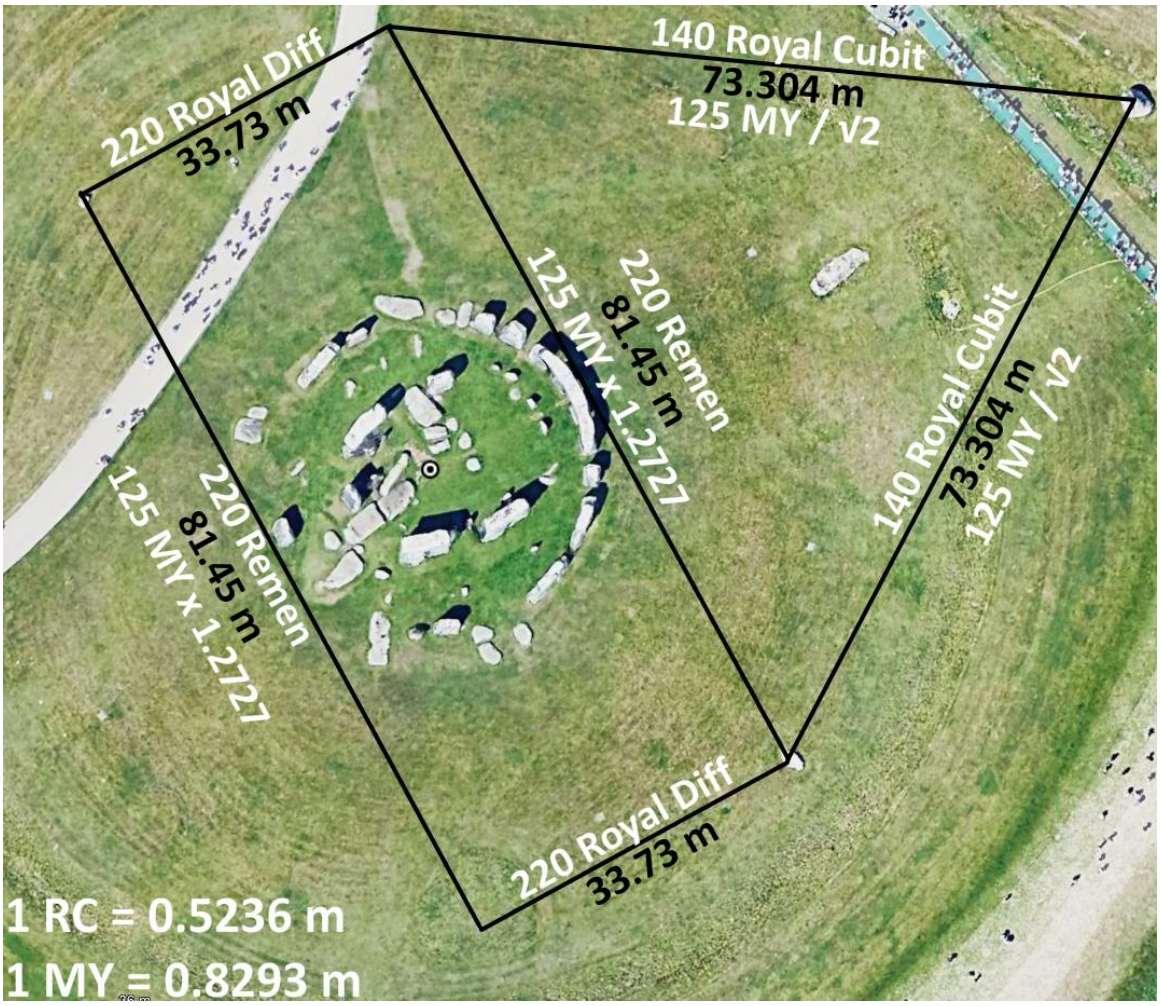


The Great Pyramid's Design at Stonehenge

A REVISED BRIEF AND PRELIMINARY OVERVIEW WITH MEGALITHIC YARDS AND COMPARATIVE AREA MEASUREMENTS

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This is a 3rd revision, which includes the area measure between the Station Stone Rectangle and the footprint of the Great Pyramid. While I am currently working on Part 3 of my 'Great Pyramid Cosmology', which will present the full details of my hypothesis including astronomical data, I'm providing this brief survey of the key geometrical points to aid readers of my work to continue their own research.

