



Stars and Stones : Megalithic Alignments

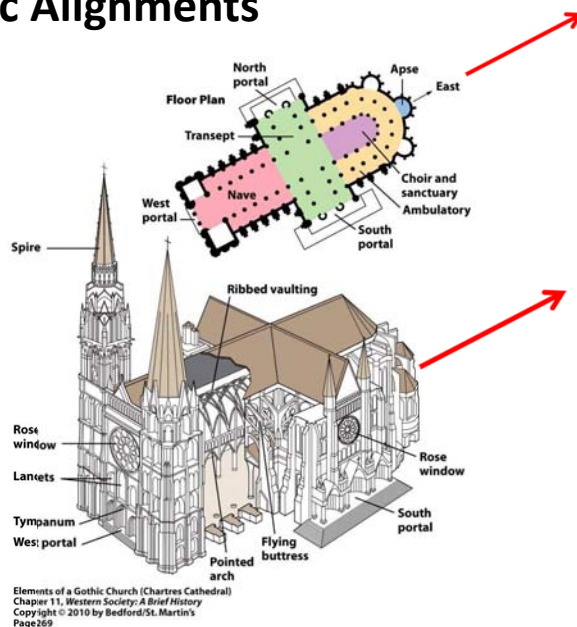
Wednesday 21st January 2026



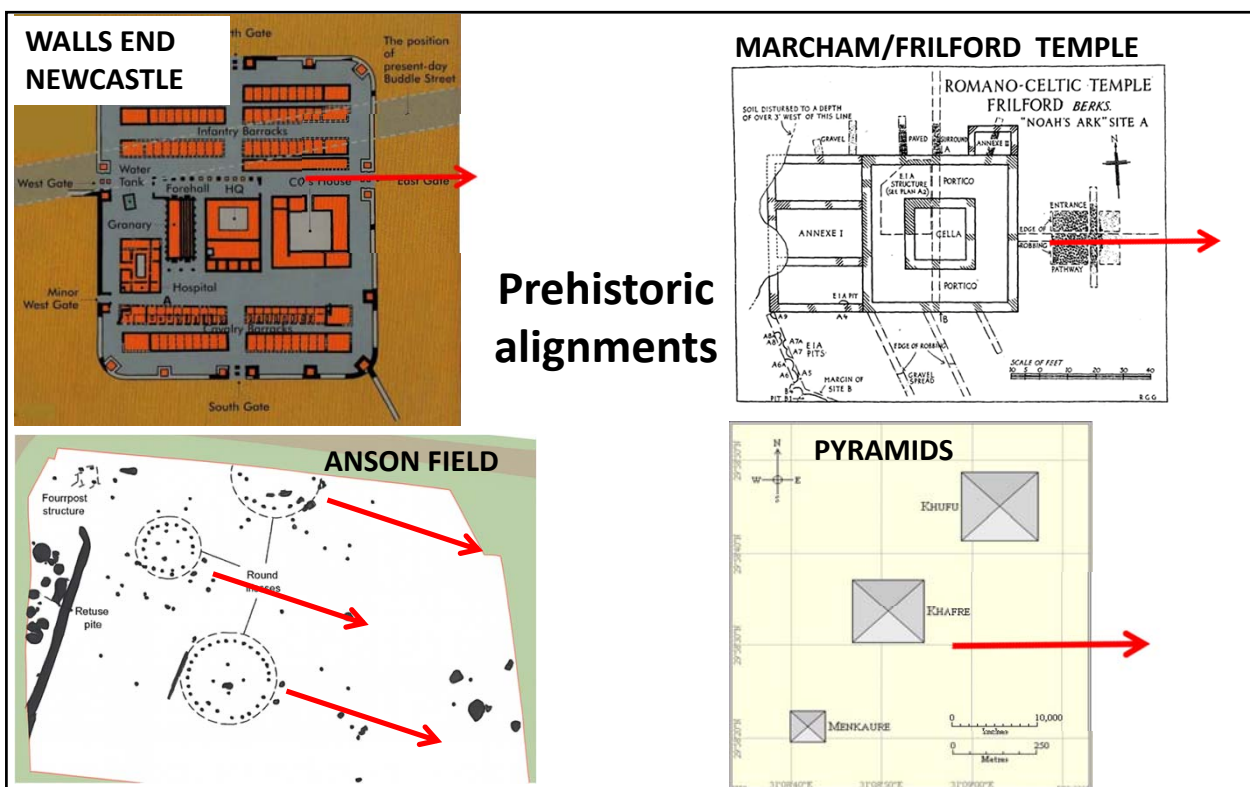
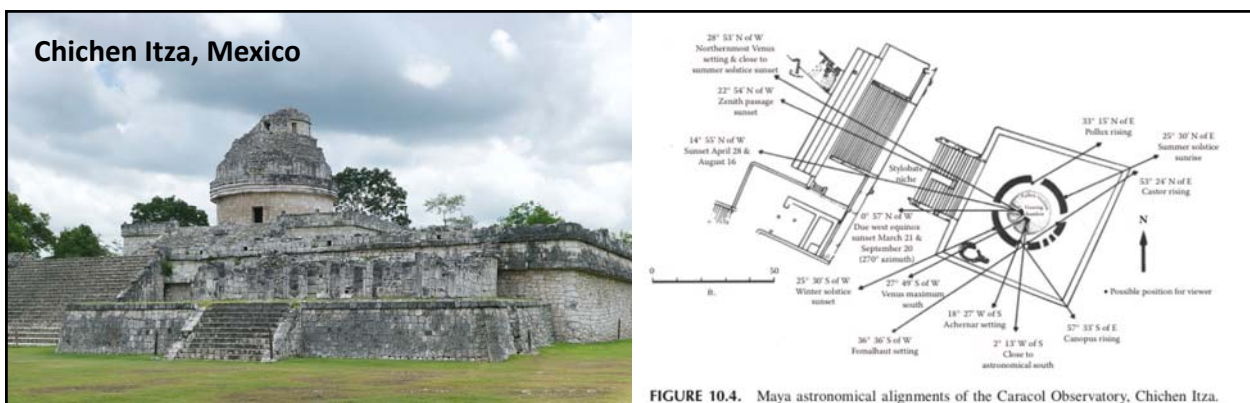
Historic Alignments

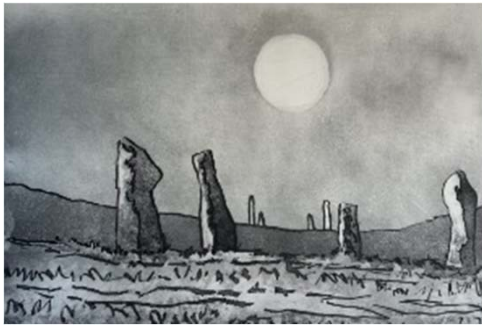
L'Etoile

'Bastide' Towns



Churches and Cathedrals

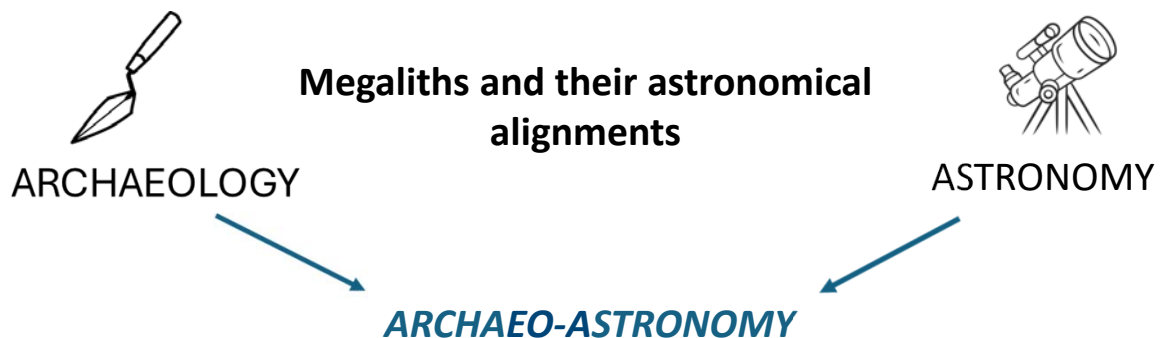




The definition and distribution of Megaliths



FIG. 2 Distribution map of megalithic monuments in Western Europe



Difficulties:

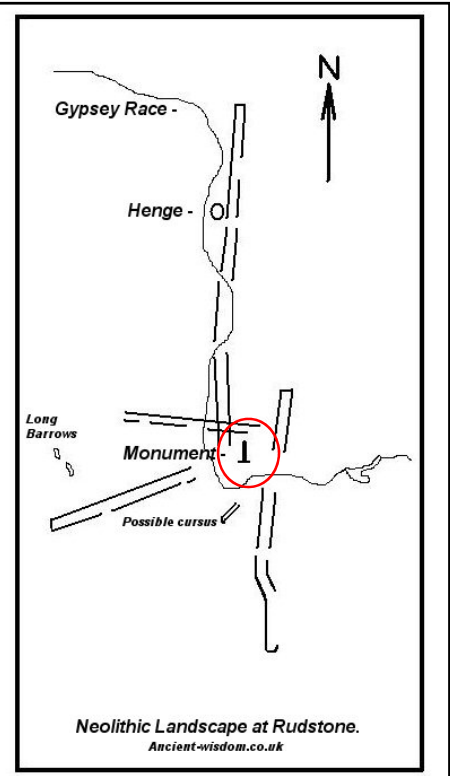
- 1) Shortage of written evidence (*Diodorus, Strabo, Hecataeus*)
- 2) Destruction / adaption of original sites (*Christians, Farmers, Builders*)
- 3) Changing position of stars and planets (*Stellarium, SkySafari, Skychart*)
- 4) The evolving attitude to the abilities of primitive man (*Bible, Darwinism.....*)

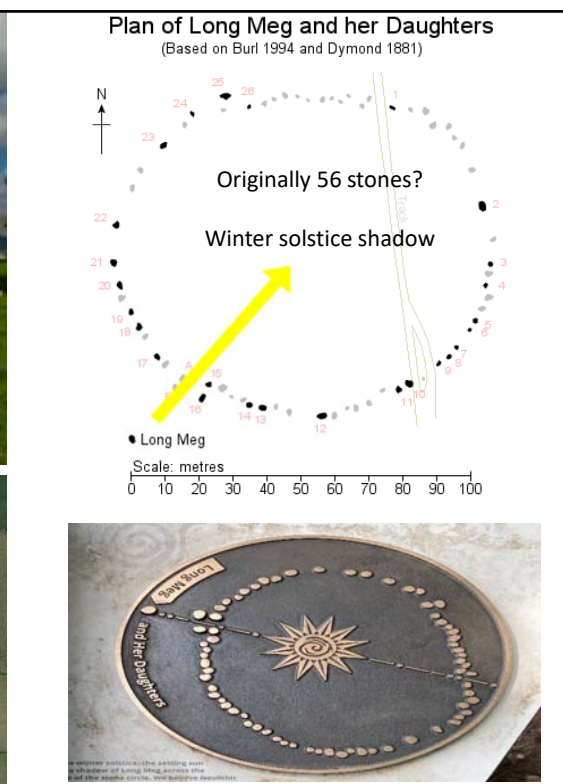


Megaliths



**Rudston
Monolith,
E. Yorks.**





Trowlesworthy, Dartmoor

Stone Rows



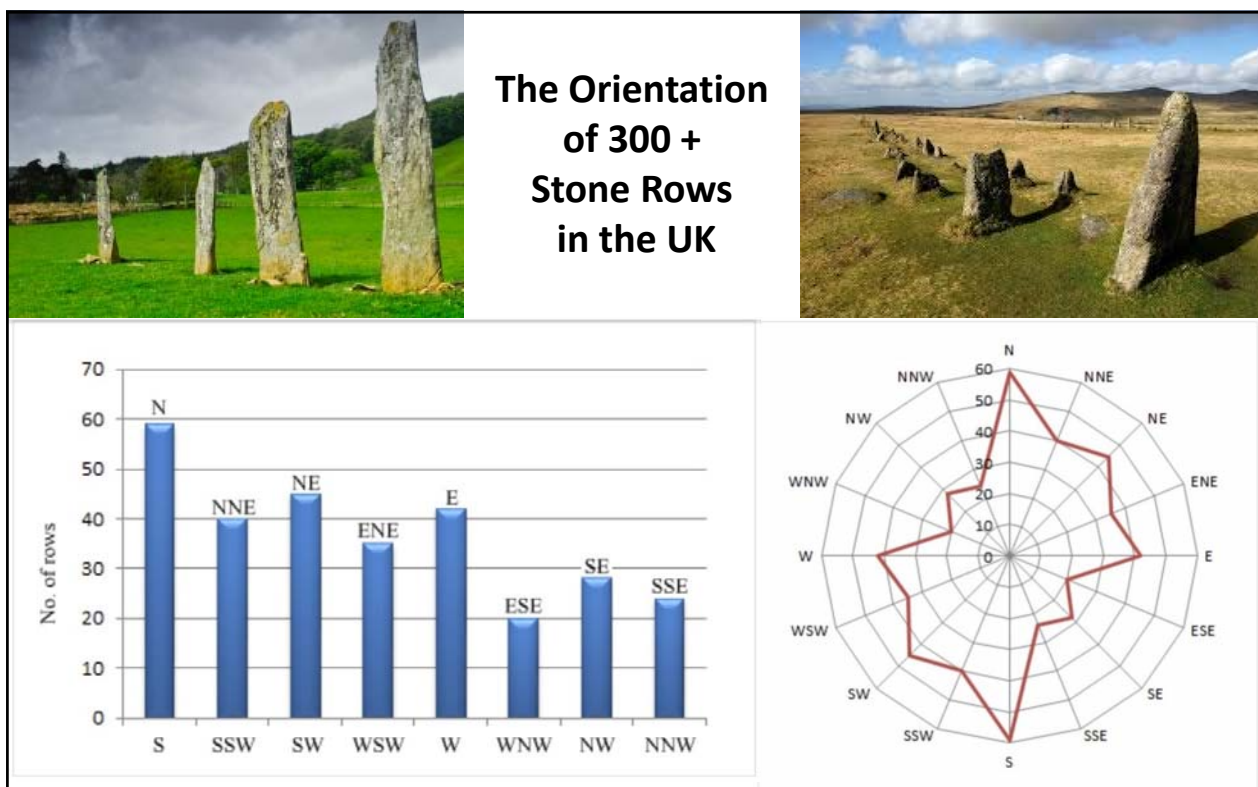
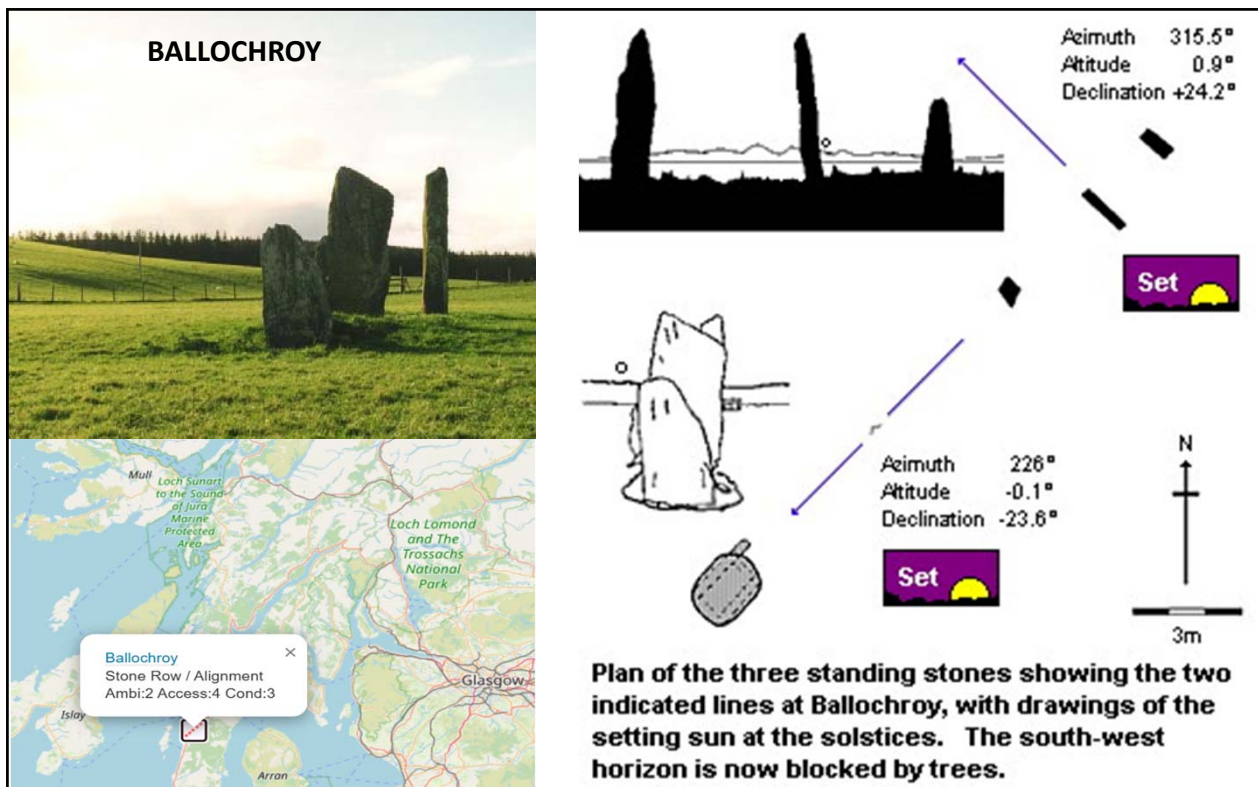
Stravanan Bay, Argyll



