| 26 | 6309.91 | -33.27 | |
| 27 | 6276.42 | -33.49 | |
| 28 | 6242.56 | -33.86 | |
| 29 | 6208.42 | -34.14 | |
| 30 | 6173.82 | -34.6 | |
| 31 | 6138.7 | -35.12 | |
| 32 | 6102.98 | -35.72 | |
| 33 | 6066.88 | -36.1 | |
| 34 | 6030.39 | -36.49 | |
| 35 | 5993.61 | -36.78 | |
| 36 | 5956.51 | -37.1 | |
| 37 | 5919.39 | -37.12 | |
| 38 | 5882.23 | -37.16 | |
| 39 | 5845.03 | -37.2 | |
| 40 | 5807.67 | -37.36 | |
| 41 | 5770.28 | -37.39 | |
| 42 | 5732.65 | -37.63 | |

| | | | |
|---|---|---|---|
| 43 | 5694.73 | -37.92 | |
| 44 | 5656.41 | **-38**.32 | |
| 45 | 5617.94 | -38.47 | |
| 46 | 5579.27 | -38.67 | |
| 47 | 5540.51 | **-38.76** | Starting from April 2, 1947, I will embark on a search for the 3 Points of the Group B, namely the 1st Max, Point No3, and Point No4, as I have observed the 1st Max Pyramid. This search will be conducted on a daily basis, taking into consideration Pluto's extremely slow orbital speed. Between 1947 and 1948, the increment is a mere 0.11, while from 1948 to 1949, the decrease is only 0.23. The number of the MAX increment between these dates will help us to locate the 1st Max, Point No3, and Point No4, which may be found close but after the aforementioned years. Typically, during long periods, the number of the Max will manifest numerous times before the rapid change or decrease (Point No3) on the orbital speed is observed. The only reliable way to pinpoint the exact location of these 3 Points is to check day-by-day until the difference by the Max is observed to be -0.02 (Yes, even the longest period |

| | | | |
|---|---|---|---|
| | | | usually has the -0.02 difference by the Max). |
| 48 | 5501.64 | **-38.87** | |
| 49 | 5463 | **-38.64** | |
| 50 | 5424.57 | -38.43 | |
| 51 | 5386.42 | -38.15 | |
| 52 | 5348.44 | **-37**.98 | |
| 53 | 5310.82 | -37.62 | |
| 54 | 5273.36 | -37.46 | |
| 55 | 5236.04 | -37.32 | |
| 56 | 5198.74 | -37.3 | |
| 57 | 5161.69 | -37.05 | |
| 58 | 5124.87 | **-36**.82 | |
| 59 | 5088.37 | -36.5 | |
| 60 | 5052.21 | -36.16 | |
| 61 | 5016.7 | **-35**.51 | |
| 62 | 4981.88 | **-34**.82 | |
| 63 | 4947.84 | -34.04 | |
| 64 | 4914.56 | **-33**.28 | |
| 65 | 4882.19 | **-32**.37 | |
| 66 | 4850.63 | **-31**.56 | |
| 67 | 4819.82 | **-30**.81 | |
| 68 | 4789.67 | -30.15 | |
| 69 | 4760.37 | **-29**.3 | |
| 70 | 4731.88 | **-28**.49 | |

| | | | |
|---|---|---|---|
| 71 | 4704.28 | -27.6 | |
| 72 | 4677.6 | -26.68 | |
| 73 | 4652.11 | -25.49 | |
| 74 | 4627.85 | -24.26 | |
| 75 | 4604.95 | -22.9 | This "gap" is because we are checking by year. No such "gaps" exist when we check by month or by day (I found a really smooth/scalar pattern). See also the "almost anti-symmetric pattern" that is a rigorous criterion on the classification. |
| 76 | 4583.45 | -21.5 | |
| 77 | 4563.47 | -19.98 | |
| 78 | 4544.95 | -18.52 | |
| 79 | 4527.84 | -17.11 | |
| 80 | 4512.06 | -15.78 | |
| 81 | 4497.69 | -14.37 | |
| 82 | 4484.68 | -13.01 | |
| 83 | 4473.06 | -11.62 | |
| 84 | 4462.85 | -10.21 | |
| 85 | 4454.18 | -8.67 | |
| 86 | 4447.13 | -7.05 | |
| 87 | 4441.8 | -5.33 | |

