

Golden Geometry Between Sky and Earth: The Pleiades and the Bosnian Pyramids

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A story written in stars, stone, and spirals

On clear winter nights, a small cluster of blue-white stars rises above the eastern horizon, compact, luminous, and strangely captivating. Known worldwide as the Pleiades or the Seven Sisters, this star group has guided calendars, myths, and rituals for thousands of years. From the Maya and the Māori to the Japanese, Greeks, and Ancestral Puebloans, cultures separated by oceans and millennia all looked to the same tight gathering of stars and found meaning there.

Now imagine that this celestial pattern is not only admired in the sky, but also echoed on Earth—etched into valley and monumental structures. This is the provocative possibility explored in my peer-reviewed research article, *Golden Geometry Revealed: The Fibonacci Link Between the Pleiades and the Bosnian Pyramids*, published in 2025 in the *International Journal of Aerospace Science, Technology and Engineering*. In that scientific study, I presented geodetic measurements, LiDAR data, astronomical modeling, and statistical simulations suggesting that the spatial layout of the Bosnian Valley of the Pyramids mirrors the internal geometry of the Pleiades star cluster.

This web-based article translates that technical research into a readable narrative, guided by the attached photographs, maps, and illustrations. It is an invitation to explore an ancient idea—*as above, so below*—through modern tools and open curiosity.

The Pleiades: a universal celestial reference

The Pleiades are not just another star cluster. Visible to the naked eye and located in the constellation Taurus, they are among the closest open star clusters to Earth, approximately 440 light-years away. Most people can see six stars clearly; many traditions speak of seven. That subtle discrepancy alone has fueled myths of loss, concealment, or transformation.

Across cultures, the Pleiades consistently mark time. Their heliacal rising—the moment they first appear before dawn after a period of invisibility—signaled agricultural cycles, ritual calendars, and new years. For the Maya, this rising helped regulate planting and ceremony. In Aotearoa (New Zealand), Matariki still marks the Māori New Year. In Japan, Subaru—meaning “to unite”—symbolizes coming together, a concept now famously carried into modern branding.

What makes the Pleiades especially intriguing for researchers is not only their cultural importance, but their geometry. The brightest stars—Alcyone, Maia, Electra, Taygeta, Merope, Celaeno, and Pleione—form distinct lines, triangles, and arcs. These are not perfect or symmetrical in a textbook sense, yet they exhibit proportional relationships that the human eye instinctively recognizes as harmonious.

In my scientific work, I asked a simple but unconventional question: could this harmony be mathematically described, and if so, might it have inspired ancient builders on Earth?

The Bosnian Valley of the Pyramids: an enigmatic landscape

Near the town of Visoko in central Bosnia-Herzegovina lies a cluster of steep-sided hills whose shapes, orientations, and spatial relationships have sparked intense debate for two decades. Known collectively as the Bosnian Valley of the Pyramids, the area includes several prominent structures: the Bosnian Pyramid of the Sun, the Pyramid of the Moon, the Pyramid of the Dragon, the Pyramid of Love, the Temple of Mother Earth, and the Vratnica Tumulus. Beneath the surface, the Ravne tunnel complex extends for kilometers.

Skeptics have argued that these are natural formations. Yet repeated multidisciplinary investigations have documented features that are difficult to dismiss: precise orientation to true north, flat triangular faces, artificial concrete layers, engineered underground passages, and consistent geometric relationships between summit points.

The Pyramid of the Sun, in particular, stands out. Rising to a measured height of approximately 368 meters, it is taller than the Great Pyramid of Giza. Its northern face deviates from true north by only a fraction of a degree—an accuracy rarely produced by chance geology.

But individual structures tell only part of the story. When viewed from above, using high-resolution LiDAR scans that remove vegetation and reveal bare terrain, the

Bosnian Valley begins to look less like a random landscape and more like a coordinated composition.