Summary

Based on direct survey data, the use of a Royal Cubit measuring 0.523606 meters reveals a strong geometric connection between the Great Pyramid and Stonehenge. The Great Pyramid's base measures 440 Royal Cubits (230.386 meters) and its height 280 Royal Cubits (146.609 meters), proportions reflected in the octagonal Station Stone rectangle at Stonehenge. The floor of the King's Chamber segments the height of the Gret Pyramid in precisely √2 or silver ratio, at 198 Royal Cubits. 198 Royal Cubits is precisely 125 Megalithic Yards. This connection aligns with a simple circle/square geometry governed by the Silver Ratio, which is observed in not only the interior and exterior of the Great Pyramid, but also at Stonehenge in the Station Stone rectangle and its relation to its Heel Stone.

Furthermore, the latitudinal distance between Stonehenge and the Equator is divided by the Great Pyramid's location at 29.979°, forming a unified geometric framework that links these ancient sites. This highlights the Egyptians' expertise in using whole-number ratios and precise spatial alignments to create structures abroad with cosmic significance.

As I've mentioned, the Station Stone rectangle is not perfectly regular and shows a noticeable deviation from true "squareness." However, it closely aligns with a Silver Ratio rectangle, and its total perimeter remarkably matches the base side of the Great Pyramid at 440 Royal Cubits. This suggests a straightforward way to express the relationship between the two: if we take the area of the Station Stone rectangle as 1 unit, then the area of the Great Pyramid's base expands naturally to the Silver Ratio times 8 (or 2.414 x 8). This proportional relationship appears to be embedded within the measurements themselves.

Great Pyramid (area)

230.386 m x 230.386 m = 53077.70 meters squared

SS Rectangle (area)

81.45 m x 33.74 m = 2748.12 meters squared

Relation between the Great Pyramid area and SS Rectangle area

53077.70 / 2748.12 = 19.3141 = 2.4142 x 8

This harmony also extends to the distances from the Station Stone Rectangle to the Heel Stone, which measure 198 and 140 Royal Cubits, respectively, as detailed in my other papers. Additionally, it aligns with latitudinal distances: the distance from the Equator to Stonehenge at 51.1788° is precisely divided by the Silver Ratio, with the Great Pyramid's latitude at 29.97182°. In this framework, the latitudinal span from the Equator to the Great Pyramid equals √2, while the span from the Great Pyramid to Stonehenge equals 1. Furthermore, the angular distance of the winter solstice sunrise at both Stonehenge and Giza segments into a 2.613:1 ratio—matching the diagonal of a Silver Ratio rectangle.

In my view, these precise measurements don't rely on hypothetical metrology based on arithmetical ideals; the design speaks for itself. In my opinion, it is the metrology, built on hypothetical mathematical ideals searching for a universal theory, that should adapt to this empirical evidence—not the other way around. Could they intersect at some point? Possibly, or even probably, but that has not been the focus of my investigation.

The Gist of It

Using 0.523606 meters for the length of the Royal Cubit as determined by the surveys of both Petrie and Dash, I've calculated the values in meters for the Royal Cubits and Remen as they apply to both the Great Pyramid and Stonehenge as follows (Figure 1):

140 Royal Cubits = 73.304 meters = 125 / √2 Megalithic Yards = Half-height of Great Pyramid, distance from SS Rectangle (91 and 94) to Heel Stone

