

Tomnaverie Recumbent Stone Circle: Earthly Window to the Sacred Sky

Liz Henty



Mircea Eliade, [1957], *The Sacred and The Profane*, translated by Willard R Trask, USA: Harcourt Inc., 1987.

Mircea Eliade, *Patterns in Comparative Religion*, translated by Rosemary Sheed, London: Sheed and Ward, 1958.

Otto, Rudolf (1869-1937), *Das Heilige* (Alternatively translated as *The Sacred* or *The Idea of the Holy*), published in 1917.

Aurora Borealis at Tomnaverie Recumbent Stone Circle

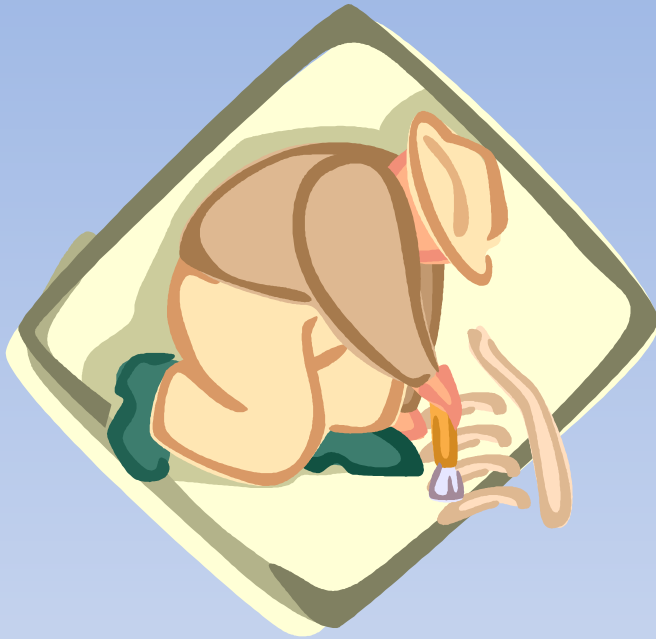
Imagining the sky as sacred space



Pieter Bruegel the Elder's *The Harvesters*, (1565)

analysed by Tim Ingold in 'The Temporality of the Landscape',
World Archaeology, Vol. 25, No. 2, Conceptions of Time and Ancient Society (1993).





**Earth-based
Archaeology**

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**Sky-based
Archaeoastronomy**

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Skyscape Archaeology

Recumbent arrangements at Easter Aquorthies, Old Kieg, Clune Wood and Cothiemuir Wood, Aberdeenshire



Aerial view of Tomnaverie Recumbent Stone Circle



Photograph courtesy of Nigel Healey

RSCs – Antiquarian Research

F R Coles, 'Report on Stone Circles in Kincardineshire (North) and part of Aberdeenshire, with measured Plans and Drawings obtained under the Gunning Fellowship', *Proceedings of the Society of Antiquaries in Scotland*, Vol.34, 1899-1900, pp.139-198.

A L Lewis, 'The Stone Circles of Scotland' *The Journal of the Anthropological Institute of Great Britain and Ireland*, Vol. 30, 1900.

Sir Norman Lockyer, 'On the Observation of Sun and Stars Made in Some British Stone Circles, Third Note, The Aberdeenshire Circles.', *Proceedings of the Royal Society of London, Series A, Containing Papers of a Mathematical and Physical Character*, Vol. 80, No. 538, 1908.

RSCs – Archaeoastronomical Analysis

Alexander Thom, *Megalithic Sites in Britain*, Oxford: Oxford University Press, 1967.

Aubrey Burl, *Rings of Stone: The Prehistoric Stone Circles of Britain and Ireland*, London : Francis Lincoln Publishers Ltd, 1979.

C L N Ruggles and H A W Burl, 'A New Study of the Aberdeenshire Recumbent Stone Circles, 2: Interpretation' in *Archaeoastronomy* No 8, *Journal for the History of Astronomy*, xvi, supplement to Volume 16, Cambridge: Science History Publications, 1985.

Clive Ruggles, *Astronomy in Prehistoric Britain and Ireland*, New Haven and London: Yale University Press, 1999.

RSCs – Archaeological Analysis

Richard Bradley, *Altering the Earth*, The Rhind Lectures 1991-92, Society of Antiquaries of Scotland, Monograph Series No. 8, Edinburgh, 1993.