Seeing what the forest hides: LiDAR and modern mapping

One of the breakthroughs in studying the Bosnian pyramids came from airborne LiDAR surveys. By emitting millions of laser pulses from aircraft and measuring their return time, LiDAR creates precise digital terrain models—even beneath dense forest cover.

The attached LiDAR images show the valley stripped of trees, revealing crisp edges, planar surfaces, and symmetrical forms. More importantly, they allow exact measurement of distances, angles, and alignments between key points.

When the summit coordinates of the main pyramids and surrounding features are plotted, striking patterns emerge. The Pyramid of the Sun, the Pyramid of the Moon, and the Pyramid of the Dragon form an almost perfect equilateral triangle, with sides measuring roughly 2.2 kilometers and internal angles very close to 60 degrees.

This triangle is not oriented randomly. Its geometry interacts with rivers, tunnel entrances, and secondary hills in ways that suggest intentional placement—or at least intentional selection—of the landscape.

Introducing sacred geometry: the golden ratio and Fibonacci spirals

Sacred geometry is often misunderstood as mystical or speculative. In reality, it is simply the study of recurring mathematical ratios and forms that appear in nature, art, and architecture. Among the most famous is the golden ratio, approximately 1.618, and its related Fibonacci sequence.

From nautilus shells and sunflower heads to hurricanes and galaxies, logarithmic spirals based on the golden ratio recur throughout the natural world. Ancient builders, from Egypt to Mesoamerica, appear to have recognized and applied these proportions long before modern mathematics formalized them.

In earlier research, I documented Fibonacci spirals in the layout of the Bosnian pyramids themselves. In the 2025 study, I extended this analysis to the sky.

A spiral among the stars

Using astronomical images from the Hubble Space Telescope and precise star position data, I constructed Fibonacci spirals centered on individual Pleiades stars—especially Maia, located near the visual heart of the cluster.

What emerged was unexpected. A golden spiral originating at Maia passes remarkably close to several major Pleiades stars in sequence, including Celaeno, Electra, Merope, and finally Alcyone. This progression follows the same proportional expansion seen in classical Fibonacci spirals.

To my knowledge, no previous peer-reviewed publication had identified such an internal spiral structure within the Pleiades. Whether this pattern is purely coincidental or reflects deeper physical or perceptual ordering is a question for astronomers and physicists. What matters for archaeology is this: the same spiral geometry appears on Earth, in Bosnia.

Mapping sky to ground

The most visually compelling illustrations attached to this article show celestial and terrestrial maps overlaid onto one another. By scaling, rotating, and aligning the Pleiades spiral with the Bosnian Valley, key points begin to correspond.

The mouth of the Fojnica River, where it joins the Bosna River, aligns with a major node in the spiral—just as a prominent star does in the sky. The Pyramid of the Sun, the Ravne tunnel entrance, and the Vratnica Tumulus fall along the spiral's curve in a sequence that mirrors stellar positions.

These are not vague resemblances. The overlays are built from measured coordinates, not artistic guesswork. While scaling is always necessary when comparing sky and Earth, the angular relationships and proportional distances remain consistent.

In addition to spirals, straight-line alignments reinforce the pattern. Lines connecting Taygeta, Maia, and Alcyone in the sky find terrestrial counterparts in alignments linking the Moon Pyramid, Temple of Mother Earth, and Dragon Pyramid. Triangles in the stars are echoed by triangles on the ground.

Could this all be coincidence?

Pattern recognition is a double-edged sword. Humans are excellent at seeing order—even where none exists. For this reason, my scientific article went beyond visual comparison and applied Monte Carlo simulations to test probability.

In simple terms, these simulations generate thousands of random landscapes and ask how often similar geometric configurations appear by chance. The results were striking.

An equilateral triangle with the observed precision and cardinal orientation appeared in essentially zero out of 10,000 random trials. Likewise, the presence of three interconnected golden spirals intersecting multiple key features was statistically negligible. When similar tests were applied to randomized star clusters, matching both celestial and terrestrial spirals also failed to occur.

This does not prove who built the Bosnian pyramids, when they were built, or why. It does suggest that the geometry itself is extraordinary.

