

Astronomical Dating and Interpretation of the Asfendos Crete Cave Rockgraph

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Citation: Fili, M, Z., (2025). Astronomical dating and interpretation of the Asfendos Crete cave rockgraph. *Herança*, 8(3), 28-50. <https://doi.org/10.52152/heranca.v8i3/1162>

ARTICLE INFO

Received: 02 July 2025

Accepted: 18 July 2025

ABSTRACT

It is concluded that hammer cyclic dents in shapings depict the constellations of Sagittarius, Scorpio, Libra, Ophiuchus, Ofis, Hercules. They stress the exact position of Venus, of Hermes and of the Moon and they are complemented by the symbol of the Sun. The depiction of the Sky on the rockgraphs is identified with the depiction that we received from the astronomical programme Stellarium on the 20th of August in 10,892 B.C. Looking at the sky in the summer from the Asfendos, you can see the edge of the Galaxy going through the Sagittarius constellation and in the position of the Sagittarius A* there is the Black Hole, the centre of our Galaxy. Also, in an orbit around the Sun, there is a depicted comet which, when combined to the date, leads to the case of an asteroid falling on planet Earth, that may be a possible cause of the glacier period “Younger Dryas” causing flooding phenomenons in the area of the Mediterranean Aegean sea, just like the Ogigus cataclysm and the Atlantis sinking us well. On the Asfendos rockgraph, the Cretan deer *Candiacervus* being eliminated before 21,500 B.C, is illustrated. On the rockgraph, spears with leaf shaped edges like Clovis point (11,500–9,000), are depicted. Symbols, such as breakeven cross, arrows, ships, a sprout and deers, are evolving on ideograms of the Cretan Hieroglyphic Scripture and of the Grammic A and B Scripture too.

Keywords: Constellations, Comets, Younger Dryas-10,892, Glovis, Atlantis.

INTRODUCTION

The purpose of the present research is the interpretation and the astronomical dating of the rockgraph of the Asfendos cave Crete.

The Asfendos cave is situated in the northeast of the Asfendos Sfakia settlement in the position Skordolakia in north Chania, in an altitude of almost 720 m, in Lefka Ori of the west Crete. The cave is oriented North-South having the entry facing the South, with the view to the Asfendos Canyon and to the South Cretan Sea. The total dimensions are small, 8.5 m×3 m, with a low roof (0.60 m) as shown in [Figure 1](#). This is the only preserved hall in which the rockgraphs occupy an area of almost 1.15 m×0.8 m on the stalagmites floor of the cave.

The engraving subject presents deers, bows, arrows, a ship with a sail and two smaller ladders, a big star and many indents in formations, as depicted in [Figure 2](#).

In the summer of 1957, the rockgraphs were indicated, by the residents of the area, to the architect Mr. Chris Papoutsakis, who published a study with this topic in 1972.

The first archaeologists' references to this specific location arouse in the beginning of the 70's (Faure, 1972, Hood, 1974, Papoutsakis, 1972, Tzedakis, 1973, Zois, 1973a, Zois, 1973b) as it is mentioned in the research Palaeolithic cave art from Crete, Greece (Strasser, et al., 2018). The successive covering and the rockgraph variety reveal long and continuous use of the cave. The architect C. Papoutsakis and the university professor of archaeology A. Zois believe that it dates back to the Mesolithic period (11,000 – 9,000 years ago). “A. Zois is

wondering whether some of the engravings belong to the Superior Paleolithic period (40,000–11,000 years ago) (Liakopoulos, 2012). The Asfendos ground engravings drew the American, from the Department of Art History at Providence college of the USA, scientific team's attention by Strasser, Sarah, Van der Geer, Kolb and Ruprecht (2018), made a research in the cave in 2016 using the modern method of Photogrammetry (Structure - from - Motion). The results of this research combined with recent findings from Paleontological studies in deers' skeletons similar to those depicted on the ground of the cave, set the Asfendos rockgraphs' creation in the chronological context from 21,500 up to 11,000 BC.



Figure 1. External Aspect of Asfendos Cave.
(T. Strasser)

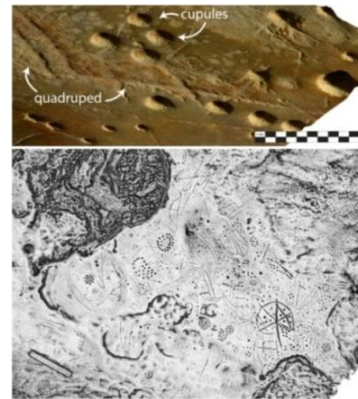


Figure 2. Internal Aspect of Asfendos Cave Rockgraphs. (S. Murray)

MATERIALS

Different Level Diagrams on Asfendos rockgraphs

Level 0—Total Depiction of Rockgraphs

The American scientific team processed the three dimension photo material and afterwards they created a chart on layers of the rockgraphs' surface, taking into account the engraving depth of the sketches, the different engraving methods and the use of uneven tools being traced. The specific depictions form the basic material of the present study. In Figure 3, there is the representation of all the rockgraphs as we see them nowadays illustrated on the design with the name "Level 0".



Figure 3. Level 0—Diagram of all Rockgraphs in Asfendos (S. Murray and C. Kolb)

Level 1—Deep Engravings

According to the above mentioned research (Strasser, et. al, 2018), some of the rockgraphs were chased later by other rockgraphs, showing this way a time sequence and a persistent use of the space leading to a continuous creation of new chased designs through the millennia.

The superior and chronologically most recent (to us) level of rockgraphs, was called “Level 1” as shown in Figure 4.

It includes graphic Figures such as a “ship” with a sail and two smaller luggers being stressed with a red outline. Also, what is important is a “star” that we stressed with a yellow outline. It is a graphically designed, almost a cyclic symbol, with an interjection of a vertical line and of two diagonal lines of less depth. This important symbol represents the Solar wheel.

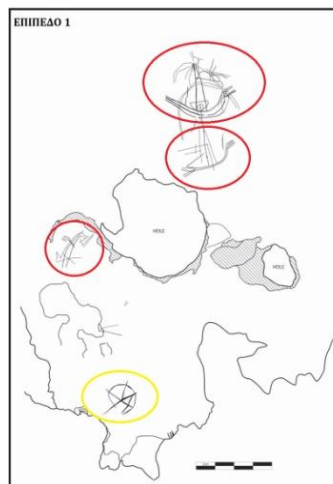


Figure 4. Level 1—Rockgraphs of Level 1 (S. Murray and C. Kolb). Colour highlighting by M. Fili

Level 2—Dents (Chuckholes)

The next low level is the so-called Level 2, which includes “abstract sums”, as shown in Figure 5, of small cavities or chuckholes, deeply hammered on the limestone floor, as shown in detail in Figure 6. The method of photogrammetry clarified that different tools used for the creation of every single layer of engravings as we can understand when looking at Level 2.

In the panoramic depiction included in Figure 5, we can only see the Level 2 formations consisted of many round cavities - chuckholes, smaller or larger, which are, approximately 797 in total, forming closed or open spiral shapes (Liakopoulos, 2012).



Figure 5. Rockgraphs Ground Plan of Level 2 (S. Murray and C. Kolb)

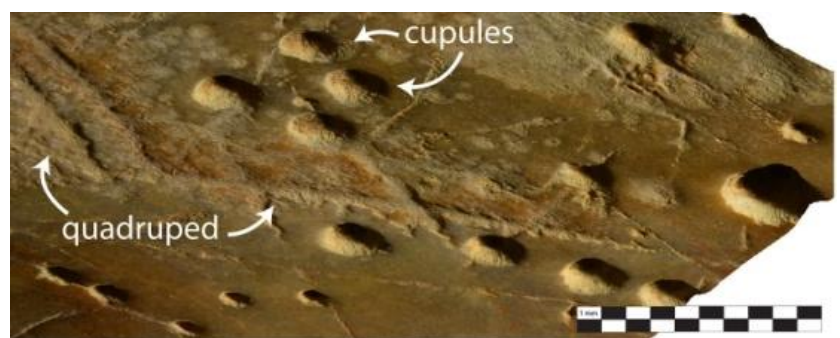


Figure 6. Cavities—Dents on the Floor of Asfendos Cave (S. Murray and P. Sapirrstein) Detail

These dents were constructed with the technique of direct strike, using hard rocks as a manual hammer with a round edge as shown in Figure 7. The tools and the phases of cavities' creation with this technique, is analytically shown in Figure 8 (Giriraj, and Krishna, 2014).