Bryntwppa, Mid Wales



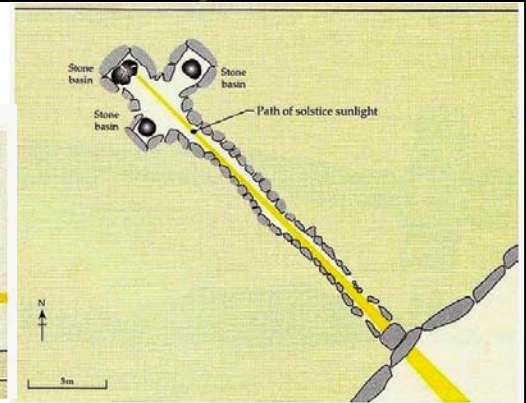
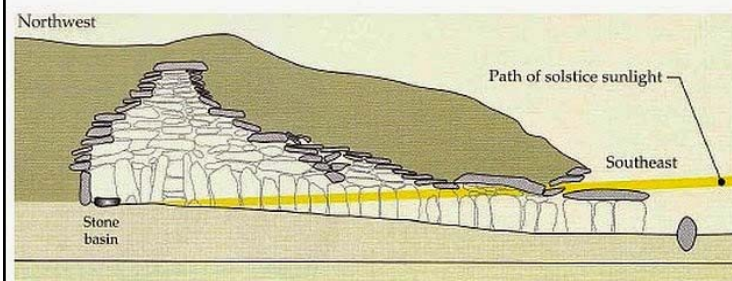
Nine Maidens, Cornwall





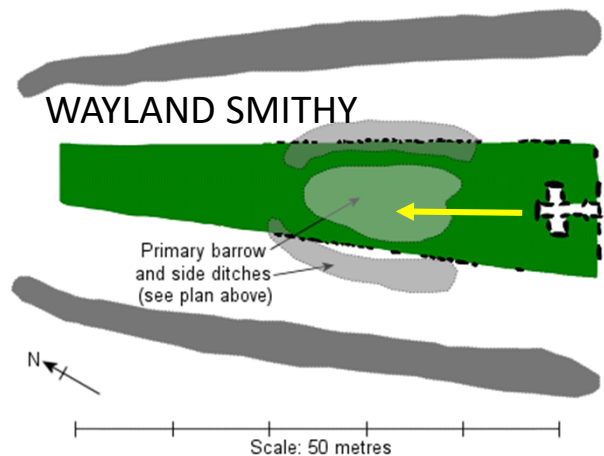
NEWGRANGE

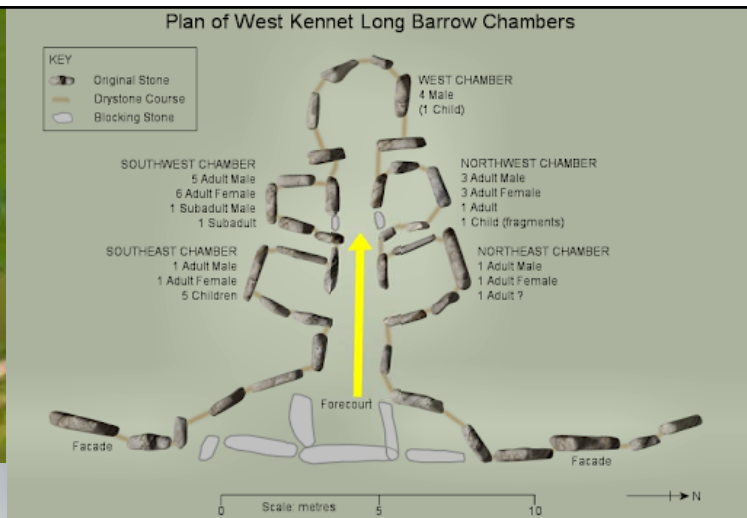
Winter Solstice Sunrise



Wayland's Smithy, a Neolithic long barrow, is oriented towards the **south-southeast**, facing inward towards the Downs and the ancient Ridgeway, rather than towards the Vale of the White Horse.

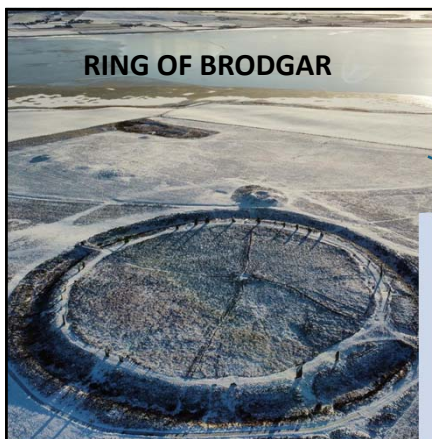
Its stone-lined burial chambers align east-west, with a facade of large sarsen stones at the southern entrance, forming a cruciform shape for ritual purposes, likely connected to the **rising sun** or celestial events.





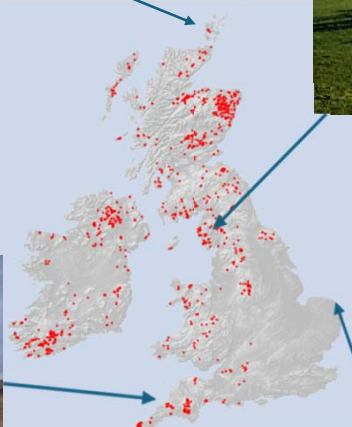
West Kennet Long Barrow

The barrow's primary feature is its monumental facade with huge sarsen stones at the eastern end, designed to greet the rising sun at dawn.



RING OF BRODGAR

Stone Circles in the UK



The distribution of over 1200 Stone Circles



SWINSIDE

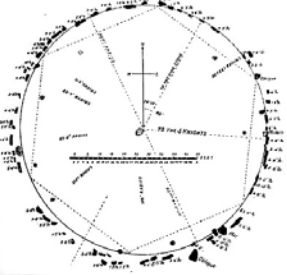
Wales 81
England 316
Ireland 343
Scotland 508



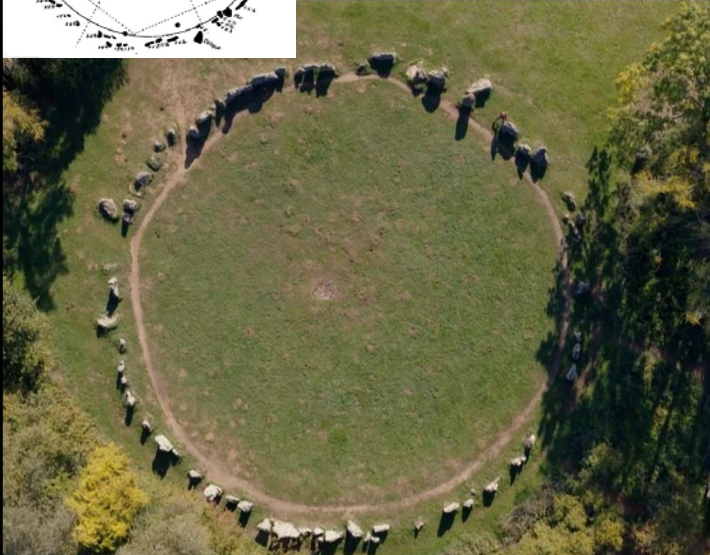

DOWN TOR



SEAHENGE





ROLLRIGHT STONES
Cotswolds







“Joining up the dots”