As above, so below

The idea that Earth reflects the sky is ancient. From Egyptian temple ceilings painted with stars to Mesoamerican pyramids aligned with Venus and the Sun, ancient cultures repeatedly encoded astronomy into architecture.

The Bosnian Valley may represent a European expression of the same impulse. Whether created by a lost civilization, inherited knowledge, or a long-forgotten cultural tradition, the geometry points toward intentional cosmological thinking.

Importantly, this interpretation does not rely on myth alone. It is grounded in measurements, maps, and mathematics—tools shared by modern science and ancient builders alike.

Why this matters

Why should the readers care about spirals, stars, and pyramids in Bosnia?

Because they challenge assumptions. They remind us that human history may be deeper, more complex, and more interconnected than standard narratives suggest. They also show how modern technology—LiDAR, satellite astronomy, statistical modeling—can reopen questions once thought settled.

Most of all, this research invites curiosity without dogma. It does not demand belief, only attention.

The Pleiades still rise each year, just as they did thousands of years ago. The monuments of Visoko still stand, quietly holding their shapes. Between them may

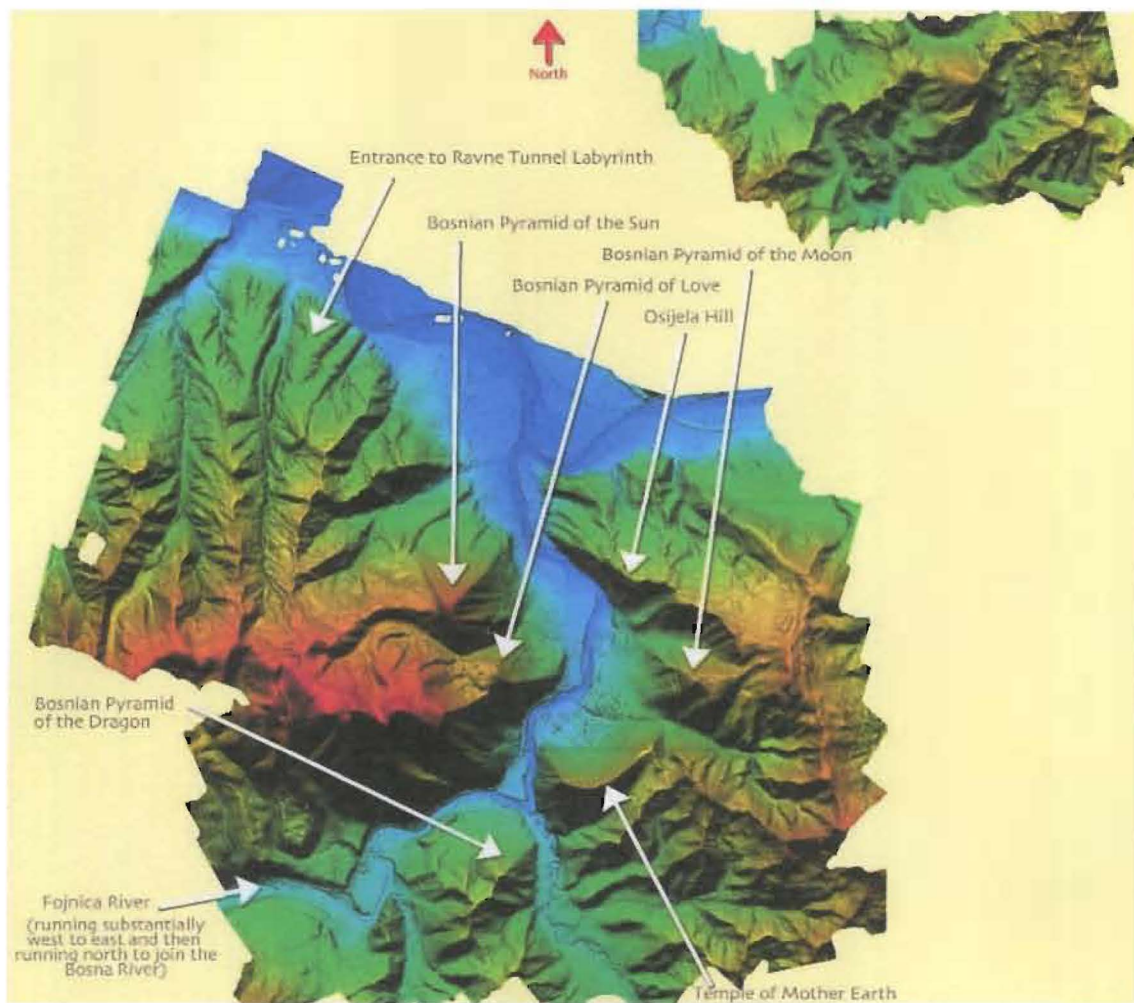
lie a shared language of geometry—a dialogue between sky and Earth that we are only beginning to understand.