The small chuckholes are technically constructed bowls made with diligence and caution on the flat rocky surface of Asfendos cave. They generally constitute characteristic decorative elements in the Art of Rocks. Upon

vertical, tilting or horizontal rock surfaces, similar small hemispherical cavities have been hammered, in many locations in Greece, but they are also found in Europe and even further up to India.



Figure 7. Stone Hammer (Stone Hammer)

(This way the ground cavities of Asfendos cave are constructed, as shown in Figures 5-6)



Figure 8. Carving Style of Cavities

Carved ships along with the same cavities in spiral pattern, as shown in Figure 9 but in different spots in the same archaeological site as in Figure 10, are found chased in Strofilas in the island of Andros in one of the most significant rockgraphs, which, according to a rough dating 3,520 ($\pm$ 540) BC, the main settlement is attached to the ultimate Neolithic era (Liritzis, 2010).



Figure 9. Design Illustration of Ships. Dr, X.S. Televantou



Figure 10. Strofilas in Andros, Rockgraphs, Small Cavities in Spiral Pattern

We meet the same small cavities on the rockgraphs of Paggaio in Kavala Pholea. In Figure 11, there is a comparison of rockgraphs, a comparison between Pholea Kavala and Asfendos cave Crete (Ataktidis, K., “Οι βράχοι της Καβάλας μαρτυρούν τον χαμένο πολιτισμό της” – “Kavala rocks reveal its lost civilization” [SCRIBD] 8/9 pages). In both regions there are identical and relative elements depicted like ladders, cyclical dents in shapes, many scripture symbols and the star with rays too. All the above, constitute symbols of message exchange as navigation requires astronomy knowledge, communication language and scripture.

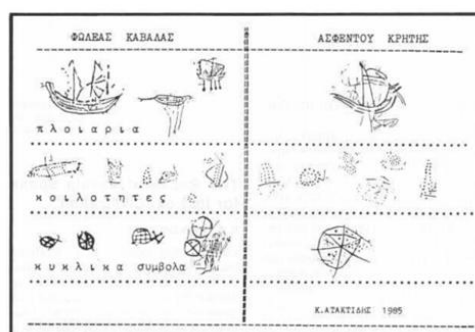


Figure 11. Rockgraph Comparison from Pholea in Kavala and from Asfendos Crete (Ataktidis An. Kostas, Cave researcher of E.S.E)

Level-3 and Level-4

In [Figure 12](#), the rockgraphs of Level 4 being depicted in light blue colour and the rockgraphs of Level 3 in yellow colour, according to the recent study Palaeolithic cave art from Crete, Greece (Strasser, et al, 2018).

The Palaeolithic Cretan engraver or hunter, who first entered the cave being inspired by the region's fauna and by the hunting activity, engraves on Level 4 there are in [Figures 12–13](#) and [14](#), bows with arrows, spears, brunches and a herd of deers. The scientific conclusions, according to the method of photogrammetry, claim that Level 4 is the most ancient layer and illustrates a Palaeolithic herd of thirty-seven (37) deers.

The animals were created during the Plistokaino era, meaning 21,000 up to 11,000 years BC, during the last period of the Glacier era in Crete! After the publication of the designs of the Asfendos cave floor in 1970, where deers with unusual long uneven horns are depicted, plenty fossilised material of dwarf deers was discovered similar to the Asfendos rockgraphs, in coastal caves along the north shore of Crete. The whole material being studied from the uneven *Candiacervus* deers' horns from the Wolf's caves and from the Gerani Crete caves, is housed in the museum of Palaeontology and Geology of the Kapodistrian University of Athens.

In the above mentioned conclusions of the study (Strasser, et al., 2018), there is the following statement: "The last appearance of the Cretan dwarf deer *Candiacervus* 21,000 years ago, provides a chronological limit to the most ancient layer of rockgraphs of Asfendos cave and it confirms that the rockgraphs are the most ancient decorative art found up to now in Greece".

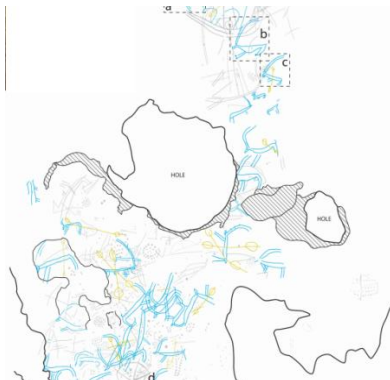


Figure 12. Rockgraphs Level-3 with Yellow Colour and Level-4 with Light Blue Colour (S. Murray and C. Kolb)

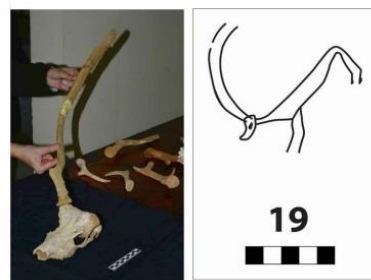


Figure 13. Skull and Single Horn of the Dwarf Deer *Candiacervus* (S. Murray and C. Kolb)

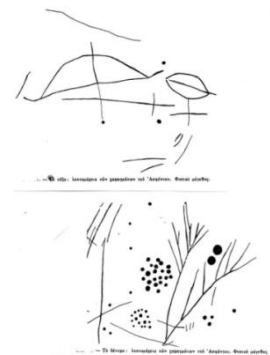


Figure 14. Bow and Branch-Sprout Details of [Figure 3](#) in Asfendos Engravings (S. Murray and C. Kolb)

Initially, the deers were chased on the most ancient Level 4 as illustrated in light blue colour in two details (a–b) in [Figure 12](#) and subsequently on Level 3 the animals were chased illustrating hunting spears with leaf shaped lances (yellow colour). It is easy to discern the detail (b) that in [Figure 12](#) except for the hunting spears, there is a unique special stem designed on a deer and it looks like there is a star on the top. It is similar to the deeply chased star on Level 1, depicted in [Figure 4](#). It is the central astronomical symbol which represents the Solar wheel.



Details (a–b) from [Figure 12](#)

METHODS

Identification of Constellations Imprinted on Level 1 and Level 2

Interaction of Engravings

The verb “write”, as far as its first meaning is concerned, means “scrape and engrave spots” (Dictionaries: LIDDELL & SCOTT - STAMATAKOU - PAPYRUS LARUS, Volume A). Later the word “write” acquired the meaning of represent, express something with lines and written elements.

In this particular occasion of Asfendos cave, it will be figured out what the engraved symbols, [Figure 15](#), mean together with the forged deep-set shapes, on the Cretan cave floor depicted in [Figure 16](#).



Figure 15. Engravings on the Floor of Asfendos Cave (Photo: Christopher Chiladakis)

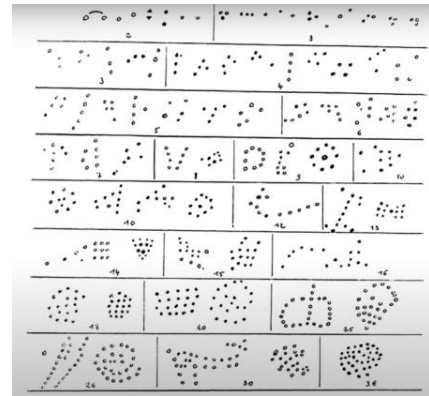


Figure 16. Formations and Cavities in Asfendos Cave (The oldest Art Greece is not what you think. Rare Earth. Video 4:37/8:07)

The big Surprise is that there are the same shapes and the same curls with the “Starry Night” Van Gogh, just like shown in [Figures 17](#) and [18](#). According to new scientific studies, the technique of representing the curl in “Starry Night” is similar to the curl and to the noisy flow found in real stellar clouds (Beattie, & Kriel, 2019).

Thus, in the arrangement shown in [Figure 18](#), the round dents reflect the constellation shapes creating the “Starry Night of Asfendos”.