| | | | |
|---|---|---|---|
| 88 | 4438.26 | -3.54 | Between these dates is the **Group C** (Point No5, Point No6 Peri-LAEC and Point No7) |
| 89 | 4436.57 | -1.69 | |
| 90 | 4436.71 | 0.14 | |
| 91 | 4438.59 | 1.88 | |
| 92 | 4442.17 | 3.58 | |
| 93 | 4447.35 | 5.18 | |
| 94 | 4454.05 | 6.7 | |
| 95 | 4462.25 | 8.2 | |
| 96 | 4471.92 | 9.67 | |
| 97 | 4483.02 | 11.1 | |
| 98 | 4495.59 | 12.57 | |
| 99 | 4509.7 | 14.11 | |
| 2000 | 4525.45 | 15.75 | |
| 1 | 4542.78 | 17.33 | |
| 2 | 4561.71 | 18.93 | |
| 3 | 4582.15 | 20.44 | |
| 4 | 4604.08 | 21.93 | |
| 5 | 4627.24 | 23.16 | |
| 6 | 4651.57 | 24.33 | |
| 7 | 4676.97 | 25.4 | |
| 8 | 4703.41 | 26.44 | |
| 9 | 4730.67 | 27.26 | |

| | | | |
|---|---|---|---|
| 10 | 4758.81 | **28**.14 | |
| 11 | 4787.84 | **29**.03 | |
| 12 | 4817.89 | **30**.05 | |
| 13 | 4848.85 | 30.96 | |
| 14 | 4880.77 | **31**.92 | |
| 15 | 4913.61 | **32**.84 | |
| 16 | 4947.37 | **33**.76 | |
| 17 | 4981.75 | 34.38 | |
| 18 | 5016.71 | 34.96 | |
| 19 | 5052.14 | **35**.43 | |
| 20 | 5088.02 | 35.88 | |
| 21 | 5124.08 | **36**.06 | |
| 22 | 5160.35 | 36.27 | |
| 23 | 5196.85 | 36.5 | |
| 24 | 5233.74 | 36.89 | |
| 25 | 5270.88 | **37**.14 | |
| 26 | 5308.41 | 37.53 | |
| 27 | 5346.32 | 37.91 | |
| 28 | 5384.65 | **38**.33 | |
| 29 | 5423.12 | 38.47 | |
| 30 | 5461.74 | 38.62 | |
| 31 | 5500.41 | **38.67** | Here I'll do the same I did for Group B. Starting from April 2, 2031, I will embark on a search for the 3 Points of the **Group D**, namely the 2$^{nd}$ Max, Point |

| | | | |
|---|---|---|---|
| | | | No8, and Point No9, etc. The only reliable way to pinpoint the exact location of these 3 Points is to check day-by-day until the difference by the Max is observed to be -0.02. |
| 32 | 5539.11 | **38.70** | |
| 33 | 5577.56 | **38.45** | |
| 34 | 5615.79 | 38.23 | |
| 35 | 5653.83 | 38.04 | |
| 36 | 5691.82 | **37**.99 | |
| 37 | 5729.65 | 37.83 | |
| 38 | 5767.48 | 37.83 | |
| 39 | 5805.34 | 37.86 | |
| 40 | 5843.3 | 37.96 | |
| 41 | 5881.11 | 37.81 | |
| 42 | 5918.79 | 37.68 | |
| 43 | 5956.25 | 37.46 | |
| 44 | 5993.49 | 37.24 | |
| 45 | 6030.2 | **36**.71 | |
| 46 | 6066.43 | 36.23 | |
| 47 | 6102.16 | **35**.73 | |
| 48 | 6137.54 | 35.38 | |
| 49 | 6172.47 | **34**.93 | |
| 50 | 6207.11 | 34.64 | |
| 51 | 6241.53 | 34.42 | |
| 52 | 6275.82 | 34.29 | |

| | | | |
|---|---|---|---|
| 53 | 6309.76 | **33**.94 | |
| 54 | 6343.41 | 33.65 | |
| 55 | 6376.66 | 33.25 | |
| 56 | 6409.54 | **32**.88 | |
| 57 | 6441.75 | 32.21 | |
| 58 | 6473.32 | **31**.57 | |
| 59 | 6504.24 | **30**.92 | |
| 60 | 6534.62 | 30.38 | |
| 61 | 6564.4 | **29**.78 | |
| 62 | 6593.75 | 29.35 | |
| 63 | 6622.74 | **28**.99 | |
| 64 | 6651.49 | 28.75 | |
| 65 | 6679.84 | 28.35 | |
| 66 | 6707.82 | **27**.98 | |
| 67 | 6735.39 | 27.57 | |
| 68 | 6762.52 | 27.13 | |
| 69 | 6788.98 | **26**.46 | |
| 70 | 6814.75 | **25**.77 | |
| 71 | 6839.8 | 25.05 | |
| 72 | 6864.24 | **24**.44 | |
| 73 | 6888 | **23**.76 | |
| 74 | 6911.25 | 23.25 | |
| 75 | 6934.06 | **22**.81 | |
| 76 | 6956.54 | 22.48 | |