Looking forward

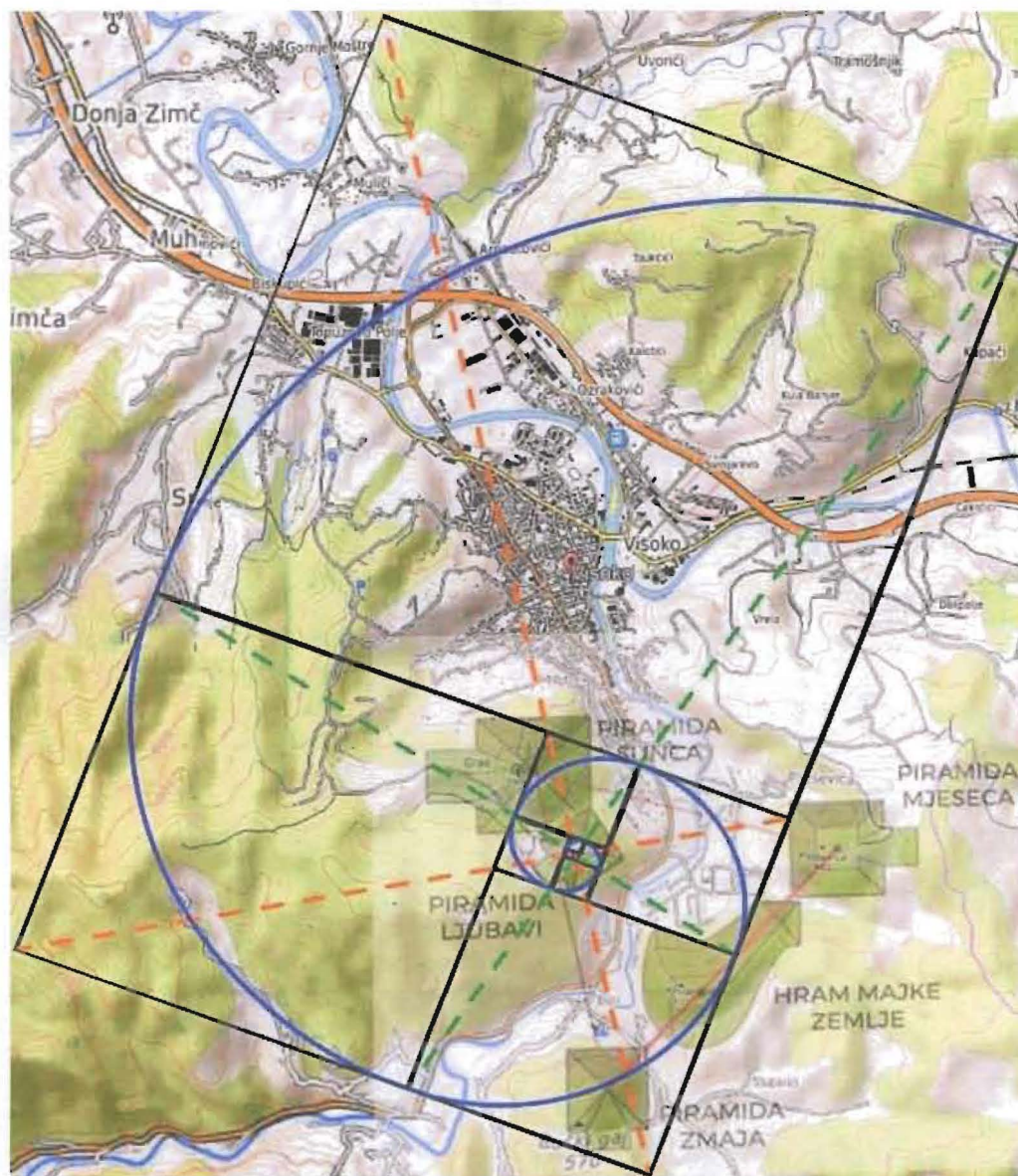
Future research will refine these models, test alternative explanations, and invite independent verification. Archaeology advances not through consensus alone, but through careful challenge and replication.