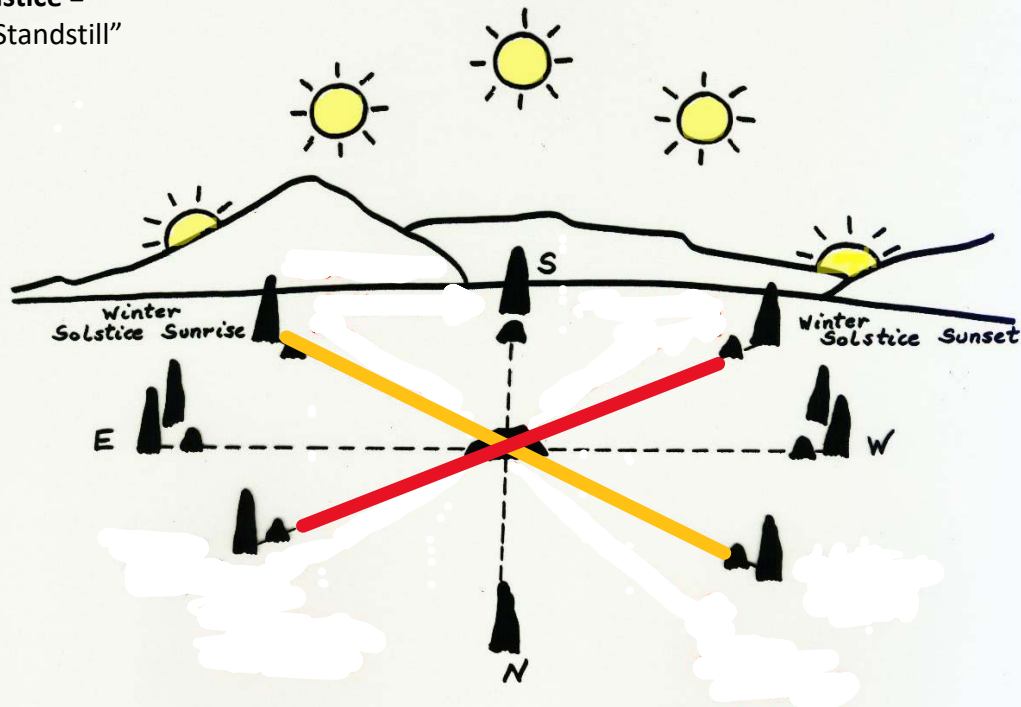
So many possibilities!

A relatively simple site at DROMBEG

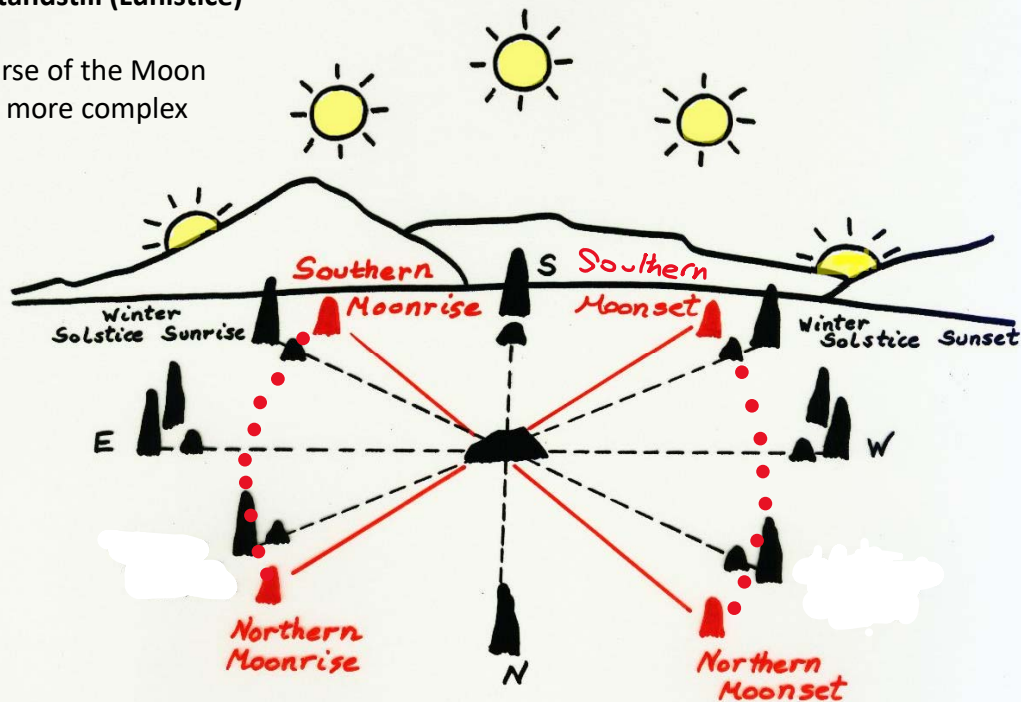




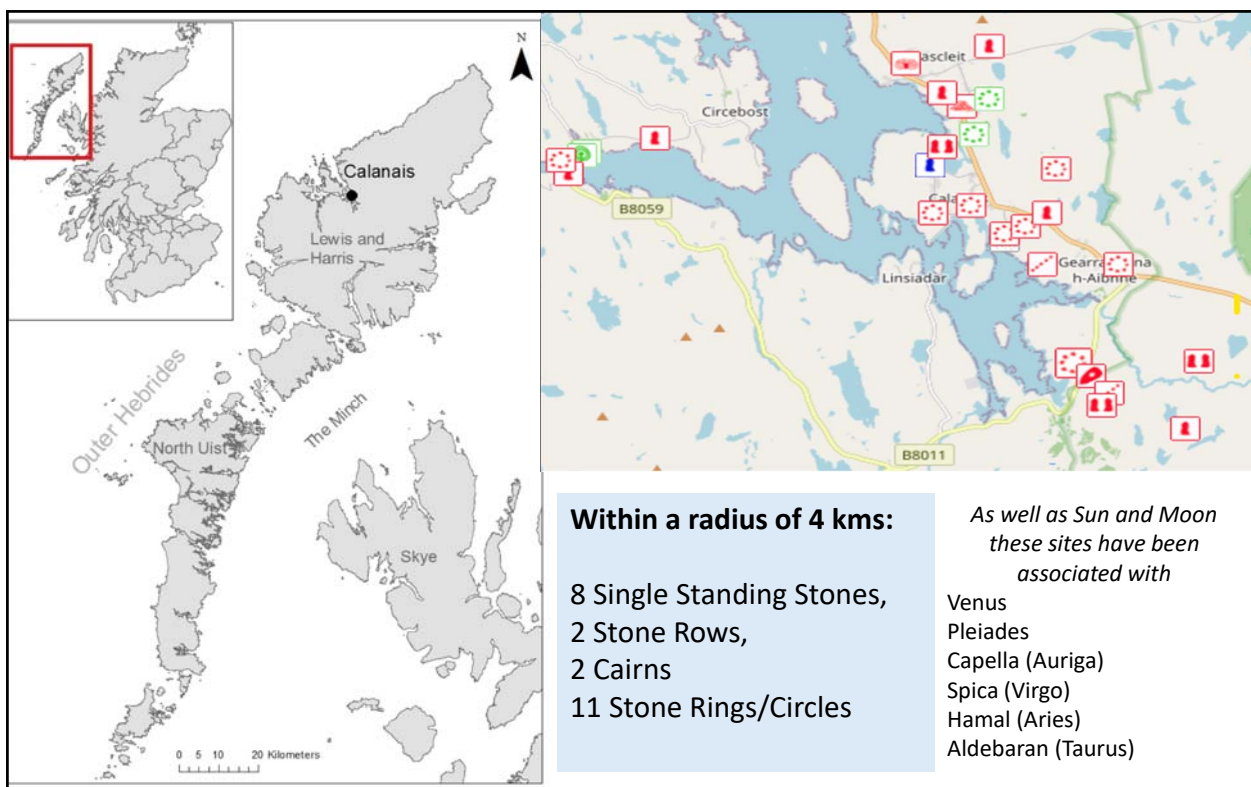
Solstice =
"Sun Standstill"