| | | | |
|---|---|---|---|
| 77 | 6978.57 | 22.03 | |
| 78 | 7000.2 | **21**.63 | |
| 79 | 7021.36 | 21.16 | |
| 80 | 7042.03 | **20**.67 | |
| 81 | 7062 | **19**.97 | |
| 82 | 7081.23 | 19.23 | |
| 83 | 7099.68 | **18**.45 | |
| 84 | 7117.42 | **17**.74 | |
| 85 | 7134.41 | **16**.99 | |
| 86 | 7150.8 | 16.39 | |
| 87 | 7166.68 | **15**.88 | |
| 88 | 7182.14 | 15.46 | |
| 89 | 7197.12 | **14**.98 | |
| 90 | 7211.66 | 14.54 | |
| 91 | 7225.72 | 14.06 | |
| 92 | 7239.27 | **13**.55 | |
| 93 | 7252.14 | **12**.87 | |
| 94 | 7264.26 | 12.12 | |
| 95 | 7275.6 | **11**.34 | |
| 96 | 7286.19 | **10**.59 | |
| 97 | 7296.04 | **9**.85 | |
| 98 | 7305.28 | 9.24 | |
| 99 | 7314 | **8**.72 | |
| 2100 | 7322.25 | 8.25 | |

| | | | |
|---|---|---|---|
| 1 | 7330.08 | 7.83 | |
| 2 | 7337.49 | 7.41 | |
| 3 | 7344.45 | 6.96 | |
| 4 | 7350.91 | 6.46 | |
| 5 | 7356.73 | 5.82 | |
| 6 | 7361.84 | 5.11 | |
| 7 | 7366.16 | 4.32 | |
| 8 | 7369.7 | 3.54 | |
| 9 | 7372.49 | 2.79 | |
| 10 | 7374.62 | 2.13 | |
| 11 | 7376.2 | 1.58 | |
| 12 | 7377.27 | 1.07 | |
| 13 | 7377.89 | **0.62** | |
| 14 | 7378.06 | **0.17** | Between these dates is the **new Aphe-LAEC** |
| 15 | 7377.77 | **-0.29** | |

Let's check the data day-by-day for the 10 Points and check Pluto if meets some of the rest criteria.

## 1) *Checking for the* 10 *Points day – by – day*

Note: The tables were long so, I'll present you only the results to check them later by yourself if you wish.

## $I. Group\ A\ (Points\ No10, No1 - Aphe - LAEC - \ and\ No2)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No10 | 01/4/1866 | 7375.49 |
| No1 | 02/4/1866 | 7375.50 |
| No2 | 08/8/1866 | 7375.49 |

## $II. Group\ B\ (1st\ Max\ and\ Points\ No3\ and\ No4)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 1st Max<br>(-0.11 on the 3rd column) | 17/7/58 | 5114.23 |
| No3<br>(Here manifests the rapid decrease; from -0.11 goes to -0.09 – which is the -0.02 difference that we expect to see after the 1st Max) | 23/12/58 | 5098.34 |
| No4 | 28/1/59 | 5094.75 |

## $III. Group\ C\ (Points\ No5, No6 - \ Peri - LAEC - \ and\ No7)$

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| No5 | 5/8/89 | 4436.42 |

| | | |
|---|---|---|
| No6 | 6/8/89 | 4436.41 |
| No7 | 5/10/89 | 4436.42 |

## *IV. Group D (2nd Max and Points No8 and No9)*

| Points | Date | Distance from the Sun in million km |
|---|---|---|
| 2nd Max<br>(+0.11 on the 3rd column) | 31/1/45 | 6024.11 |
| No8<br>(Here manifests the rapid decrease; from +0.11 goes to +0.09 – which is the -0.02 difference that we expect to see after the 2nd Max) | 26/3/45 | 6029.50 |
| No9 | 31/5/45 | 6036.09 |

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## About Anna G.

Anna G. is a renowned Greek author, researcher, and publisher, born in the village of Exo Mouliana in Crete in 1982. With 34 published books, her most notable work is "Spinalonga: The True Story," which has achieved the status of a two-time bestseller in Greece and a five-time number one bestseller globally in the category of "History of Greece." Her books are sold in 84 countries around the world. During her spare time, she writes plays and screenplays for theater and feature films. Although her works vary in subject matter, they all adhere to the four criteria that distinguish Anna G.'s writing: 1) a thorough study of the subject matter, 2) an analysis of data and patterns for possible gaps, 3) the creation of a “book/script/play-proposal”, and 4) the usefulness of the work at a social, artistic, historical, or scientific level. She is a humorous and caring mother who believes that children and young people can change the world. Currently, she runs Opsidianos Publications and is preparing her 35th book - a scientific observation that builds on the present one, in which she will demonstrate to the reader the types of calculations used to determine the 10 Zones above the surface of a LAECsp (for example, the Z9/The "Moons'/Satellites' Orbiting Zone, etc.). Additionally, she oversees the development of a play approved by the Ministry of Culture of Cyprus, which will be performed in all schools in Cyprus from September 2023, as well as writes screenplays for another play, an animated short film, and two feature-length films.