For now, the images, maps, and spirals speak for themselves. They suggest that long before modern instruments, someone was watching the stars—and shaping the land accordingly.

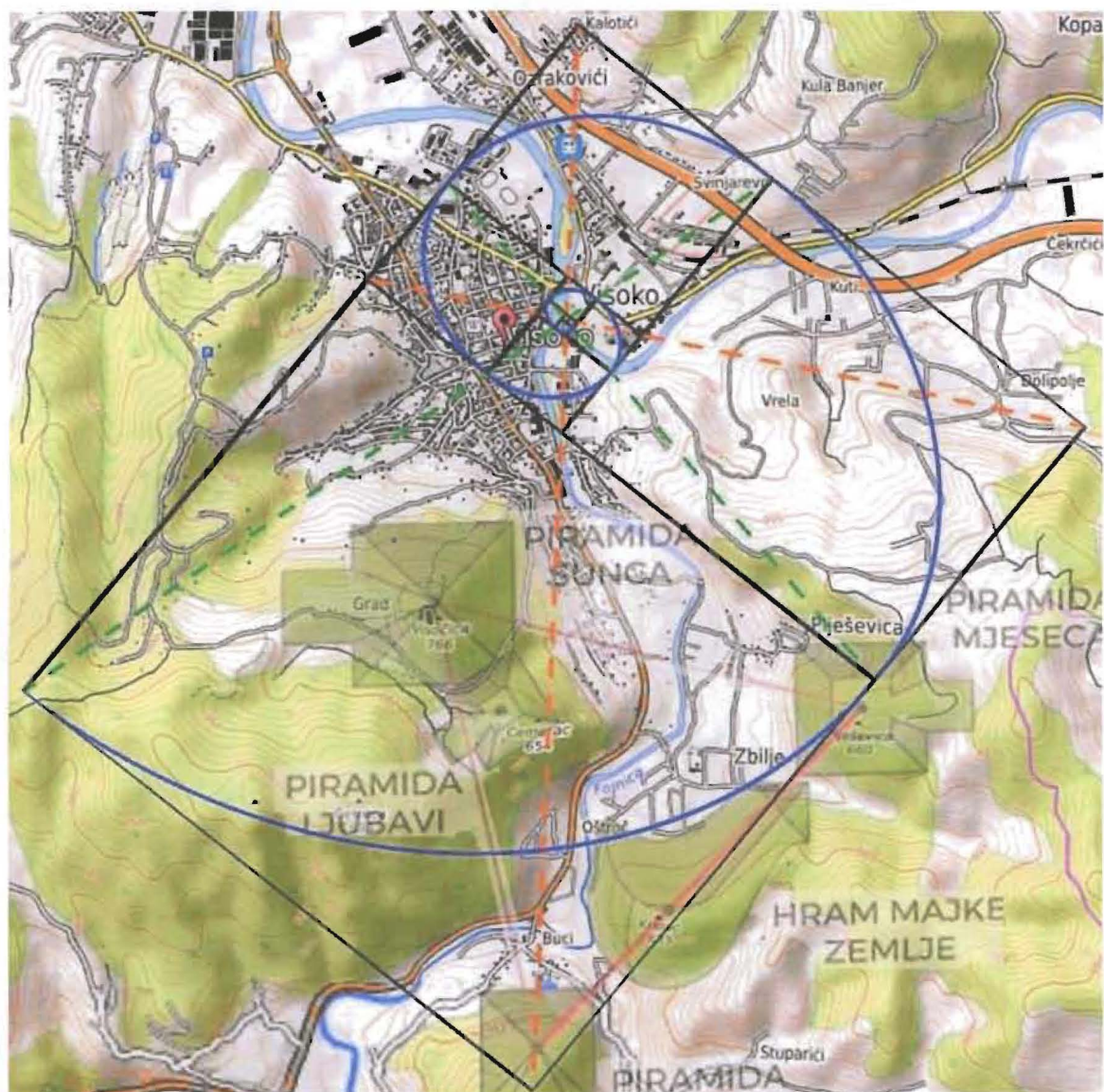




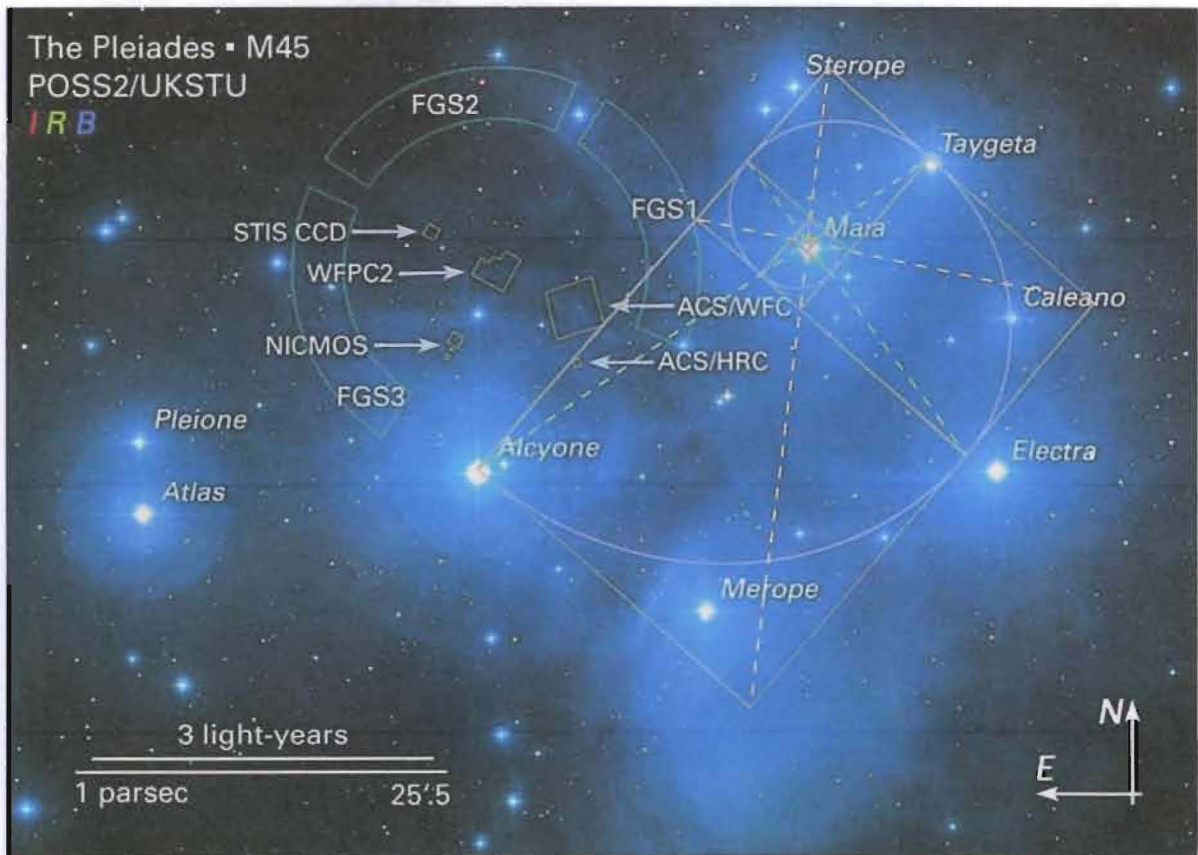
LiDAR scan of the Bosnian Valley of the Pyramids