Figure 17. The “Starry Night”, oil painting by Vincent Van Gogh 1889 (It has been in the permanent collection of the Modern Art Museum in New York since 1941)

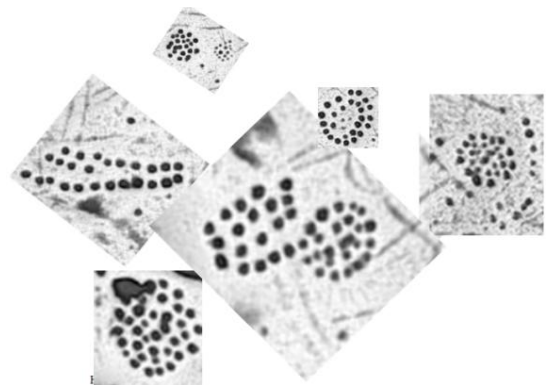


Figure 18. Cavities in Shapes from Asfendos Cave (Composition M. Fili)

Through the methodology and the technique of the spots united with lines depicted in [Figure 19](#), an interesting topic is which constellations we identify on the cave floor.

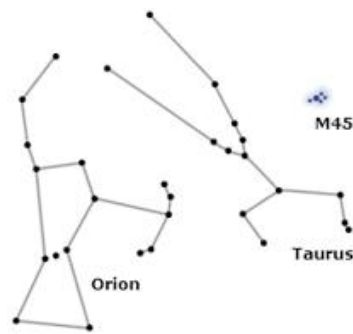


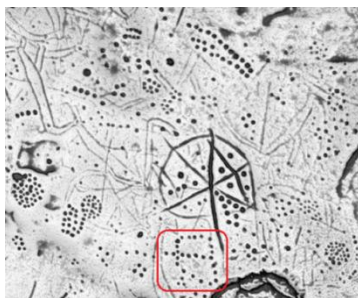
Figure 19. Constellations

Sagittarius Constellation

Having as a motive its characteristic shape, the first constellation we track down easily on the floor shapes, as depicted in the repetition of Figure 2, is the Sagittarius constellation!

Some former astronomical charts depict Sagittarius as a bow with an arrow as in Figure 20. In the science of Astronomy, in many languages, the constellation is just called "Bow". It is visible from Greece with the best sightings in July and in August too. In the book of Yginus entitled "*Astronomy: Poeticon Astronomicon*", 2014, Evandros editions, offers a piece of information that has to do with the bow which is divided in the middle by the galactic circle.

Aratus instead of the naming Sagittarius, also gives the names Archer and Bow Stretcher (the one who stretches the bow). In other Greek writers we face the variation Bower, whereas Eratosthenes, Hipparchus, Pluto and Ptolemeos agree with the term Sagittarius. Romans claimed that Sagittarius was the astrological sign of goddess Artemis using the term: Diana Sidus, and believed that it was related to fertility.



Repetition of Figure 2. Detail of Asfendos cave. Design Intervention 1 (M. Fili) in Figure 2

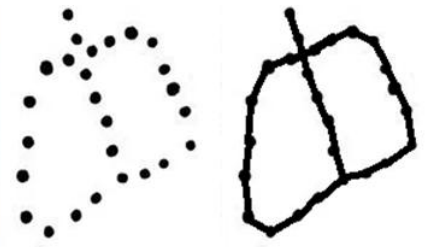
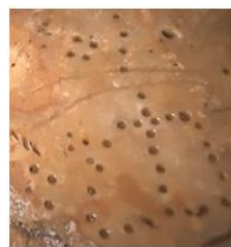
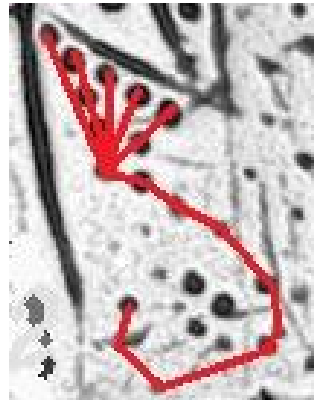
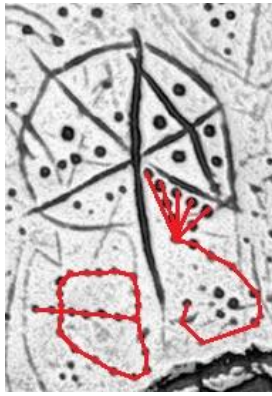


Figure 20. Asfendos cave floor - Bow design (The oldest Art in Greece is not what you think. Rare Earth. Video 4:37/ 8:07). (Shape Collation M. Fili)

Scorpio Constellation

On the rockgraph, Scorpio constellation is imprinted with the shaping accuracy of Figure 21 and in the right position too: on the right of the Sagittarius since it borders it, according to the contemporary astronomical charts. As far as the North hemisphere observers are concerned, Scorpio appears in the south sky.

Aratus narrates that Orion exterminated every prey in Chios island. One day, he dared to try to unite violently with goddess Artemis and then the goddess sent a big scorpion against him that killed him. Thus, when Scorpio rises from the east, Orion heads for the West, up to the world's boundaries (Aratos the Soleus, *Phenomena and Diosemeia*, 636 - 644 -645 - 646). Except for Sagittarius which was the astrological sign of goddess Artemis, we figure out that Scorpio has a direct relation to goddess Artemis as well.



Repetition of Figure 2. Design intervention 2 (M. Fili) and on the right there's a detail from the same Figure



Figure 21. Scorpio Constellation (Wikipedia)

Libra Constellation

The constellation of Libra, as it is shown in Figures 22 and 23, as well as in the design intervention 3, is situated in the absolutely correct neighboring position with the Scorpio according to the astronomical chart of the Sky and of Asfendos as well.

Initially, in the Greek Astrology Libra was a part of Scorpio known as Xile Scorpio, meaning the “Scorpio’s Claws”, which we find with this designation in Eratosthenes, in Aratus and in the zodiac circle imprinted on the Mechanism of Antikythera as well.

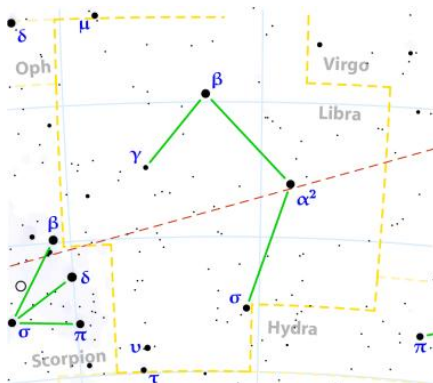


Figure 22. Libra Constellation



Figure 23. Libra Constellation

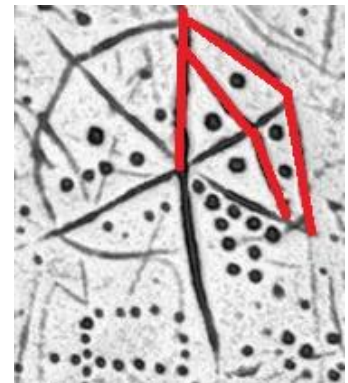


Figure 2 repetition. Design intervention 3 (Magda Fili)

Ophiuchus and Ofis Constellation

Another two neighboring constellations are registered in their correct position on the astrological chart of the cave since the Scorpio constellation borders the Ofis and the Ophiuchus as well, as depicted in Figure 24! The Ophiuchus constellation is illustrated as a person who is supporting a snake (the Ofis constellation) as shown in Figure 25. In the middle of the Ofis constellation, there is the obvious Ophiuchus constellation. In Greek mythology the god of Health and Medicine, Asklepios is represented in the starry sky by the Ophiuchus constellation, while the snake wrapped around his rod is the Ofis constellation.

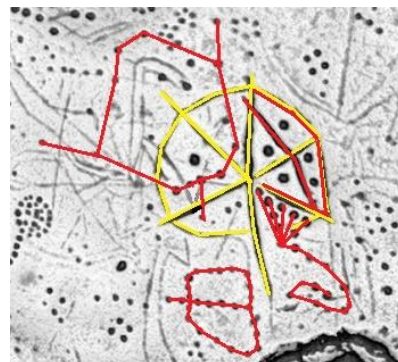
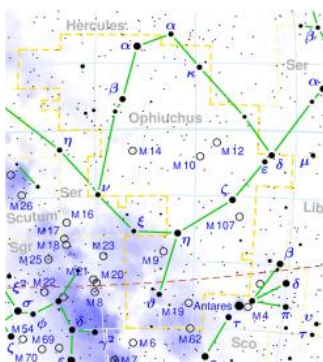


Figure 25. Artistic Representation of

Figure 24. Ophiuchus and Ofis constellations (Ophiuchus - Wikipedia)

Figure 2 repetition. Design intervention 4 (M. Fili)

the Constellations of Ophiuchus and Ofis (Stellarium)

Hercules Constellation

The constellation of Hercules is also imprinted, as illustrated in [Figures 26](#) and [27](#), which is located among the following constellations: Ophiuchus and Ofis, Dragon, North Stephan and Lyre. Hercules borders Vootis. Despite its big size though, it is a vague constellation. Let's not forget though that Hercules is characterized as a mighty archer since, with his flawless arrows, kills the Stymphalides hens as well as the eagle that Zues had sent, relieving this way Promitheas from his torture. Also, Appolodorus narrates that in the third achievement of Hercules, the Kerinitida deer, since Hercules didn't want to kill it, was being hunted for a whole year. The exhausted animal while trying to cross the river Ladonas, was hurt by an arrow, so this way Hercules caught it alive.