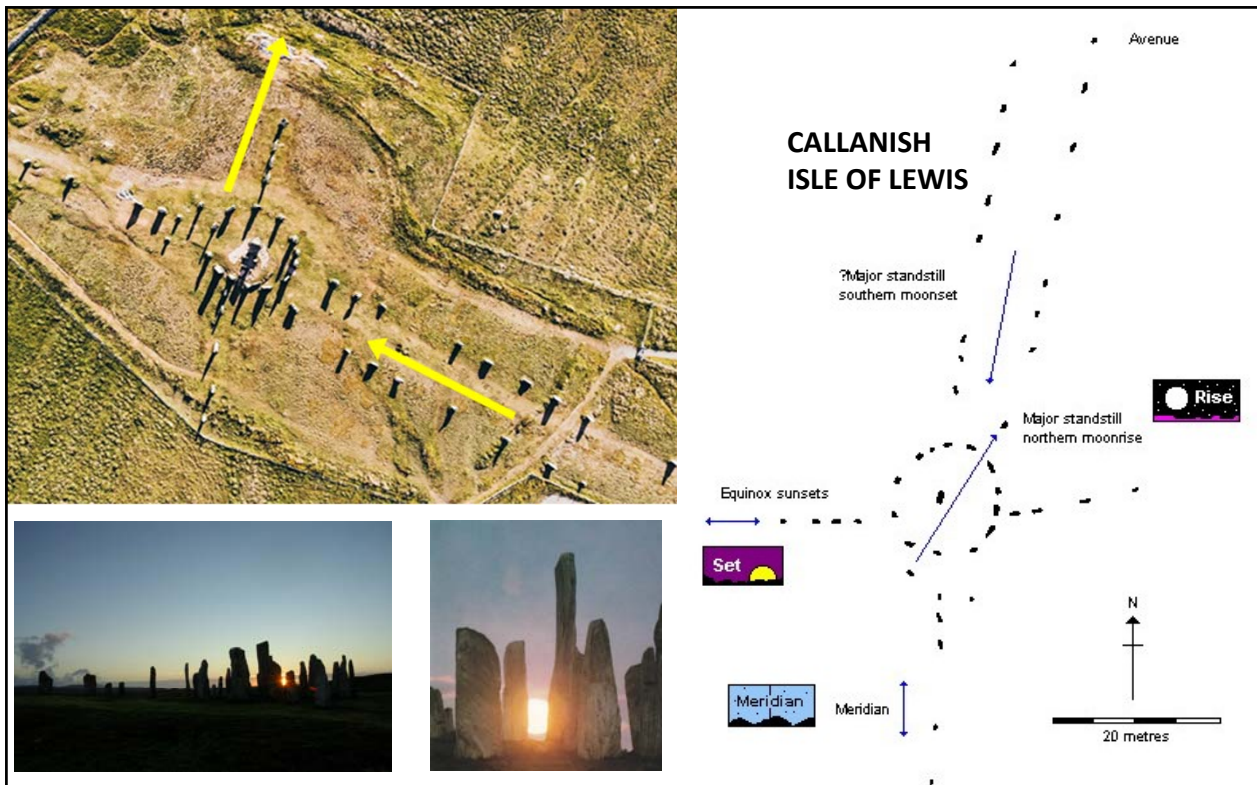


Lunar Standstill (Lunistic)

The course of the Moon is much more complex







Diodorus Siculus on the 'Celtic Temple of Apollo'

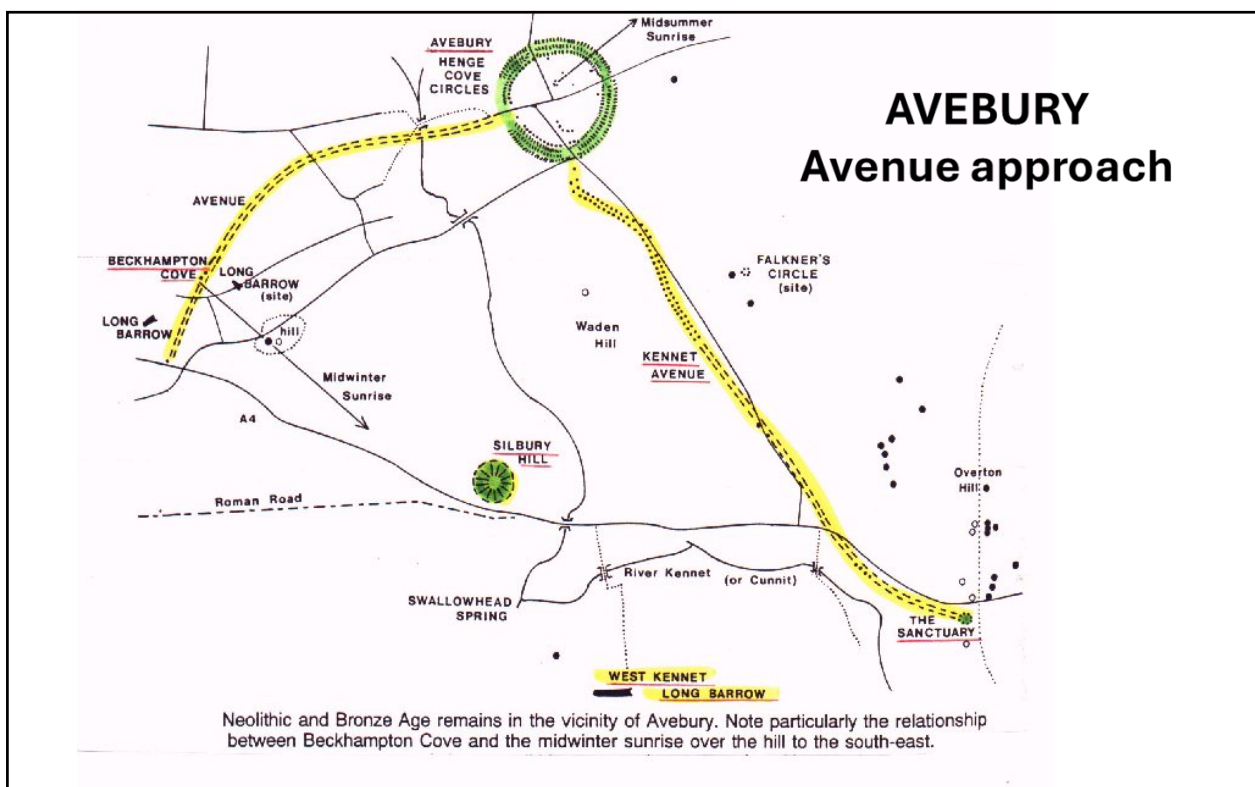
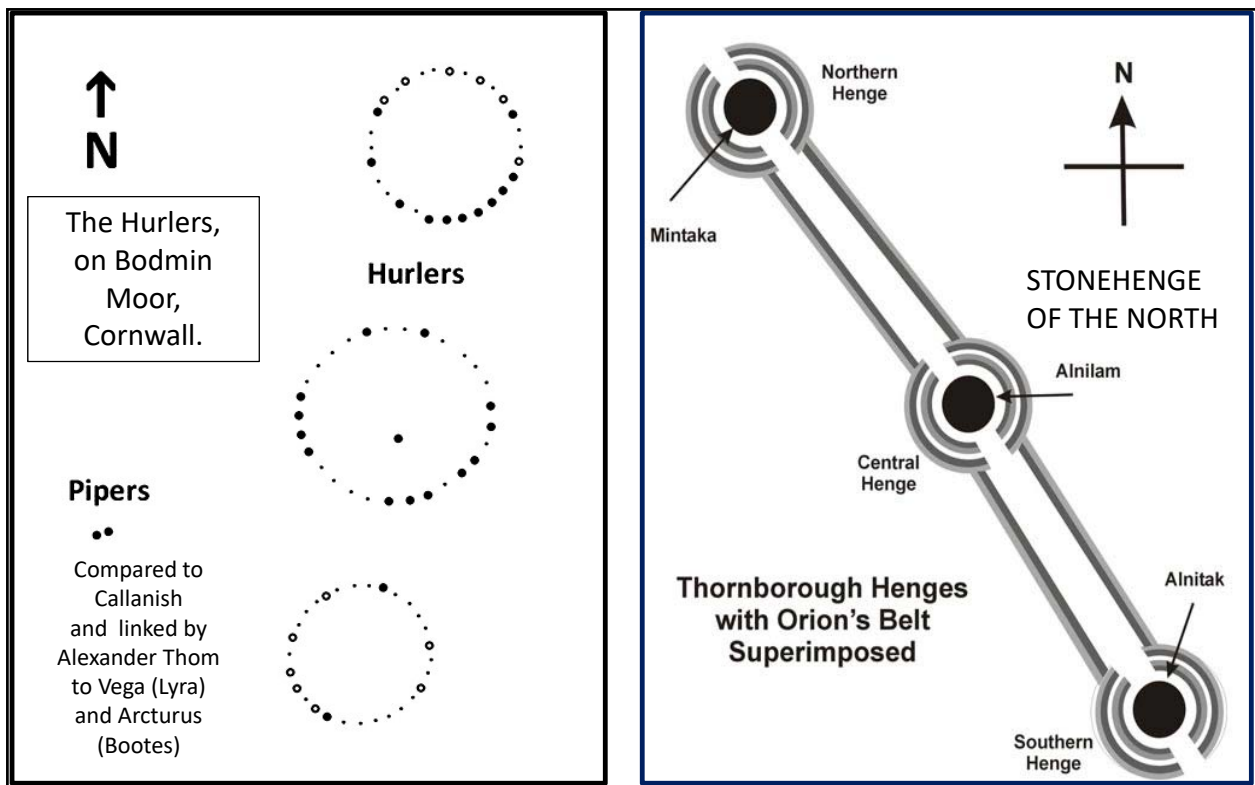
Book 2 chapter 47 - written in 1st Century bc