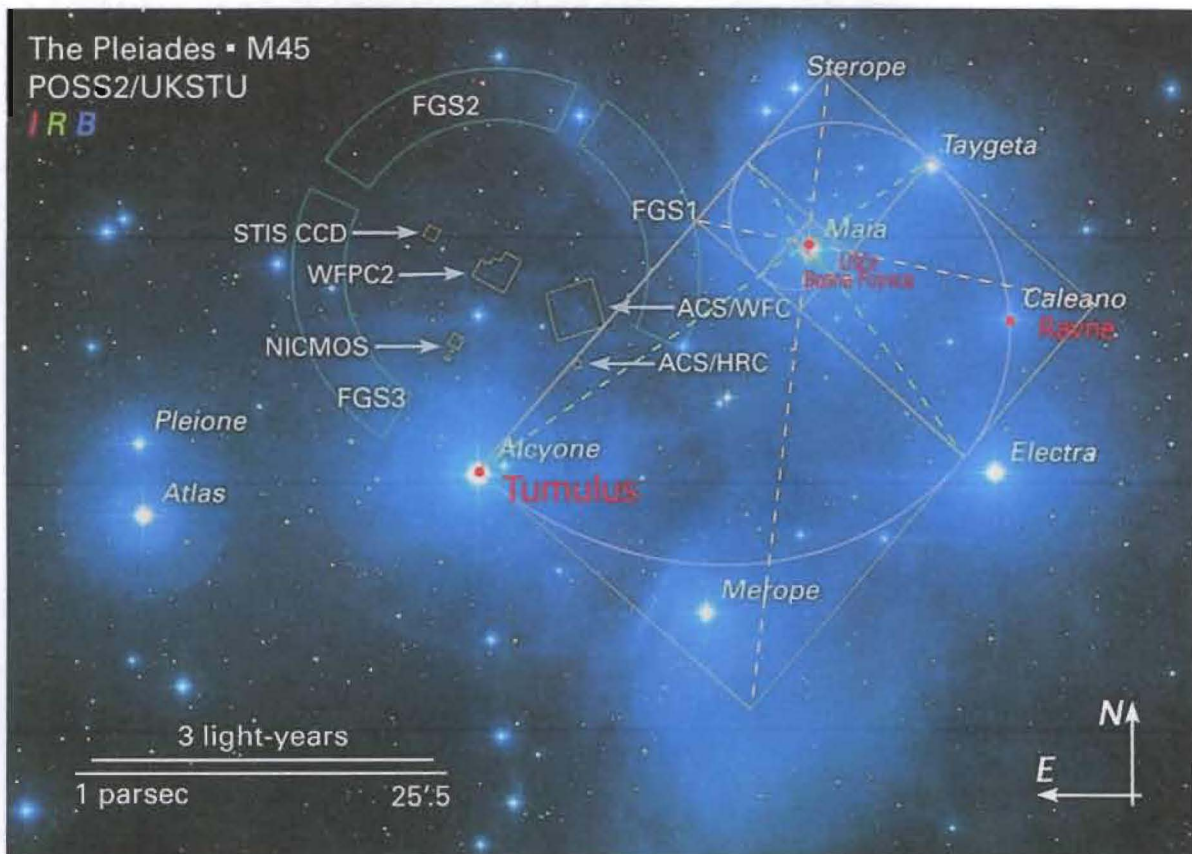
Golden Section (Fibonacci) Spiral intersect the tops of the Bosnian Pyramids of the Love, Sun, Earth, Dragon and summit of the tumulus