It is the achievement that directly connects to Goddess Artemis and to the hunting of her sacred animal. Since the hero completed, being obliged to do so, the twelve achievements, "two years after his last achievement, in 1256 BC, Hercules fell in love with Ioli, Euritus' daughter. Her father (bowman Apollo's grandson who was a remarkable archer), proclaimed a Panhellenic archery competition offering Ioli as a prize. Hercules bit him, but Euritus and his son...", in the book: *Dating the timeless Mythology*, (Preka – Papadima, P., 2025, p. 58-63). Everything is interconnected in the multilayered Asfendos rockgraph since graven ships and constellations, sharp javelins, bows and arrows and deer hunting coexist. All these are interconnected and designed together in the cave's main topic, which directly refers to the primitive worship of the goddess of Thira, goddess Artemis.

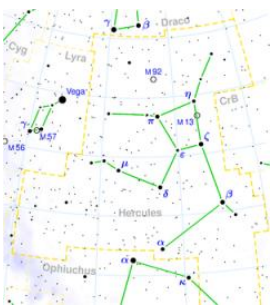
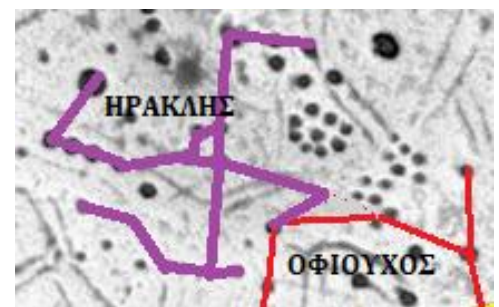


Figure 26. Hercules Constellation (Wikipedia)



Figure 27. Hercules Constellation Artistic Representation (Sidney Hall - Urania's Mirror - Hercules and Corona and Borealis.png. Wikipedia)



Hercules constellation. Design intervention 5 (M. Fili) in detail of [Figure 2](#).

The engraved information of Asfendos cave claims that together with the Hercules constellation we have six constellations of the South Sky Hemisphere on a sky chart imprinted on the cave's floor thousands years ago! It is concluded that there was astronomical knowledge and careful accurate record keeping, as well.

DISCUSSION

Astronomical Asfendos Rockgraph Dating

Astronomical Programme Stellarium

Except for the chased deep set round spots with which the constellations have been imprinted, the next important element deeply engraved, in order not to fade away as millennia pass by, is the shape of the Sun with its rays, together with the, previously mentioned, nearby five constellations. The dating of the rockgraphs of Asfendos cave range between the Mesolithic period (11,000–9,000 years ago), and maybe they belong to the Superior Palaeolithic period (40,000–11,000 years ago) according to Mr. Ch. Papoutsakis and A. Zoi's estimation. (Liakopoulos, 2012).

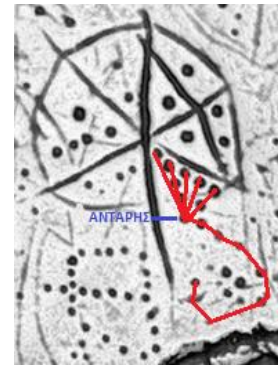
By giving the coordinates of the location of the Asfendos cave to the Stellarium program, with a starting point 11,000 BC according to X. Papoutsakis' and A. Zois' opinion, and the summer as a calendar season, the search began according to the route of the sun.

The apparent Sun's motion over the zodiac circle is something that has always been true. Thus, for a period of time the Sun is projected on the sign of Scorpio. The Sun's projection on the Scorpio doesn't exactly follow the same route through the millennia due to the phenomenon of Equinox' transition. This way, by going back and

forth in time we found the sun's position in Scorpio that mostly fits the rockgraph. Up to the Summer of 10,892, as you can see in [Figure 28](#), of the Stellarium programme, specifically on 20 th August 10,892, meaning 13,000 years ago, all constellations come close together with the sun during its upper culmination agreeing with the rockgraph design on the Asfendos cave floor.



Figure 28. The Sun's Position and the Star Antares' Position, from the Scorpio Constellation (Photo from the Stellarium)



Design intervention (M. Fili) in detail of [Figure 2](#)

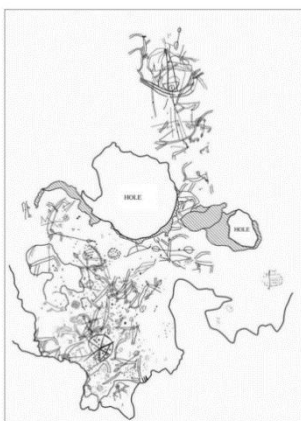
Culmination

At exactly 12 o'clock at noon all rockgraph astronomical positions identify themselves with the Stellarium Figure.

"All celestial objects: the Sun, the Moon, the Stars, due to the rotation of the celestial sphere, pass through the location's meridian, which means they pass through once above the horizon and once below it. Those passages are called meridians or culminations. As far as the Sun is concerned, the upper meridian passage is called midday, though the below meridian passage is called midnight, which is considered to be the beginning of the civil day in opposition to the culmination or midday (always referring to the sun) which is regarded as the beginning of the astronomical day. In these positions we can find simple relations that connect the height, or the zenith star distance, to its deviation and to the geographical amplitude of the area" (Meridian Passage - Wikipedia).

Rockgraphs' and Constellations' Orientation

The rockgraphs' orientation is moving towards the South to North direction. The Sun's diagram with the constellations is located on the cave's entry, meaning South. With a direction to the depth of the cave, the engraved rockgraphs with the ship on the top, stretch North to an upper direction, just as the way we look at the rockgraph diagram in [Figure 3](#). In [Figure 30](#), the rockgraphs' and constellations' orientation both have the same direction.



Repetition of [Figure 3](#). Diagram of Asfendos rockgraphs

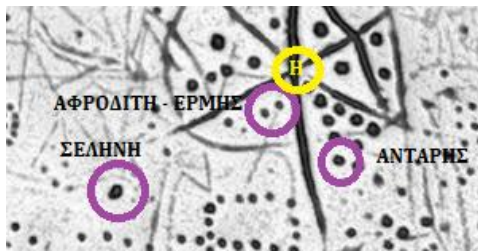


Figure 30. Panoramic Aspect of the sky with the Orientation Symbols, Stellarium Figure

The Moon - Venus - Hermes

Taking into consideration the position of the two planets Venus, Hermes, as well as the Moon's, depicted in [Figure 28](#) from the electronic program Stellarium, it is proved that they are imprinted with accuracy on the

rockgraph according to the design intervention 7. On the 20th August in – 10,892 as we see in the photos of the Stellarium and on the Asfendos rockgraph, the positions of the following celestial objects such as the Antares, the brightest star of the sign of Scorpio, the planets Hermes and Venus as well as the Moon in comparison to the Sun and to the Sagittarius, the Libra and the signs of Ophiuchus and of the Ofis, are totally identified, as illustrated on the design intervention 8!



Design intervention 7 (M. Fili) in detail of Figure 2-(a). Sun (yellow circle), Hermes, Venus, Moon and Antaris of Scorpio constellation (purple circles)



Design intervention 8 (M. Fili) in detail of Figure 2-(b). The Sagittarius, Scorpio, Libra, Ophiuchus - Ofis (red colour) constellations have been partially added



Detail of Figure 28. The Sun, Hermes, Venus, Scorpio's Antaris (Stellarium)

Ecliptic - The Sun and the Planets

There is new Figure 31 with additional information from the astronomical programme Stellarium, with the help of a strong ally (the modern technology). These new pieces of information are copied on the rockgraph as well, like this: As it is shown in the design intervention 9, the Ecliptic line added with orange colour and the Galaxy centre (GC) in red colour. The Sun's position in the centre of the beaming star is stressed (yellow colour), the planet's Hermes - Venus position, the Moon's and the star Antari's position (in purple circles). The position of the Summer solstice on the Cancer is stressed (green colour) up to the cut point of the Sun's wheel with the ecliptic line.