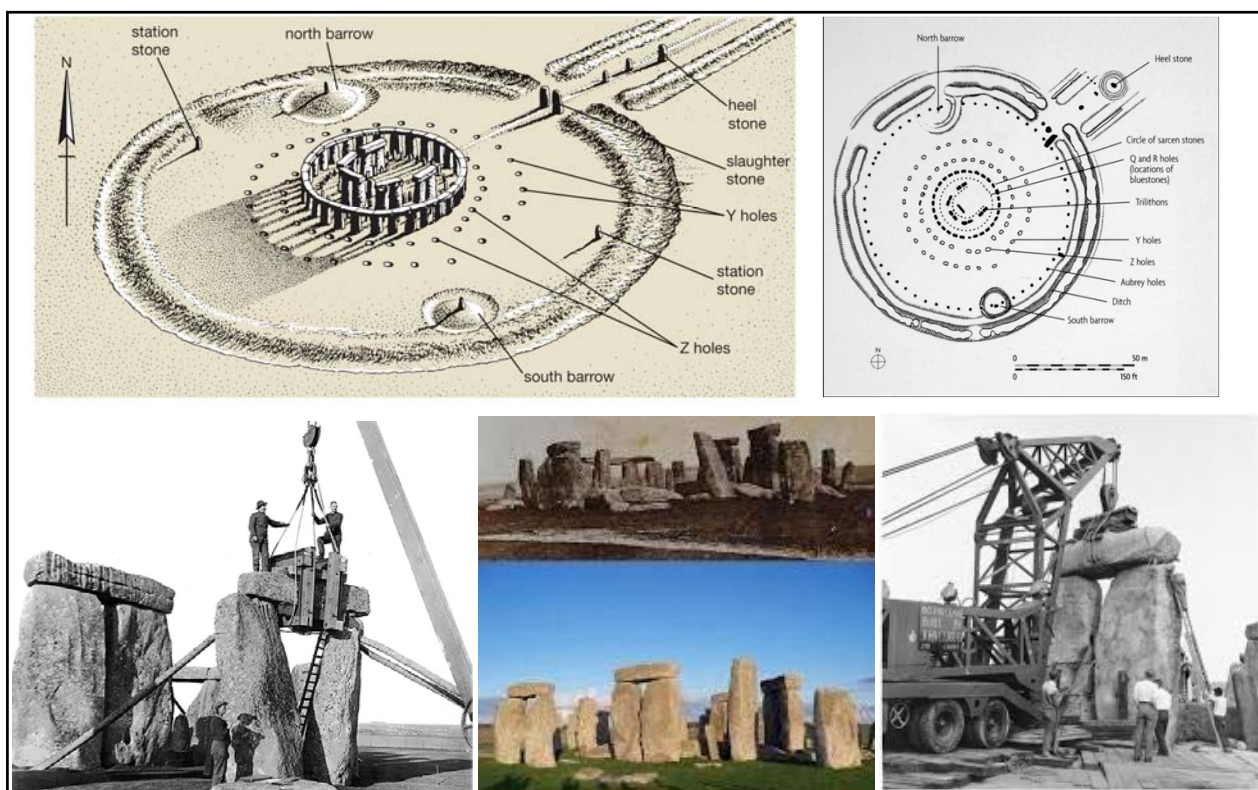
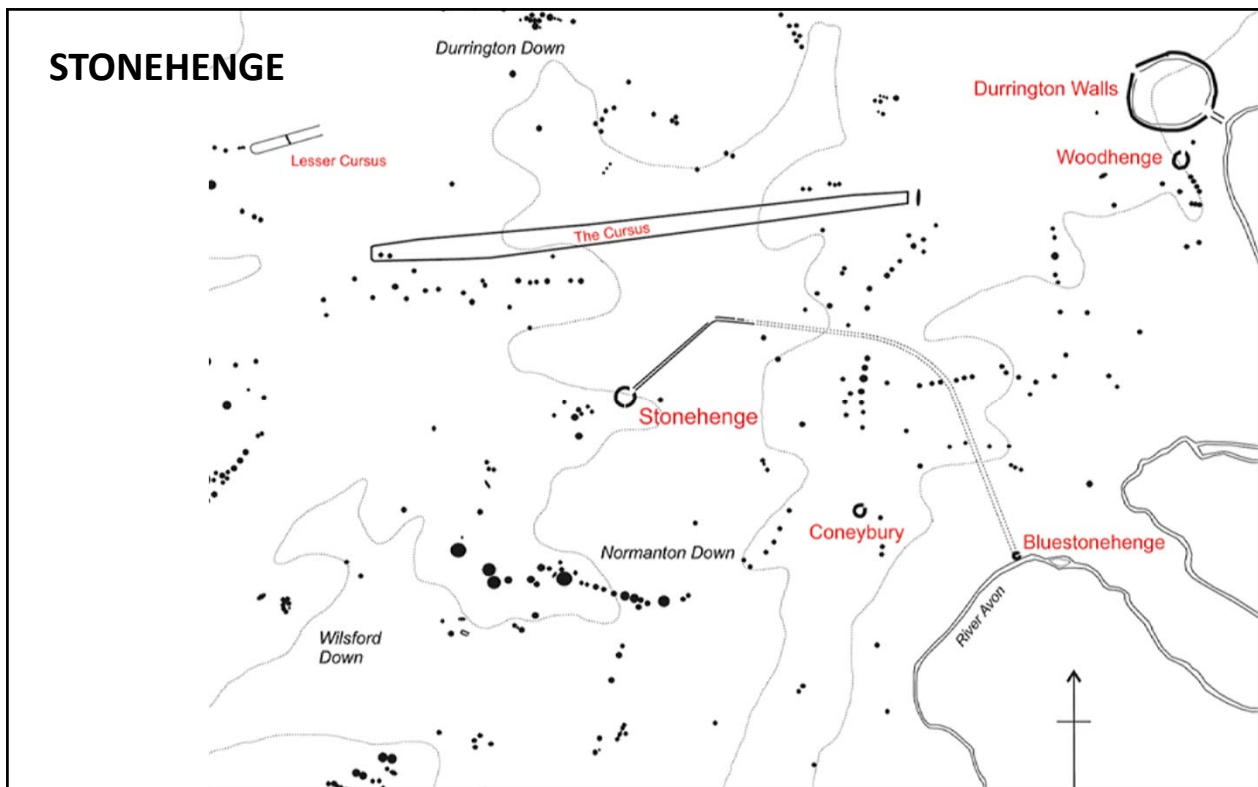
This island, the account continues, **is situated in the north and is inhabited by the Hyperboreans, who are called by that name because their home is beyond the point whence the north wind (Boreas) blows;** and the island is both fertile and productive of every crop, and since it has an unusually temperate climate it produces two harvests each year.

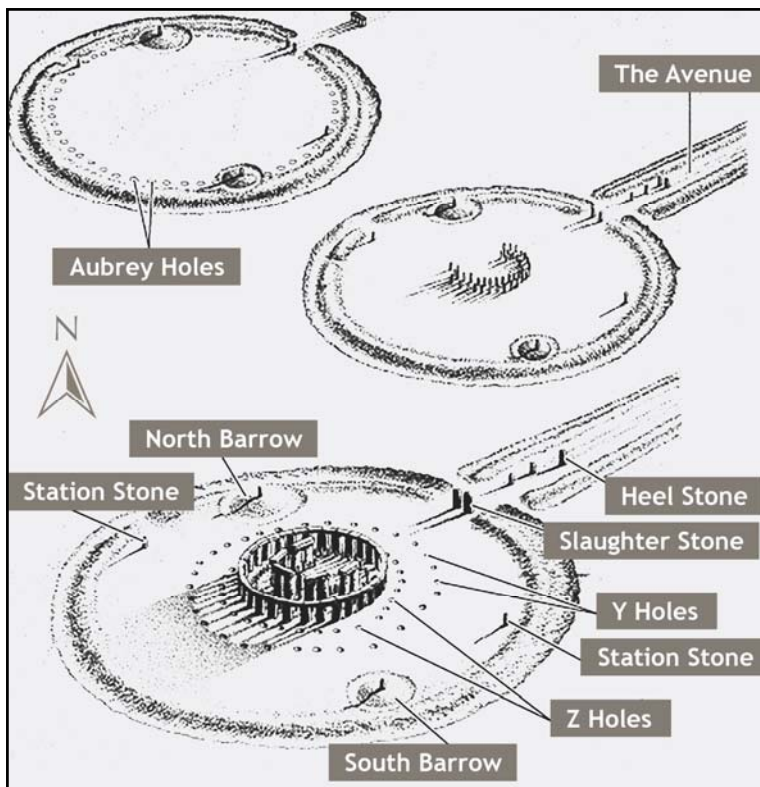
Moreover, the following legend is told concerning it: Leto was born on this island, and for that reason Apollo is honoured among them above all other gods; and the inhabitants are looked upon as priests of Apollo, after a manner, since daily they praise this god continuously in song and honour him exceedingly. **And there is also on the island both a magnificent sacred precinct of Apollo and a notable temple which is adorned with many votive offerings and is spherical in shape.**

They say also that the Moon, as viewed from this island, appears to be but a little distance from the earth and to have upon it prominences, like those of the earth, which are visible to the eye.