Richard Bradley, *The Significance of Monuments: On the Shaping of Human Experience in Neolithic and Bronze Age Europe*, London, Routledge, 1998.

Richard Bradley, *The Moon and the Bonfire: An Investigation of Three Stone Circles in Aberdeenshire*, Edinburgh, Society of Antiquaries of Scotland, 2005.

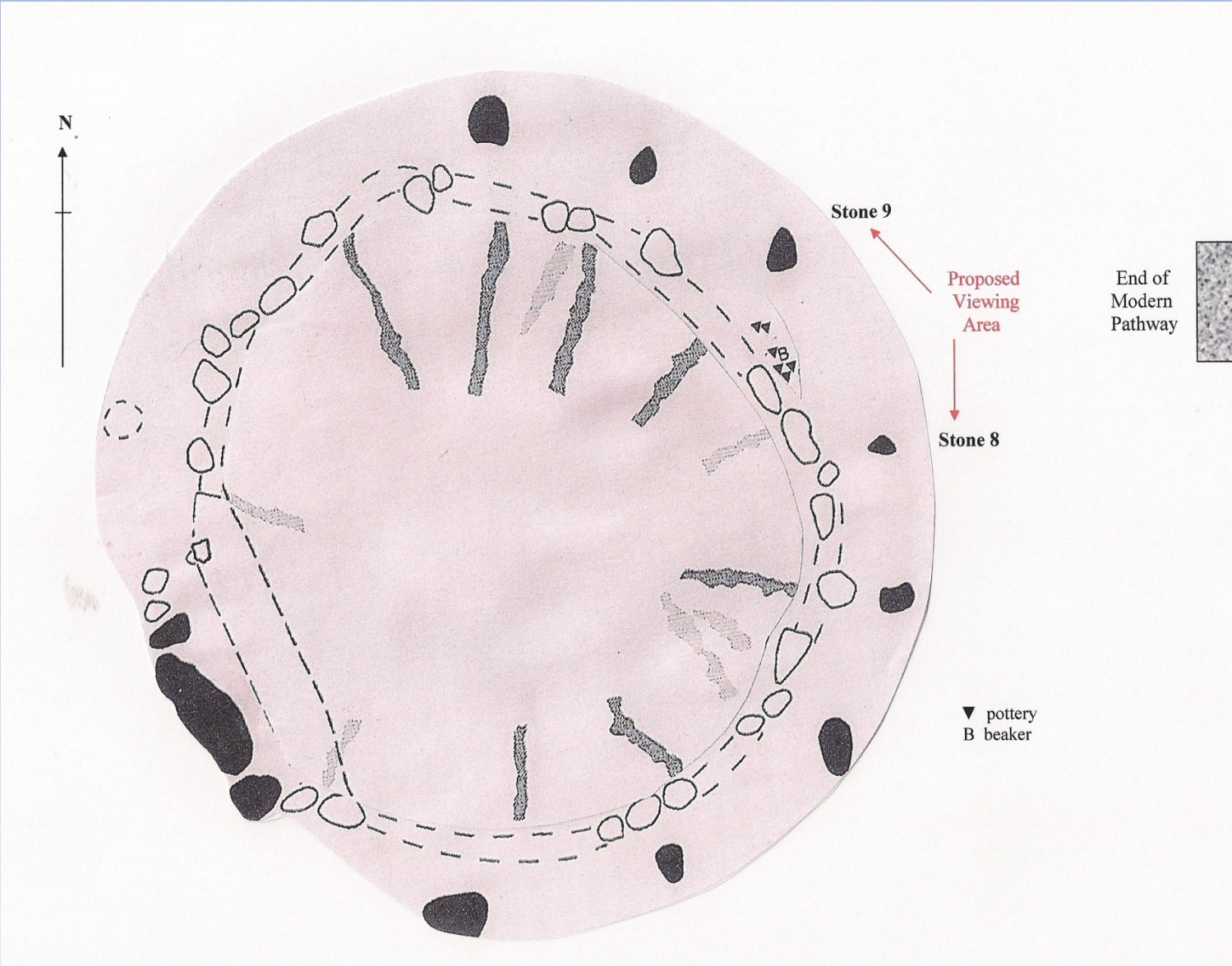
Tomnaverie Recumbent Stone Circle

Lochnagar

Morven Hill



Composite plan of Tomnaverie using Bradley's *Moon and Bonfire*, plans 27, 46 and 52, showing circle stones, ring cairn, radial divisions, major pottery deposits, proposed viewing area between stones 8 and 9 and the end of the current approach pathway