We figure out total identification of all the spots, plus the constellation's positions which, due to clarity reasons, haven't been added.

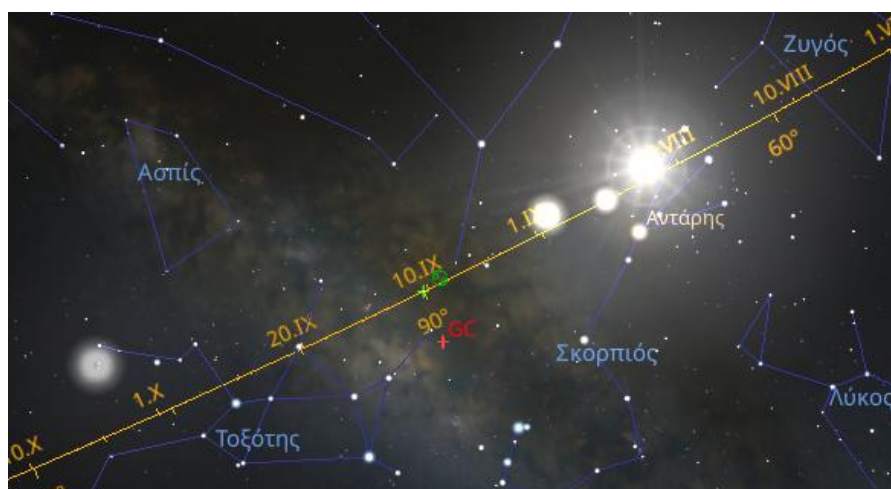
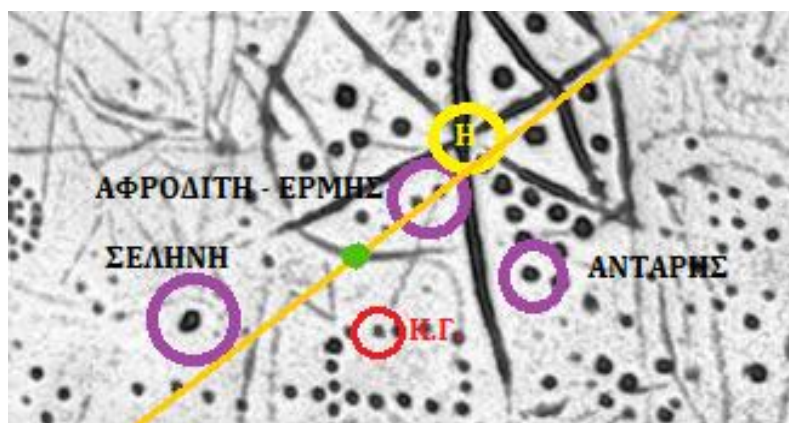


Figure 31. In a photo of the Stellarium programme there is: The Sun, Hermes Venus Antaris the Moon and the Ecliptic Line (orange line), the centre of the Galaxy - GC (GC - red colour), and the Summer Solstice in the Cancer (green spot)



Design intervention 9 in Figure 2 (M. Fili). The Sun, Hermes, Venus, Antares and the Moon. Moreover, the Ecliptic Line (orange line), the centre of the Galaxy - GC (K.F. - red colour), and the Summer Solstice in the Cancer (green spot)

The Galaxy Road and the Black Hole - The Centre of our Galaxy

Still there is something equally important in the celestial area imprinted on the Asfendos cave.

In the Night Summer sky, the edge of the Galaxy is visible from the earth. Part of the Galaxy road is visible, as illustrated in Figure 32.

In the book of Yginus entitled “*Astronomy: Poeticon Astronomicum*”, 2014, gives the information that his bow is divided in the middle from the Galaxy circle. The Sagittarius is the main actor, it is the brightest in the Galaxy level, seen from the Earth since the whole activity of the Galaxy is right there! The Sagittarius constellation is the richest and the brightest constellation in the sky, a region full of dense stellar flocks, gases and many nebulas.

Right there, in the constellation of Sagittarius, there is something literally unique! Within the limits of its creation deep in the universe, the Black Hole is located, the centre of the whole Galaxy!

In the exact position of Sagittarius A* (Sagittarius A*, Sgr A*) as Figure 33 shows, there is the Black Hole, a powerful radium source. It is the centre of our Galaxy, a black hole situated in a distance of 27,000 years of light from the Earth, depicted in Figure 34 and its mass is measured like this: the solar mass being multiplied 4,000 times.



Figure 32. Galaxy Address. Star photo Triantafilos Papagiannoulis

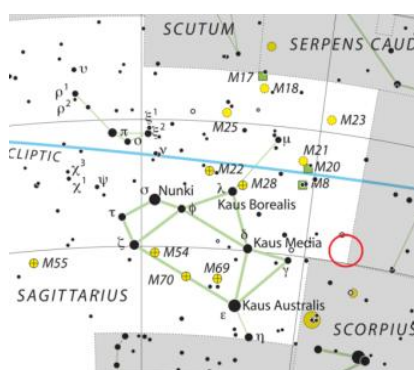


Figure 33. Sagittarius A* the Centre of our Galaxy (Wikipedia)



Figure 34. Milky Way's super massive black hole Sagittarius A* - How was it imagined? You tube, Time 05:00 / 7:05.
<https://www.youtube.com/watch?v=uhqVYj-tXA>

Comet

The “Asfendos observatory” offers a very significant piece of information, maybe the most significant of all. It is an astronomical element- its presence on the rock engravings of the cave is impressive. The truth is that it is the Figure of a comet imprinted, with an intense deepest pothole, on the starry sky of the cave, as we can see in the

design intervention number 10 in orange colour.

A burning comet like this in [Figure 35](#), with a long tail and with a vivid glow performing an orbit around the sun, is chased on the rock of the floor. Thus, on Level 2 consisting of round dents, we observe that the simultaneous presence of the comet and of all the celestial objects in 10,892 B.C, leads us straight to a certain global astronomical incident that occurred during this era. The global incident at that time is the fall of a comet or of an asteroid on Earth, which caused a huge climatic change.

Many scientists support this theory today, claiming that it is the cause of a brief return to the Glaciers' era, whereas many others fight against this theory.

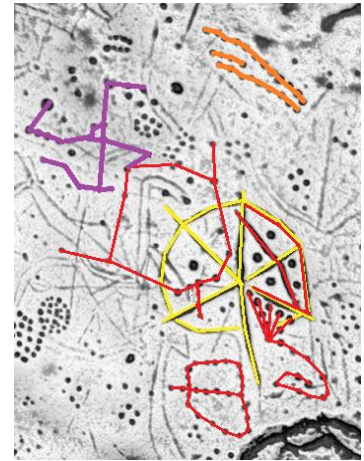
What should be stressed here, is that the deeply chased Sun's disc with its rays in Level 1, was designed if not together, probably afterwards and above the dents, how late it was designed is unknown, since there hasn't been a scientific dating of the different level of the rock graph.



Detail of [Figure 28](#).



[Figure 35](#). Comet. C/2023 A3 (Tsuchi Shan - ATLAS). Star Photo: Triantafilos Papagiannoulis. The shooting was performed in Stymfalia, Sikionas, Peloponnesus Circumference on 3rd November 2024 when the comet was 6.5 to 7 mag away



Comet (orange colour) and constellations. Design intervention 10 in [Figure 2](#) (M. Fili)

Younger - Dryas

The last era of Glaciers in the history of Earth began 115,000 years ago and came to an end 11,600 years ago. In the end of this Glacier period, while the temperatures were increasing, a global climate change occurred. As we can see in the orange region in [Figure 36](#), a brief and steep temperature drop in the largest part of the North Hemisphere as well as in the whole planet happened, having as a consequence the return of the climate to circumstances that remind us of Glaciers.

This short term Glacier era, which occurred before 10,900 or 9,700 B.C, plus/minus two or three centuries, is named "Younger Dryas" by scientists. An international team of researchers, having as a leading head, the geologist Dr James Kennett, consider that, back then, a cosmic crash of a comet into the Earth, triggered the abrupt era of freezing of the whole planet (Anderson, et. al., 2011).