The account is also given that the god visits the island every nineteen years, the period in which the return of the stars to the same place in the heavens is accomplished; and for this reason the nineteen-year period is called by the Greeks the "Year of Meton."







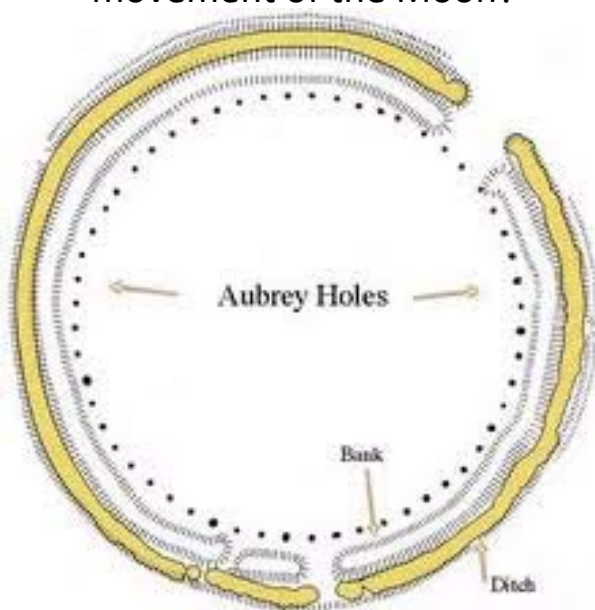
THREE PHASES OF STONEHENGE

1. Aubrey Holes, Station stones & Bank
3000 – 2500 BC

2. Blue Stones & Avenue plus Timber Triliths?
2600-2400 BC

3. Sarsen Triliths & Blue Stone horseshoe
2500-2200 BC

The 56 Aubrey Holes Created to track the movement of the Moon?



John Aubrey (1666): early phase of construction

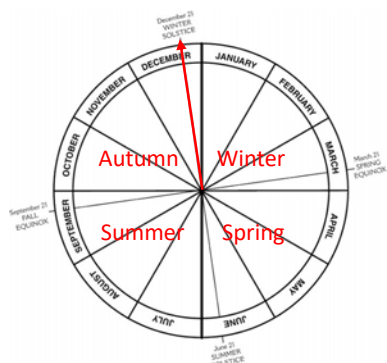
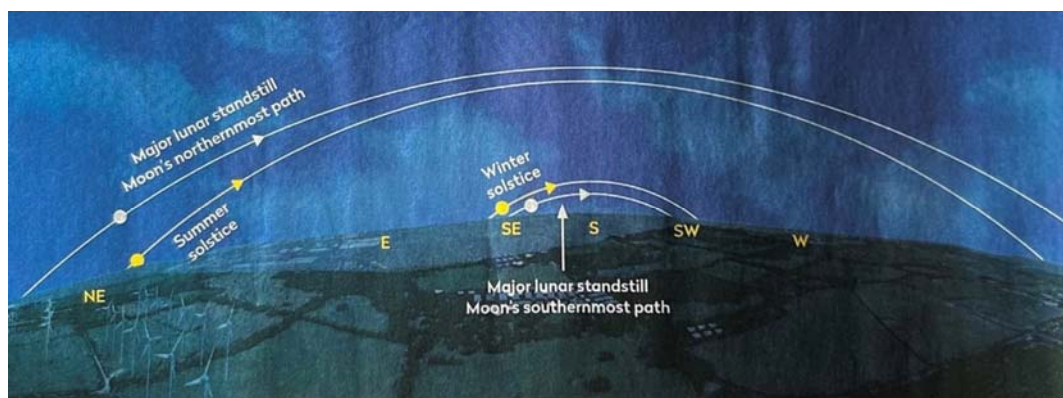
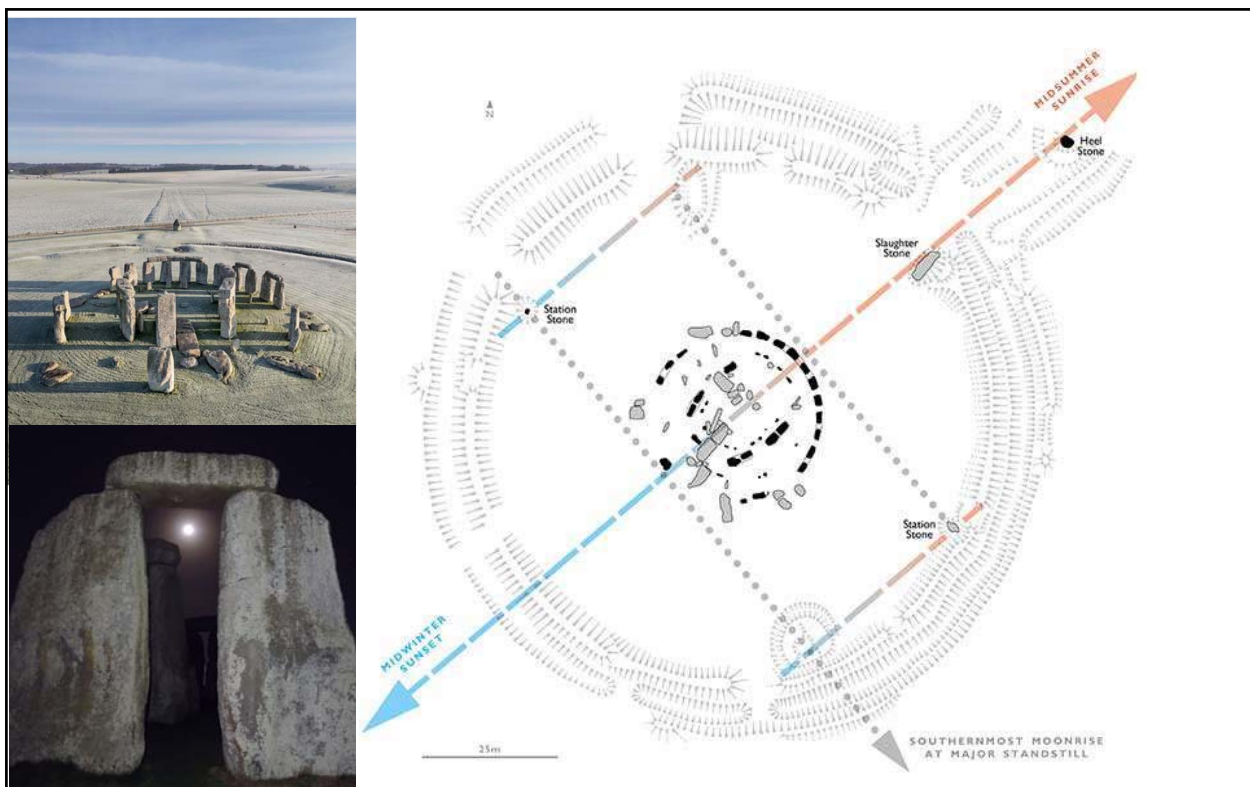
Gerald Hawkins (1963) & Fred Hoyle (1966) : Lunar Cycles and Eclipses

Two times 28 lunar days or three times x 18.6 years of the lunar standstill cycle = 56 holes

Richard Atkinson (1966) "Moonshine on Stonehenge" - Ritual Pits

Lloyd Matthews and Joan Rankin (2015) : Daily solar calendar

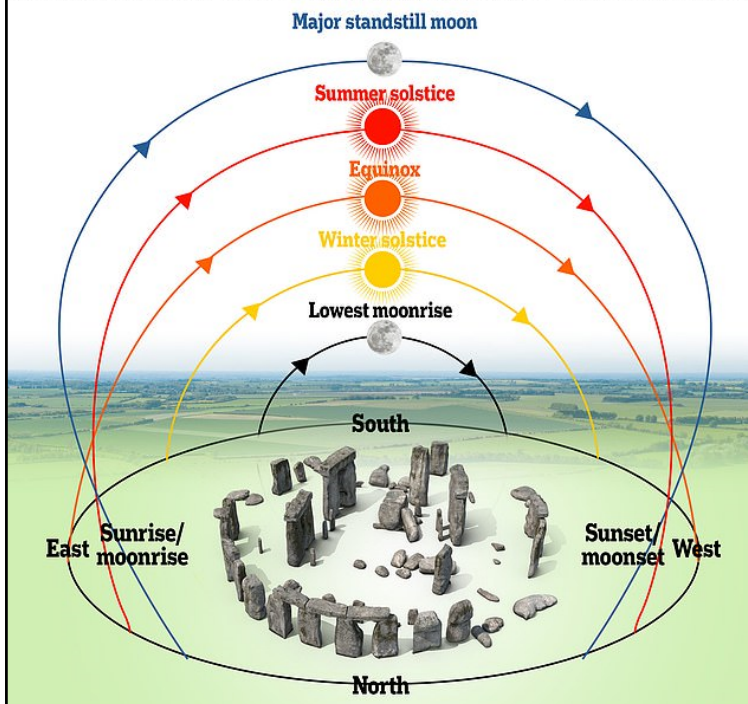
Mike Parker Pearson (2017) Blue stones



The Metonic Cycle

- **Discovery:** Meton observed the summer solstice in 432 BCE and calculated the 19-year cycle of the Moon.
- **Purpose:** To synchronize lunar calendars with the solar year and to ensure that the seasons remain consistent.
- The Major Lunar Standstill season was peaking in 2024 and 2025