198 Royal Cubits = 103.673 meters = 125 Megalithic Yards = √2 Height of Great Pyramid apex to floor of King's Chamber

220 Royal Cubits = 115.193 meters = Half-base of Great Pyramid and half-perimeter of SS Rectangle

280 Royal Cubits = 146.609 meters = Height of Great Pyramid and 2x distance of SS Rectangle stone to Heel Stone

440 Royal Cubits = 230.386 meters = Full base of Great Pyramid and full perimeter of SS Rectangle

220 Remen = 81.450 meters = 220 / √2 Royal Cubits = 125 x 1.2727 Megalithic Yards = Quarter diagonal of Great Pyramid and Long Side of SS Rectangle

440 Remen = 162.90 meters = Half diagonal of Great Pyramid

220 Royal Difference = 33.736 meters = Short side of SS Rectangle

The Egyptian approximations of √2 and π, as 140/99 and 440/140, while technically assumptions, are far more contextually and reasonably grounded in their practical use of whole fractions for construction. The Egyptians preferred whole-number ratios to approximate complex mathematical relationships, which is why these approximations align so well with their architectural methods. These aren't just abstract ideas; they fit seamlessly into the Egyptians' pragmatic approach to geometry, architecture, and metrology. Additionally, the Royal Cubit, measured at 0.523606 meters, is not

merely speculative—it's based on direct evidence from survey data of the King's Chamber and the base of the Great Pyramid, making it almost indisputable.

With this foundation, both the Great Pyramid's base and the Station Stone rectangle's perimeter 440 Royal Cubits (230.386 meters), with the Great Pyramid's height being 280 Royal Cubits (146.609 meters). These proportions are rooted in a simple circle/square geometry, specifically in a square whose diagonal is segmented into the silver ratio by an arc. This natural segmentation is uniquely mediated by the Silver Ratio and is instrumental in the construction of an octagon.

For instance, if you start with a square with a side of 220 Remen (81.45 meters), its diagonal will measure 220 Royal Cubits (115.193 meters). The arc that segments the diagonal forms two silver ratio rectangles, each measuring 33.74 x 81.45 meters, which perfectly matches the dimensions of the Station Stone rectangle (in orange) at Stonehenge as shown in Figure 1.