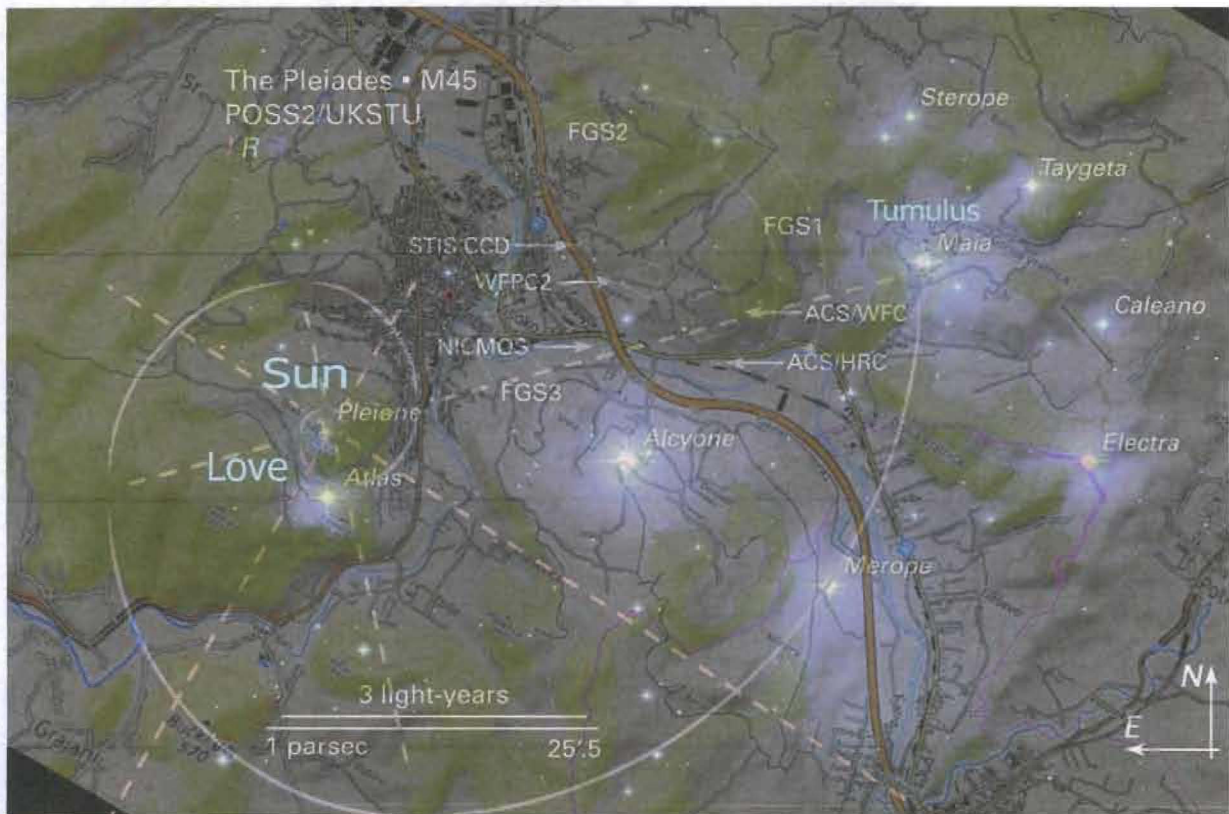
Golden Section Spiral connects the mouth of two rivers, top of the Bosnian Pyramid of the Moon, two corners of Temple of Mother earth and summit of the puyramidal hill Krtnica



Golden Section Spiral intersects with four Pleiades stars



Two spirals overlay: terrestrial points (mouth of two rivers, entrance to the underground world, and tumulus top) with celestial



From the Sun and Love pyramid and Tumulus Summit to Pleione, Atlas, Meropë, and Maya