

The Aubrey Circle at Stonehenge

SURVEY DATA MATTERS

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In the field of metrology, it's common for discussions to go in circles or lead to misunderstandings because people often talk past one another. This happens when they aren't using the same empirical evidence to support their personal hypotheses. One person might start their hypothesis based on idealized mathematical calculations that the builders intended to construct, while another starts with John Doe's empirical data, and yet another uses Jane Doe's entirely different data set. When participants aren't working from the same foundation, namely the same empirical data set, no meaningful resolution can be achieved, and arguments inevitably arise. Essentially, they aren't playing by the same rules in full discloser. This not only hampers productive discourse but also stalls progress in advancing the field or benefiting everyone's pursuit of truth. For meaningful progress, it's crucial to disclose, and preferably agree, on the data set before promoting and discussing various hypotheses. I posed the following question to my colleague, let's call him Alexander, about the Aubrey Circle at Stonehenge (Figure 1):



Figure 1

Alexander, let's stick to the subject of direct evidence regarding the Aubrey holes before we dive into hypothetical interpretations. I want to make sure I fully understand your position so we can be on the same page, using the same data. You said:

> *"Atkinson and others plotted the centers of the Aubrey holes under Thom's supervision. Thom measured to the outer edge. The diameter of the Aubrey holes is then 2 feet. Atkinson measured 283.6 plus 2 = 285.6."*

As I read your statement Alexander, this breaks down into the following claims:

1) Atkinson staked the centers of each Aubrey hole.

2) Thom measured to the 'outer edge' (not to the center or inner edge) of each Aubrey hole.

3) The diameter of each Aubrey hole averages 2 feet.

4) Atkinson measured 283.6 feet for the Aubrey Circle's diameter.

Now, let's take your claims one by one based on the 1974 survey report given by Thom:[1]

1) Yes, according to Thom's report, Atkinson located and staked out the centers of the discovered Aubrey holes. I agree with you here. Done.

2) I don't see any indication that Thom measured to the 'outer edge' of the Aubrey holes. In fact, in his 1974 report, he seems to imply that since Atkinson staked the centers of the Aubrey holes, he (Thom) measured to those center stakes. All interpretations of Thom's data that I've read to date suggest Thom's reported diameter of 283.6 feet (86.441 meters) refers to the centers of the Aubrey holes, not the outer edge. Therefore, we seem to disagree on this point. Can you justify your claim that Thom measured to the outer edge?

3) Thom does not record the diameter of the Aubrey holes in his 1974 report. However, Atkinson and subsequent studies on Stonehenge report an average diameter of 3.47 feet, or 1.06 meters ± 0.3 meters, for each hole—not 2 feet (0.609 meters), as you claim. So again, we seem to disagree here. Can you explain why you're using 2 feet as the average diameter?

4) It was Thom, not Atkinson in the report, who measured the Aubrey Circle diameter as 283.6 feet. Thom is very clear about this in his report, specifically noting, "these stakes and drilled holes were

[1] Thom, A., Stevenson Thom, A., & Strang Thom, A: Journal for the History of Astronomy, Vol. 5, p.78-82. https://articles.adsabs.harvard.edu//full/1974JHA.....5...71T/0000083.000.html

surveyed accurately by us." So, we disagree on this as well. Can you clarify why you claim Atkinson, and not Thom, measured the 283.6-foot diameter?

Now, if Thom (not Atkinson, as you claim) measured 283.6 feet to the centers of the holes, and the holes have an average diameter of 3.47 feet (1.735 feet radius), then the overall Aubrey Circle diameter, when measured to the outer edge, would be 283.6 + 1.735 + 1.735 = 287.07 feet. Measured to the inner edge, it would be 283.6 - 1.735 - 1.735 = 280.13 feet. This results in:

- Inner Aubrey Circle = 280.13 feet (85.383 meters)

- Mid Aubrey Circle = 283.60 feet (86.441 meters)

- Outer Aubrey Circle = 287.07 feet (87.498 meters)

None of these results match the 285.60 feet you've mentioned, but 287.07 feet would get you closer, with 285.60 feet being within 99.48% of 287.07 feet, and 287.07 feet equating to a total circumference of 331.56 Megalithic Yards (MY), assuming the standard MY as 2.72 feet. This is at odds with the 330 MY in your hypothesis.

However, you could argue that the original timber posts within each hole had a smaller diameter (perhaps 2 feet) than the hole itself, and if we measured to the outer edge of those timber posts, we might get closer to 285.6 feet, and thus 330 MY. I can see that as a reasonable possibility. In any case, this is my interpretation of Thom's direct evidence, which differs from your claim.

Therefore, Alexander, do you agree or disagree with my assessment of the survey data? Let's set aside the hypothetical implications for now and focus on whether you agree or disagree with my interpretation of the raw data from Thom's 1974 report. If you disagree, I'd appreciate an explanation as to why, since I may be missing something.