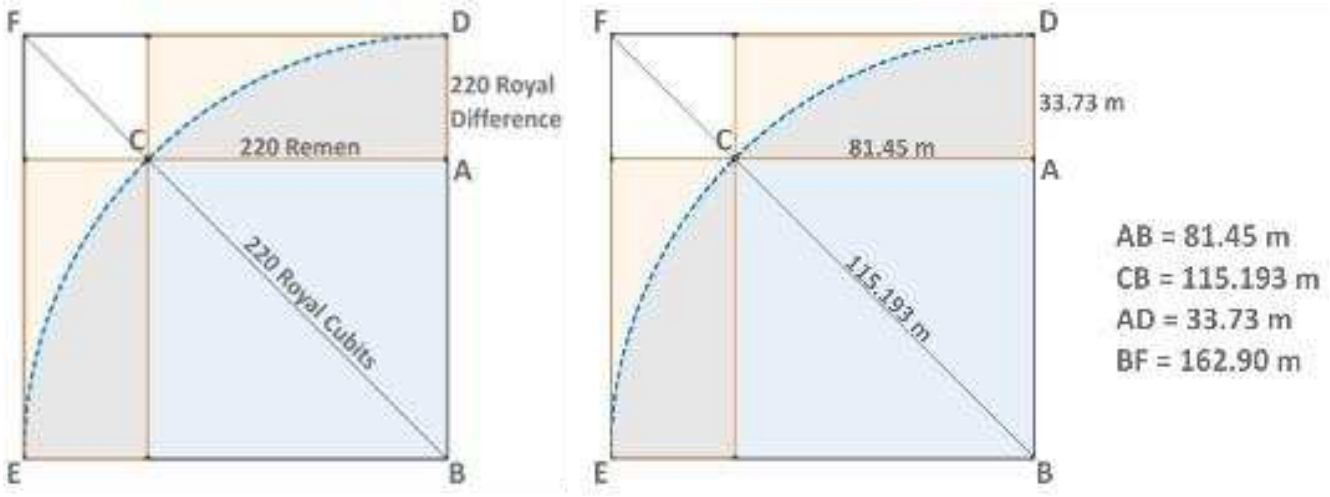


Figure 1

It is suggested that the Station Stone Rectangle and the Heel Stone were erected simultaneously during the first megalithic phase of construction on the outer edge of the Aubrey Circle. It's clear the builders used the Aubrey Circle as a guide rather than a foundation, as timber analysis shows the post holes were already defunct, and the ditching for stones 92 and 94 disturbed the circle, showing little regard for its original structure.

When we examine the circle/square relationship—which I now call the "Silver Ratio Square"—we can clearly observe a template and measurement system that was likely used at both the Great Pyramid and Stonehenge.

Consider a square where the diagonal is √2 and the side is 1 (Figure 2). The arc of the diagonal can be used to create a larger square with double the area, like how the Egyptians allocated land. In this configuration, the arc CD compared to the diagonal of the square, line CB, is in the same ratio as the Great Pyramid's half base (220 Royal Cubits) to its height (280 Royal Cubits), which is 14/11 or 1.2727. However, when the arc is compared to the side of the square, line CA, the

relationship mirrors the Pyramid's height (280 Royal Cubits) to its half-diagonal (440 Remen), or 10/9, which equals 1.1111.

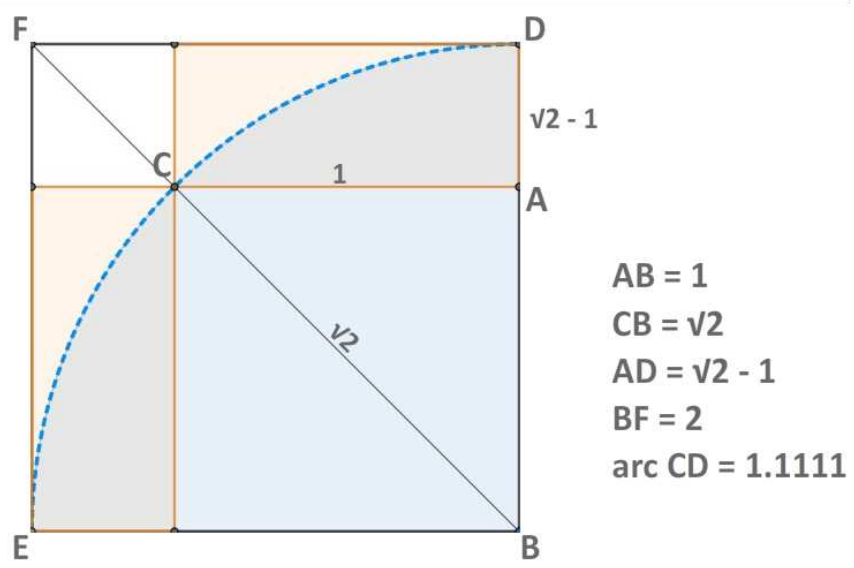


Figure 2

What's intriguing is that the chosen height of the Great Pyramid seems to mediate the unique planar relationship between the circle and square. This raises the question: what if we made the diagonal of the larger square equal to the height of the Great Pyramid? If we do so, the diagonal of the large square, line BF, becomes 280 Royal Cubits, line CB (the diagonal of the smaller square) becomes 198 Royal Cubits, and line CA (the side of the smaller square) becomes 140 Royal Cubits, half the diagonal of the larger square. As for arc CD, which maintains the 10/9 ratio with the side of the smaller square, it equals exactly 220 Remen, or 125 x 1.2727 Megalithic Yards—matching both the Great Pyramid's quarter-diagonal and the long side of the Station Stone rectangle, with its two corners connecting to the apex, or Heel Stone, at precisely 140 Royal Cubits, or 125 / √2 Megalithic Yards, each.