Right away and all of a sudden, the "Younger Dryas" comes to an end and the Earth becomes warm, very fast leading to the Glaciers' melting, to the inflow of fresh water in the oceans and to the sudden ascent to the level of the sea with local cataclysmic phenomenons. This unpredictable incident of the "Younger Dryas" caused the disappearance of a large number of species from the human fauna, so as a result many eco systems in only a few decades were ruined.

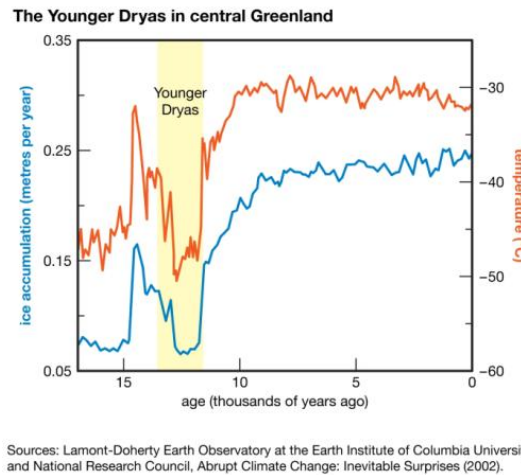


Figure 36. Younger - Dryas Incident - “Younger Dryas” (Orange Area)

According to the astronomer Dr. William Napier (Napier, 2010), that abrupt era of freezing, almost 13,000 years ago, was caused by the crash into a comet or asteroid that entered our Solar System much earlier, meaning 20,000 years ago. The core of the comet or of the asteroid deriving from the far away Smog Oort outside our Solar system, illustrated in Figure 37, was trapped in the Sun’s gravity and entered an orbit around the Sun. Next, it was decomposed, as all comets, in pieces of rock and ice, the meteors.

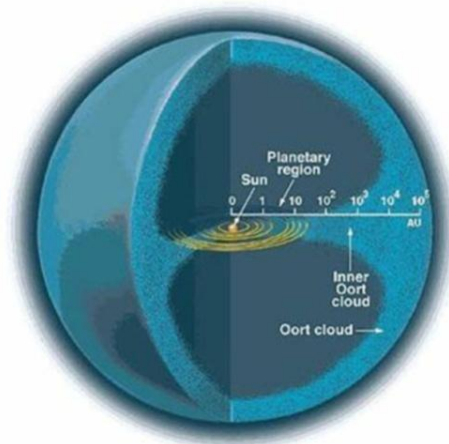


Figure 37. Hypothetical Distance of the Smog Oort Compared to the Rest of the Solar System

The humans were surprised by the huge explosions in the sky, depicted in Figure 38, from the unexpected deaths and from the heavy rain, which imprint this astronomic incident being engraved on the rocks in many places on the Earth. It was completely natural for the humans to memorise this global event in the holy places on the top or in the observatory of Asfendos.

According to the scientific research of Dr Martin B. Sweatman and Dr. Dimitrios Tsikritsis (Sweatman, & Tsikritsis, 2017) the same event has occurred. Imprinted on “Geppekli Tepe” as well. There are also references in mythologies of almost all civilizations to the drop of a star or to a big heavy rain. Researches that have been carried out in samples of ancient ice cores from Greenland, “conclude” that the most possible starting era of this small Glacier period was 10,890 B.C. This way, the researchers Dr Martin, B Sweatman and Dr Dimitrios Tsikritsis consider this year as the most probable for the comet fall, although the precise time of inception of the YD is still uncertain.

In parallel, in German, analysis in sediments from the lake Meerfelder Maar (MFM), during the climate change Younger Dryas, provides a chronological context that defines the duration of the Younger Dryas from 1025 up to 1090 years (Brauer, et. al., 1999).



Figure 38. Comet Drop in the Earth

Clovis Civilization

In 2007, the research team Firestone et al., suggested a unique mechanism for the start of the cold period Younger Dryas (YD). According to the case of the crash, one or more extraterrestrial objects crashed or exploded above the ice layer Laurentide, probably in a location near the area of the Big Lakes in Canada in the beginning of the YD, almost 12,900 years ago (Firestone, et al., 2007). Except for the rapid climate change, they also claim that the YD impact is responsible for major fires, for the disappearance of the megafauna of Pleistocene and for the decay of the prehistoric civilization Clovis in North America.

The civilization and the locations of human Glacier installation of the people of Clovis is known all-over North America, from South Canada as far as South Mexico. The dating locations of Clovis' civilization with radioactive coal, show a dating period blooming between 10,600 and 11,250 B.C.

This timing corresponds to the last years of the phenomenon Younger Dryas, to the last era of the Glaciers.

Historically, it was proposed that the ancestors of the people who produced the Clovis Civilization migrated in the North America across the "Beringian canal" and then, followed the "iceless route - Rocky Mountains", but many subsequent scholars have suggested that an immigration across the Pacific shores is the most probable (Cultura - Clovis - Wikipedia).

Anderson et al.(2011) present evidence that the population of Clovis civilization went through dramatic decrease. People did not disappear, but it is possible that they were scattered throughout the whole continent in many peripheral communities. In the beginning of the Younger Dryas (YD) era, the characteristic corrugated edges on the weapons of the Clovis people, disappeared from the archaeological records. They have never been found beyond the timing duration of YD.

The study of this civilization and its technology led to the conclusion that there were similarities in the edges of the Clovis hunters' spears with the leaf shaped edges of the spears illustrated on the Asfendos rockgraph in Crete.

According to the Professor of Prehistory, of the Exeter University, having experience in the technologies of the Rocky Era and in the Experiment Archaeology, Dr Bruce Bradley, the Solutreans and Clovis population constructed spears with oblique section rods made of animal bones, of mammoth ivory depicted in Figures 39 and 40. The most typical trait of Clovis Culture is the "Clovis weapon" with the far out distinctive stone blazors, meaning the spear edges in leaf shape. According to new evidence that has been accumulated in the last two decades, it leads (Bradley and Stanford 2004, 465) to the theory referring to the Solutreans and Clovis civilizations, revealing that the most ancient origins of people in North America, during the last biggest Glacier, comes from the Southwest Europe.



Figures 39-40. Double Oblique Sectioned Bones and Ivory from Palaeoindians, North America (North American Paleoindian-beveled and Ivory roads: A new interpretation)

<https://journals.sagepub.com/doi/abs/10.2290/3H6Q-5YOR-Y1JU-FLPW?journalCode=naa>

The Clovis weapon constitutes the sign of the Paleo Indian period, as well as the first superior technologies of stone tools. The Clovis weapon has a sharp spear from obsidian in a carved grooved shape of leaf depicted in Figure 42, with parallel or slightly bent sides and a hollow base. Both aspects of the spear have been slimmed down, which is a sharp blazer with a canal in the middle of the stone part, useful for its fixation on the edge of a rod illustrated in Figure 41. The named and distinctive Clovis' weapon has a degree of perfection and beauty, which wasn't often used during the Prehistoric years. The oldest of these weapons have been found in Eastern and Southeastern regions of the USA. It is possible that the Europeans of the Glaciers Era arrived in North America by boats or luggers and settled in the edges of large layers of ice stretching from Griland to the west up to the North of New York, in 10,600 until 11,250 BC.



Figure 41. Corrugated Spot Technique on the Weapons' Edges in Clovis Culture (On Fluted Point Morphometrics, Cladistics and the Origins of the Clovis Culture)

<https://www.researchgate.net/publication/333659581>



Figure 42. Clovis Edges (Clovis in Kentucky - Alan Slade, time 4:43/14:20).

<https://www.youtube.com/watch?v=F9VdwYOLhVA>



Detail of Figure 12. Spear with two edges (yellow colour), details from the Levels 3 - 4 of Asfendos rockgraph

Ogygus Cataclysm - Atlantis

The Asfendos rockgraphs substantiate very important and dramatic events that happened in the wider area of the Mediterranean Sea, specifically in the Aegean Sea, recorded in Greek philosophy. There were many cataclysms as well as the Atlantis sinking, which, according to Plato's texts, happened 900 years before Solon's era "in a tremendous day night" (Plato, Timeos 23 B, 24 A).

The Palaeolithic Asfendos rockgraphs. written evidence, that according to recent scientific studies, offer additional evidence about something so significant as the Ogygus's cataclysm.