MAJOR LUNAR STANDSTILL: WHEN MOONRISE AND MOONSET ARE FARTHEST APART ALONG THE HORIZON



During 2025 English Heritage have been teaming up with experts from Oxford, Leicester and Bournemouth Universities and the Royal Astronomical Society to investigate the alignment of the ancient stones with the moonrise and moonset.

The four Station Stones at Stonehenge align with two of the Moon's extreme positions, and there is much debate as to whether this was deliberate, and if so, what might have been the purpose.

A team of archaeoastronomers have been exploring the complex relationship between the landscape, stones and the Moon over the course of the standstill.

The attitudes to the 'primitive minds' have changed - we are starting to admire them!

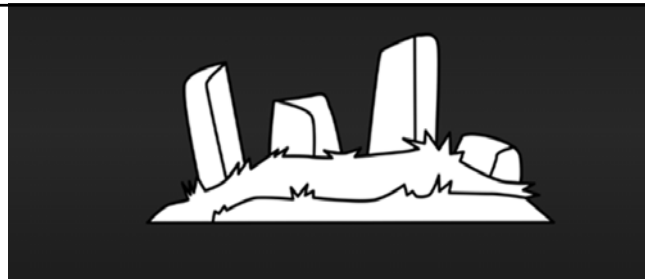


Solstice

Sunset

Sunrise

Equinox



ANY CONCLUSIONS ON MEGALITHIC ALIGNMENTS?

1 Standing Stones

2 Stone Rows

3 Long Barrows

4 Stone Circles



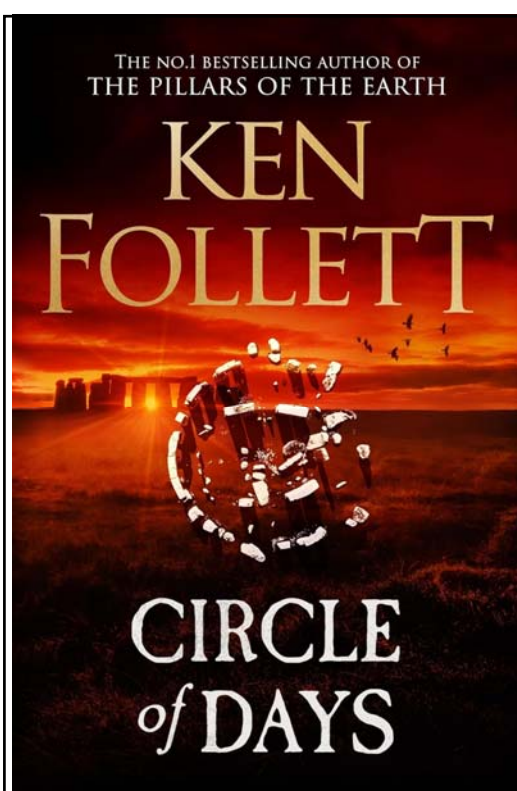
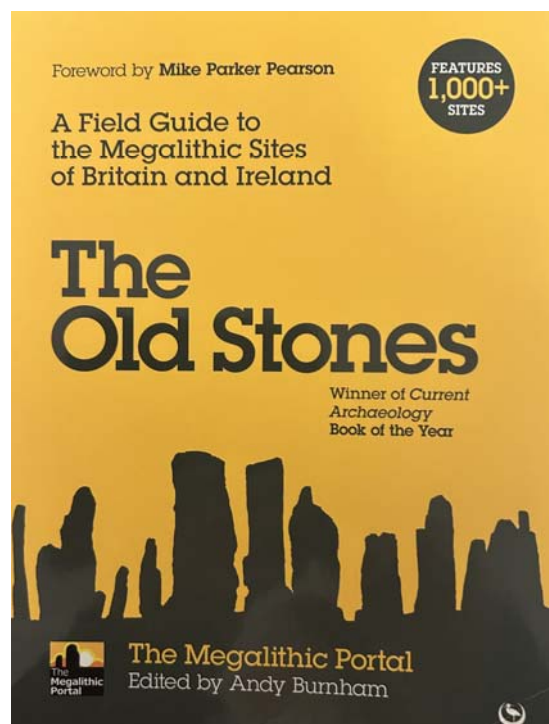
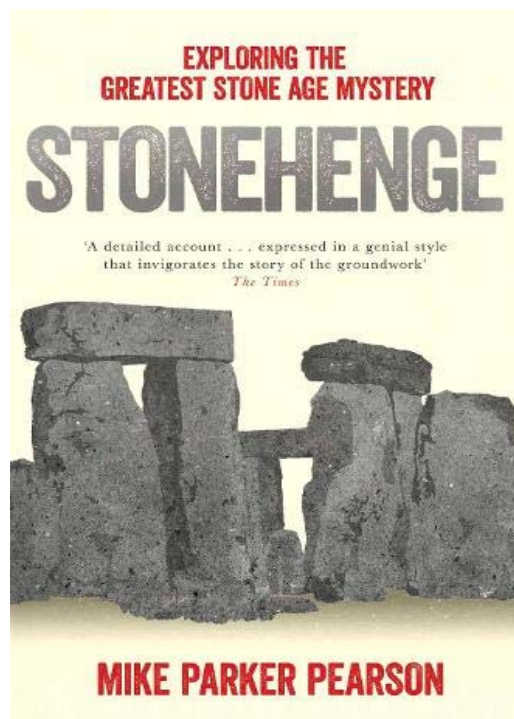
Moon Standstill

Annual Calendar

Four Seasons

Metonic Cycle

Recent Publications in 2025

**KEN FOLLETT (2025)****A FLINT MINER WITH A GIFT**

Seft, a talented flint miner, walks the Great Plain in the high summer heat, to witness the rituals that signal the start of a new year. He is there to trade his stone at the Midsummer Rite, and to find Neen, the girl he loves. Her family lives in prosperity and offers Seft an escape from his brutish father and brothers, within their herder community.

A PRIESTESS WHO BELIEVES THE IMPOSSIBLE

Joia, Neen's sister, is a priestess with a vision and an unmatched ability to lead. As a child, she watches the Midsummer ceremony, enthralled, and dreams of a miraculous new monument, raised from the biggest stones in the world. But trouble is brewing among the hills and woodlands of the Great Plain.

A MONUMENT THAT WILL DEFINE A CIVILISATION

Joia's vision of a great stone circle, assembled by the divided tribes of the Plain, will inspire Seft and become their life's work. But as drought ravages the earth, mistrust grows between the herders, farmers and woodlanders - and an act of savage violence leads to open warfare . .



**ADDITIONAL REFERENCES
AND INFORMATION**

ARCHAEO-ASTRONOMY

Changing attitudes to the 'primitive prehistoric mind'

- 1740** : "Stonehenge : A Temple Restored to the British Druids" **William Stukeley** (antiquarian & reverend)
- 1909**: "Stonehenge and other British Stone Monuments Astronomically Considered" **Norman Lockyer**
(astronomer and scientist)
- 1923**: "Instances of orientation in prehistoric monuments" **Henry B Somerville** (naval officer & surveyor)
- 1966**: "Stonehenge Decoded" **Gerald Hawkins** (astronomer) "Moonshine on Stonehenge" **Richard Atkinson** (archaeologist)
- 1971**: "Megalithic Observatories" **Alexander Thom** (engineer) "Megaliths in History" **Glyn Daniels** (archaeologist)

1972: THE PLACE OF ASTRONOMY IN THE ANCIENT WORLD Royal Society & British Academy Symposium

- 1999**: "Astronomy in Prehistoric Britain and Ireland" **Clive Ruggles**
(astronomer & archaeologist)
- 2015**: "Archaeo-astronomy. Introduction to the science of stars and stones." **Giulio Magli**
(astrophysicist & astronomer)