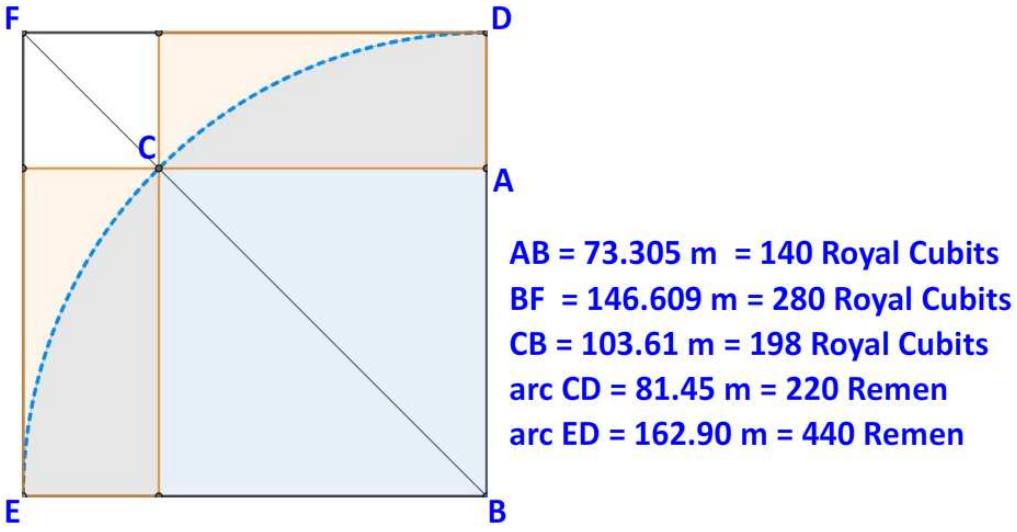


Figure 3

In Figure 3, if we imagine point A as the Heel Stone, which divides the side of the larger square into the silver ratio, then point C at 140 Royal Cubits would be Station Stone 91, and point D at 220 Remen (arc CD) would be Station Stone 94. In this way arc CD acts as the long side of the Station Stone rectangle. Alternatively, as shown in Figure 1, if point A represents Station Stone 91 and point C represents Station Stone 94, then line CA (220 Remen) would form the long side of the Station Stone rectangle. In this configuration, line AD would form the short side of the rectangle, and line CB would equal half the base of the Great Pyramid at 220 Royal Cubits, making the entire perimeter of the orange Silver Ratio rectangle exactly 440 Royal Cubits, just like the base of the Great Pyramid.

What we see designed in the three-dimensional, square-like structure of the Great Pyramid—between its base length and height (side and apex)—is paralleled in the two-dimensional, circle-like layout of Stonehenge, where its length and 'height' (SS side and Heel Stone) reflect a similar relationship. The Heel Stone, in this context, acts as a kind of ‘apex’ for the Station Stone Rectangle.

Through a simple geometric relation, that of the circle and square, the side of the larger square is segmented by the Silver Ratio at point A, forming what I call the "Silver Ratio Rectangle." The long side of this rectangle measures 220 Remen (81.45 meters), and the short side represents the difference between √2 and 1, or 0.4142 (33.736 meters). This difference, which I refer to as the "Royal Difference," as shown in Figure 1, mediates the relationship between the circle and square. Therefore, the long side of the Silver Ratio Rectangle remains 220 Remen (81.45 meters), while the short side, or 220 Royal Differences, measures 33.736 meters.

The perimeter of this orange rectangle is exactly double line BC, totaling 440 Royal Cubits (230.386 meters)—the same as the base length of the Great Pyramid and the perimeter of the Station Stone Rectangle at Stonehenge.

In this simple geometric construction linking circle and square through the silver ratio, we discover a precise template which generates measures found in both the Great Pyramid’s connection with its apex and the Station Stone Rectangle’s connection with its Heel Stone. The Station Stone Rectangle, with its perimeter of 440 Royal Cubits (230.386 meters), is clearly designed to emulate the base of the Great Pyramid and define the side of an octagon. Meanwhile, the Heel Stone, placed 280 Royal Cubits (146.609 meters) from the rectangle’s corners, mirrors the apex of the Great Pyramid (Figure 4).