In her book, the archaeologist Dr. Elena P. Mitropetros entitled: "The principles of Greek geomythology" (Volume one, Aegeis, p. 191), mentions that:

"Besides, the association of Ogygus with Jupiter, the Titans and the geological events in Thessaly, leads our

thought to the conclusion that the homonymous event happened during a very old era, in between the years 14,500 and 12,500 P.A.S. (Ryan and Pitman 1998:319) the water level in the Black Sea could have reached the highest level and it must have overflowed the Sangarius valley having as a consequence the arrival of the water in the Aegean Sea”.

There are many different hypotheses on the dating of the cataclysms, which remains a big problem.

The Asfendos cave and the rockgraphs imprinted on it, are really important since they narrate a chapter from the history of Earth: At the same time, they constitute a lesson about the contemporary Era! Nowadays, the Younger Dryas period forms an example of the dynamic and unpredictable nature of the climate Earth system.

HOLY PLACES OF THE TOP OR OBSERVATORY?

What was the Asfendos Cave?

The astronomist and peer professor of Physics and Space in the University of Athens Mr X. Mousas says: “The holy places of the top are ancient astronomy observatories, meaning observatories, found in Crete and in Kythira, as well as in many other regions of Greece”. “In Crete since the last years of the 3rd millennium B.C. it seems that we have really advanced calendars. In Giuhta and Petsofas mountains in Crete, specialists claim that they have discovered two ancient “schools” in which, astronomy with the use of small ceramic models depicting the constellations of Taurus, Aries etc., were taught, so that the young people would be able to recognise the constellations, their interchange throughout the year, their motion during the night and to find their way in the land but mainly in the sea”, (Mousas, D. X., 2018, “*The mechanism of Antikythera*”. Publications: Canto Mediterraneo, p. 134).

As a result, there is another observatory at the top in Asfendos Crete.

Women Hunters in the Palaeolithic Era

“Women used to hunt too in the Palaeolithic Era” as we are informed by a recent unconventional scientific research published in 2022 (Ocobock, C., & Lacy T. S., 2023). The theory that men evolved to hunt and women evolved to gather is wrong).

In the hard disk of memory, in which Art exists, Greek tradition has memorised the Figure of the woman hunter, through the characteristic example of goddess Artemis as illustrated in [Figures 43 and 44](#). The scientific research team, who announced the new study, stressed the role of the hormone of the estrogens that usually exists in larger amounts in the female body than in the male one. The Palaeoanthropologist Dr. Sarah Lacy of the Delaghuier University in the USA highlights that: “When we deeply examine the anatomy and the contemporary physiology and then we examine the skeleton remnants of the ancient people, there isn't any difference in the wound prototypes between men and women, because they did the same activities”. Then she continues by saying that for three million years, males and females both equally participated in survival activities for their small communities and their diet dependence on meat and hunting was led by both sexes (Ocobock & Lacy, 2023).

In the Superior Palaeolithic era, which means the cultural period between 45,000 and 10,000 years, when the first modern people entered Europe, it was the period when people invented the bow and the arrow, the fish hook and the hunter's nets. These advanced tools allowed people to catch a larger quality of animals. Women, as well, may have preferred the hunting tactics taking advantage of those new technologies.



Figure 43. Artemis. Red figure pottery amphora of the classical era 400 - 390 B.C., detail. It is housed in the Louvre Museum



Figure 44. Artemis. Marble Roman sculpture. Probably a copy of a work of the Greek sculptor Theoharis in 400 B.C the Louvre Museum

The brain attachments combining the information, lead us to the Protector of the Nets in the most ancient Cretan goddess Vritomarty Diktinna. Diodorus the Sicilian (Historical Library 5th, 77) states that: “Vritomartis named Diktyнна as well, according to the mentioned myth, who was born in Keno in Crete, from Zeus and Karmi, from Evolus, Demeter’s son”. Stravon in the *Geographicals* (I, IV 12), says: “She, who discovered the nets used in hunting, was named Diktinna and her holy places: “Diktyннаia” spent her days with Artemis, that’s why some people believe that Diktyнна is Artemis herself. The Cretans established sacrifice and built monuments in honour of this goddess”.

The Asfendos cave in Lefka Ori functioned as a dedicating spot and as an observatory since Palaeolithic times. (Palaeolithic era: 2,5 million years up to 10,000 B.C) keeping there the sacred irrational secrets. So, there on the Palaeolithic, meaning on the ancient rock of Lefka Ori there are, chased-as dedicating engravings-, deers and bows armed with arrows in honour of the Mountain Mother Goddess of the wild nature depicted in [Figure 45](#) ready to embrace a young deer with tenderness.



Figure 45. Artemis. She dangled the bow to embrace a deer. Attic red figure pottery, jar of white depth, approximately 480-470 B.C. It is situated in the Mississippi University

Symbolic First writing

The engraving is the first, the most ancient art of human action. So, the human being of the last era of Glaciers consciously has the intention to write and chooses or constructs a sharp and hard tool, an engraver, in order to make the engravings in the Asfendos cave, true. This way, he creates a first form of writing with Figures as a means of communication, a first scripture with symbols used for the information and knowledge transfer, thousands years ago.

After many language and writing fermentations, the same symbols keep on “being written - and engraved” as we see in [Figure 46](#) in the Cretan Hieroglyphic scripture from 2000 to 1500 B.C, which are found as pictograms - ideograms, Scripture, which we find on Phaistos Disc and on the copper double ax in Arcaloxori (1600 B.C).

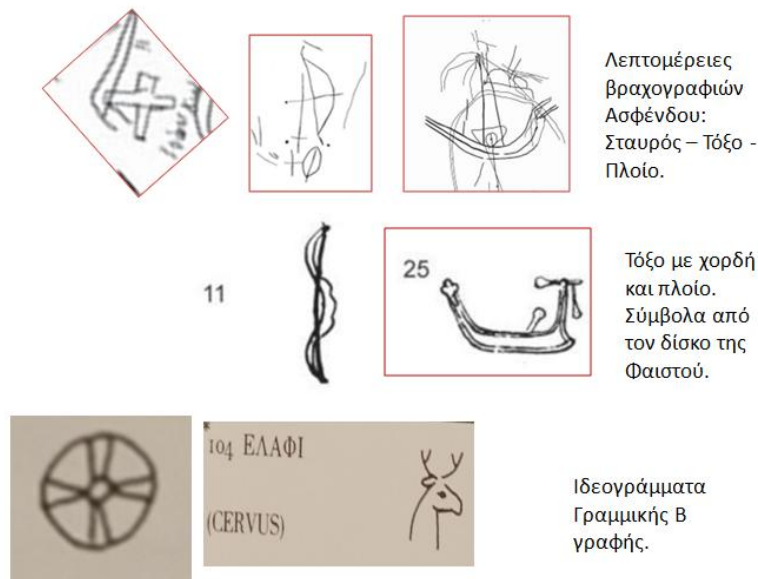


Figure 46. Asfendos rockgraphs' Details (collage Magda Fili): Cross from Figure 3.

Bow from Figure 3. Ship from Figure 4.

Bow with a string (11) and a ship (25): Phaistos disc.

Wheel and deer. Ideograms of Linear B scripture (J.T.Hooker).

The above mentioned symbols continue to have a steady structural presence in the Greek syllable Linear A Scripture, which strongly exists for approximately three centuries from 1750 up to 1450 B.C, as well as in the Syllable Linear B scripture, which is widespread from 1375 up to 1200 B.C. On the charts with ideograms and syllable grams depicted in Figures 47, 48, 49, 50, 51, the same basic symbols of Asfendos rockgraphs are repeated.

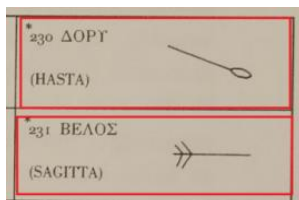


Figure 47. Linear B scripture Ideograms (J.T. Hooker)

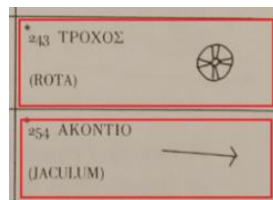


Figure 48. Linear B scripture Ideograms (J.T. Hooker)

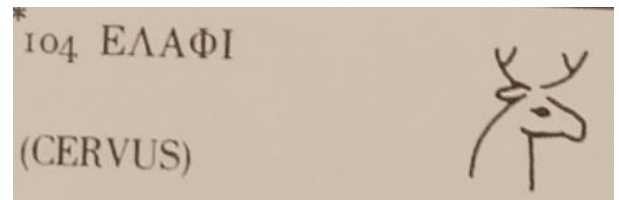


Figure 49. Linear B Scripture Ideograms (J.T. Hooker)

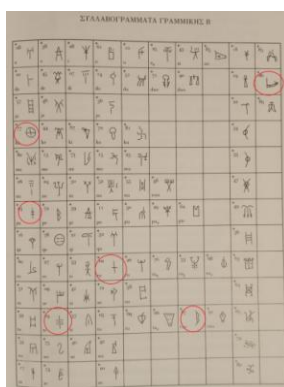


Figure 50. Linear B Scripture Ideograms (J.T. Hooker)



Figure 51. Linear B Scripture Syllable Ideograms (J.T. Hooker)

The breakeven cross (Figures 52, 53 and 54) is one of the oldest Greek, as well as universal symbols, fitted in age long years with cosmic status. It is a symbol declaring the communication between the infinity universe and the Earth. The three art and architecture examples with a breakeven cross come from Crete.



Detail form Figure 3



Figure 52. Marble Breakeven Cross of 1.600 B.C from Knossos. Archaeological Museum in Heraklion Crete



Figure 53. Stone Mitre of the 15th century B.C. found in a Minoic copper foundry in Palekastro Sitia Drete



Figure 54. Unique Minoic Archaeological Complex Discovered in Crete in the Hill Kasteli
It dates back in between 2000 - 1700 B.C

There are significant signets from Crete depicted in Figures 55, 56, 57, 58 with graven deers and other symbols too, such as javelins, branches or sprouts. They are signets engraved with the Cretan Hieroglyphic Scripture.

These small works of art constitute visual evidence, through which, we come to the conclusion that from 21,000 B.C to 1400 B.C, Cretan artists keep on depicting the deer as a sacred dedication to the Divine. To DA - Mother Earth, the mountainous mother of wild fauna and of hunting, having as an aim, not only the nutrition of the body but the pursuit of spiritual and mental development!



Figure 55. Seal of Hieroglyphic Scripture from Malia Crete, Archaeological Museum in Heraklion.(C.M.S. - Ii,2)



Figure 56. Cretan Stamp of Hieroglyphic Scripture, Preroyal era 3000-2000 B.C. (C.M.S.- V.105)



Figure 57. Cretan Stamp, Hieroglyphic Scripture.



Figure 58. Hieroglyphic Scripture stamp 1400 C B. Rousdip - PaleKastro Crete Archaeology Museum in Sitia Crete

The “gold horn deer” is the holy animal and the symbol of Elafivoliain Artemis.

The “shivering”, the deer that shivers, - is bouncing as it is illustrated in Figure 59, expressing the vital energy of every organism and its residence is the mountain tops, symbolising in parallel with the high spiritual tops like Lefka Ori Crete.



Repetition of detail of Figure 12



Figure 59. Artemis' head - deer hunting. Boeotian black figure vase of 560-550 B.C. University of Harvard Art Museum

Its horn extends higher than its comprehension and bends like the sun's rays, depicted in Figure 60, as a part of universe radiation, rays reaching the earth and offering energy and life. Artemis is the first to be born and then a twin brother follows, Apollo the bowman, God of the Sun's light and of the photons, illustrated in Figure 61.

The devine, the really fast deer represents, in a symbolic way, the light speed and a good reason to pray is the development of speed of our slow vibrated light!

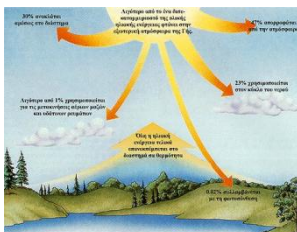
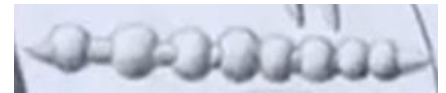


Figure 60. Solar Radiation



Figure 61. The Photon—Quanta of Light or of Electromagnetic Radiation



Detail of Figure 55

CONCLUSION—ASTRONOMICAL INFORMATION OF THE FLOOR

The total surface of all the engraved designs of the Asfendos cave in Crete covers just two square meters of the ground. Having all the designs of the levels of Asfendos rockgraph and the help of the modern technology, such as the Stellarium astronomical programme, significant astronomical events recorded were tracked down and were reported as well, on the rock. The detailed astronomical depiction causes real awe and admiration and leads us to the year 10,892 B.C. A determining era of really important events for the whole planet. Despite the depth of time, on 20th August 10,892 B.C and during the culmination, many celestial objects from the Asfendos cave chart identify themselves with the sky chart.

Asfendos cave rockgraphs literally function as a chart of stigma establishment or of celestial objects positionings, something like a GPS of the sky.

So, in the aggregate, the spot of the cave's floor, being analysed, accurate astronomical information is provided, such as:

1. There are five sunrise and sunset constellations of the South Hemisphere: Sagittarius, Scorpio, Scorpio edges or Lybra, Ophiuchus and Snake.
2. Also, partly visible, the Hercules constellation.
3. All visible from Greece and Crete, in those times, during the summer months, meaning that we have a location definition and an observation era.
4. The Sun's disc is graven in level 1, but the same shape is already formerly known, since it is graven on the former Level 3.
5. The apparent Stellarium positions related to the Sun are depicted in detailed accuracy, as well as the positions of the planets: Hermes, Venus and of the Earth's Satellite-the Moon.
6. This depicted astronomical information on the two layers of the rockgraphs Level 1 and Level 2, leads us to the precise date: 20th August 10,892 B.C.

7. The astronomical identification between the rockgraph and the sky Figure from the Stellarium, occurs exactly during the Sky's culmination, at 12:00 o'clock on the 20th of August.

8. The orientation N-S (North-South) of the floor rockgraph agrees with the orientation of the constellations on the sky chart as well.

9. The illustration of a comet is really important, since once combined with the date, identifies with unique world historical incidents being memorised as: 1) the fall of a comet as a cause of the beginning of a climatic event, the so-called Younger Dryas, 2) the flooding phenomena from place to place, relate to the cataclysm of Ogygus 14,500 with 12,500 PAS or to the Atlantis sinking 9,000 years before Solon. 3) Incidents that led to the decay of the civilization of Paleo Indians Clovis, whose technology is illustrated with identical data in Asfendos rockgraphs.

10. Also, most of the rockgraph's symbols continue to evolve and to have a steady structural presence in the Cretan Hieroglyphic Scripture (2000 to 1.500 B.C), in the Greek Syllable Linear A Scripture (1750 to 1450 B.C) as well as in the Syllable Linear Scripture (1375 to 1200 B.C).

11. Last, the Asfendos cave was definitely an observatory as well as an ancient top holy place dedicated to the Cretan goddess Vritomartis - Diktynna - Artemis as well as an enclave of a sequence and coherence preservation of the Greek tradition.

Art is a language of scripture through which we are bestowed with primitive knowledge. Our ancestors engraved or painted by memorising, so that we'll be able to find the information, read it and comprehend it! So, it seems that the Palaeolithic Cretan artists, since 21,000 and 10,892 B.C placed the basis of an illustrated vocabulary creating composite graphs with meanings, as well as memorising scientific information. The footprints of the Art are the steps that lead us to the realisation of a historical time and place coherence and continuous evolution, so that nowadays almost 23,000 years afterwards, we are able to recall the primitive route and conclude the present research project, using the following Herodotus' phrase as a conclusion (Herodotus, Urania, Book 8, (144.3).

"There is the Greek nation deriving from the same blood, having the same language with us, with which we have the same Gods' sanctuaries, the same sacrifices and the same moral codes".

ACKNOWLEDGEMENTS

The presence of the peer Professors of the Greek Kapodestrian University of Athens, Ms. Preka Paladima of the section of Astrophysics Astronomy and Mechanics of the section of Physics of the University of Athens is appreciated, as well as the Astronomist Professor of Universe Physics Mr. Xenofon Musa for their exceptional proposals that led the research to a wider depth and profoundly improved the initial formulation of the project.

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ETHICAL DECLARATION

Conflict of interest: No declaration required. **Financing:** No reporting required. **Peer review:** Double anonymous peer review.