Additionally, the latitudinal distance between Stonehenge at 51.1788° and the Equator at 0° divides into the Silver Ratio, with the location of the Great Pyramid at 29.9792° acting as the dividing point. This brings the unified theory full circle:

51.1788° - 29.9792° = 21.1996°

51.1788° / 21.1996° = 2.41413 = √2 + 1 (99.997%)

In this way, the latitudinal distance between Stonehenge and the Equator (51.1788°) matches the long side of the octagonal Station Stone Rectangle, and the distance between Stonehenge and the Great Pyramid corresponds to the short side of the rectangle, at 21.1996°.

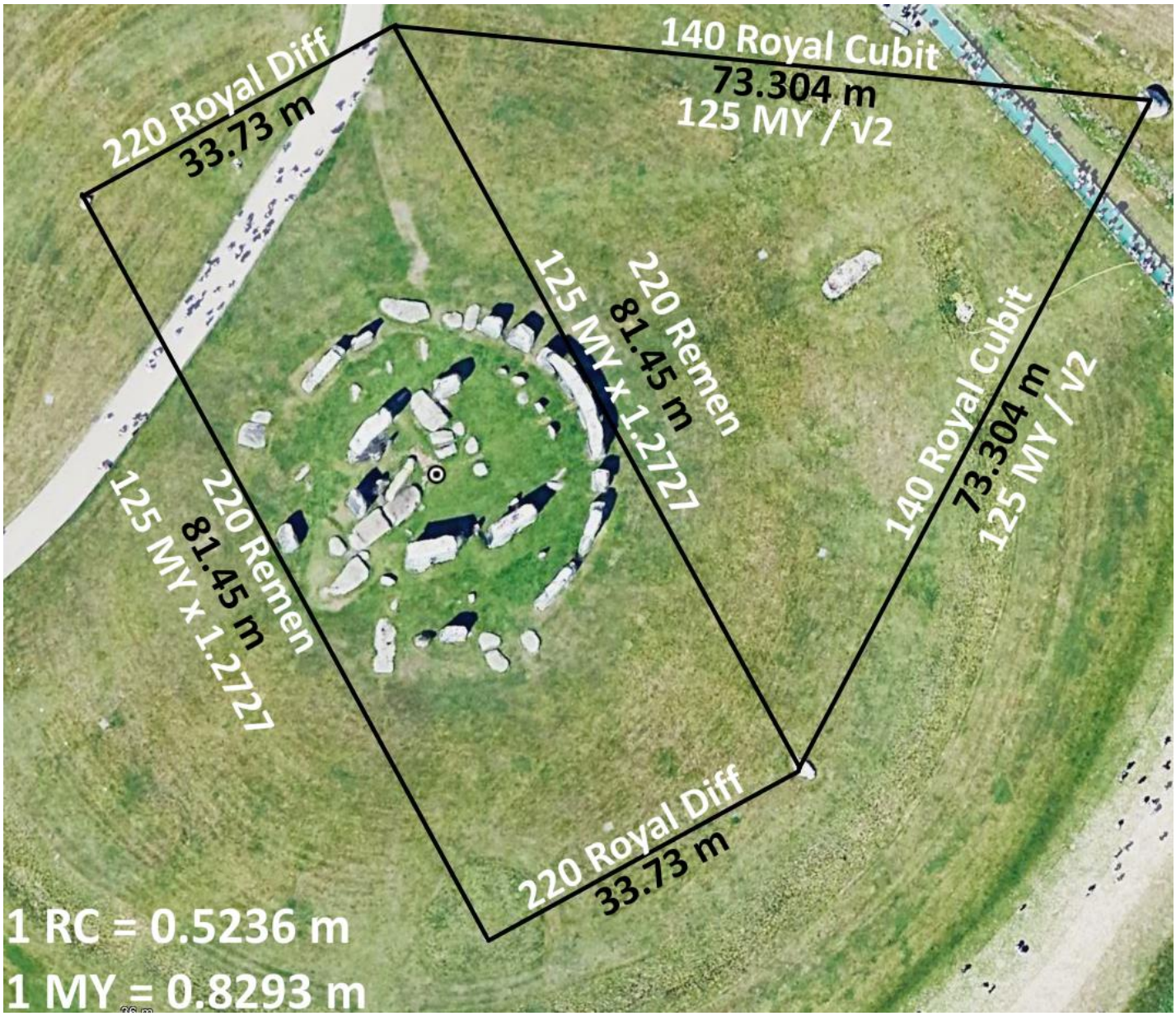
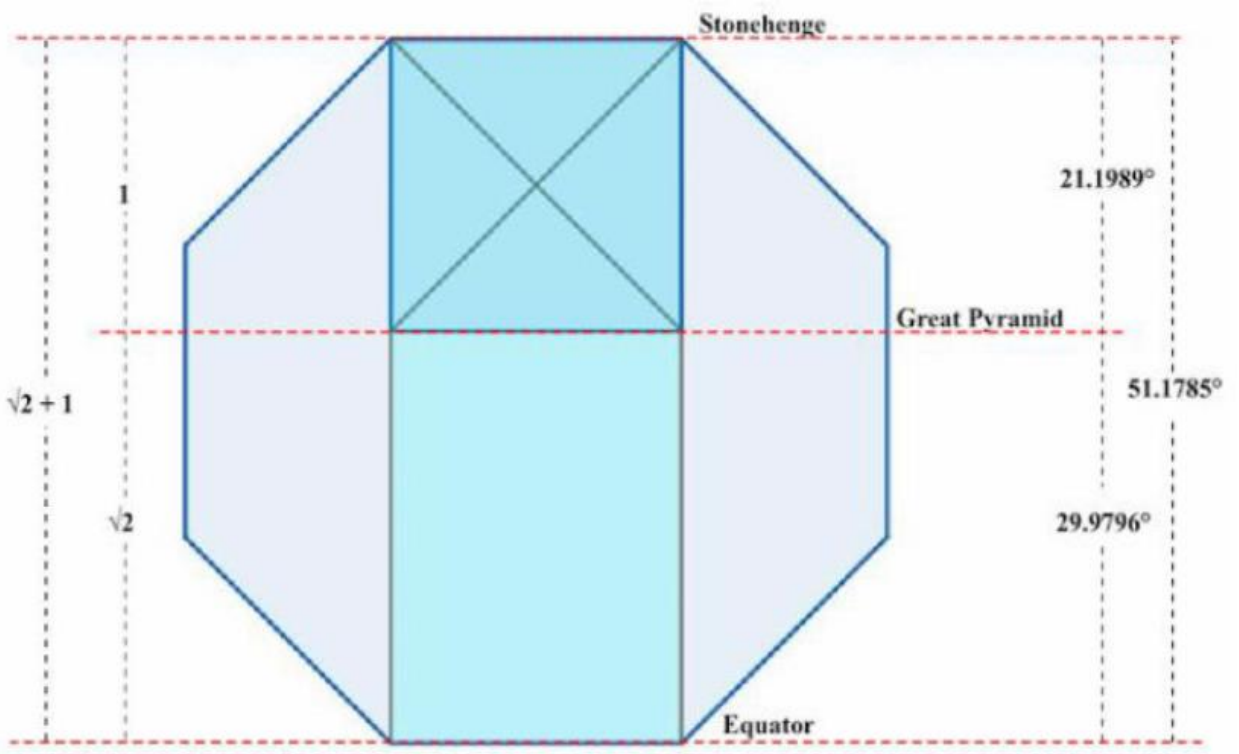


Figure 4



Large-scale relationship of latitudes to octagon.

Figure 5