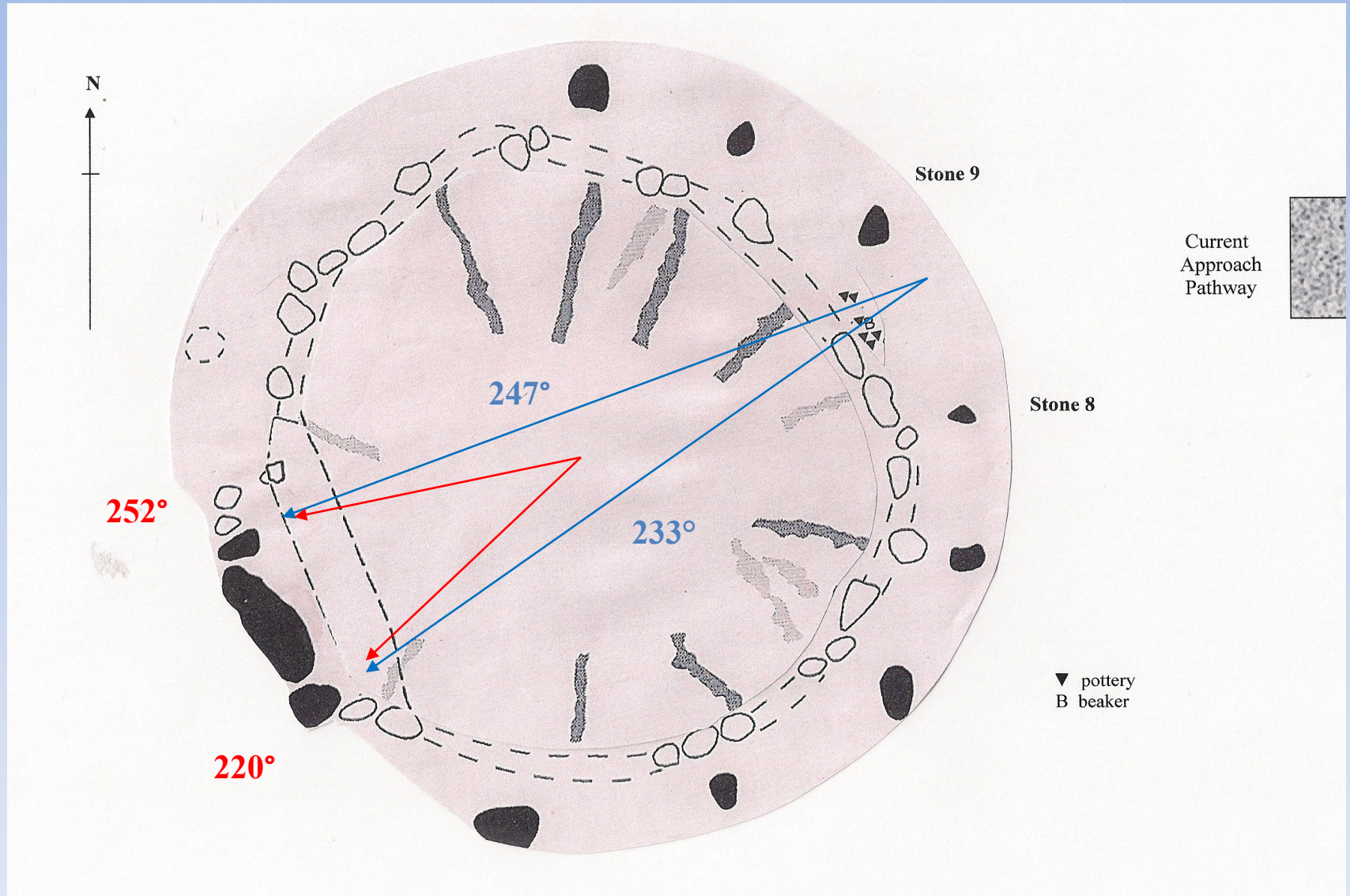
Tomnaverie Recumbent Arrangement as viewed from the centre of the circle



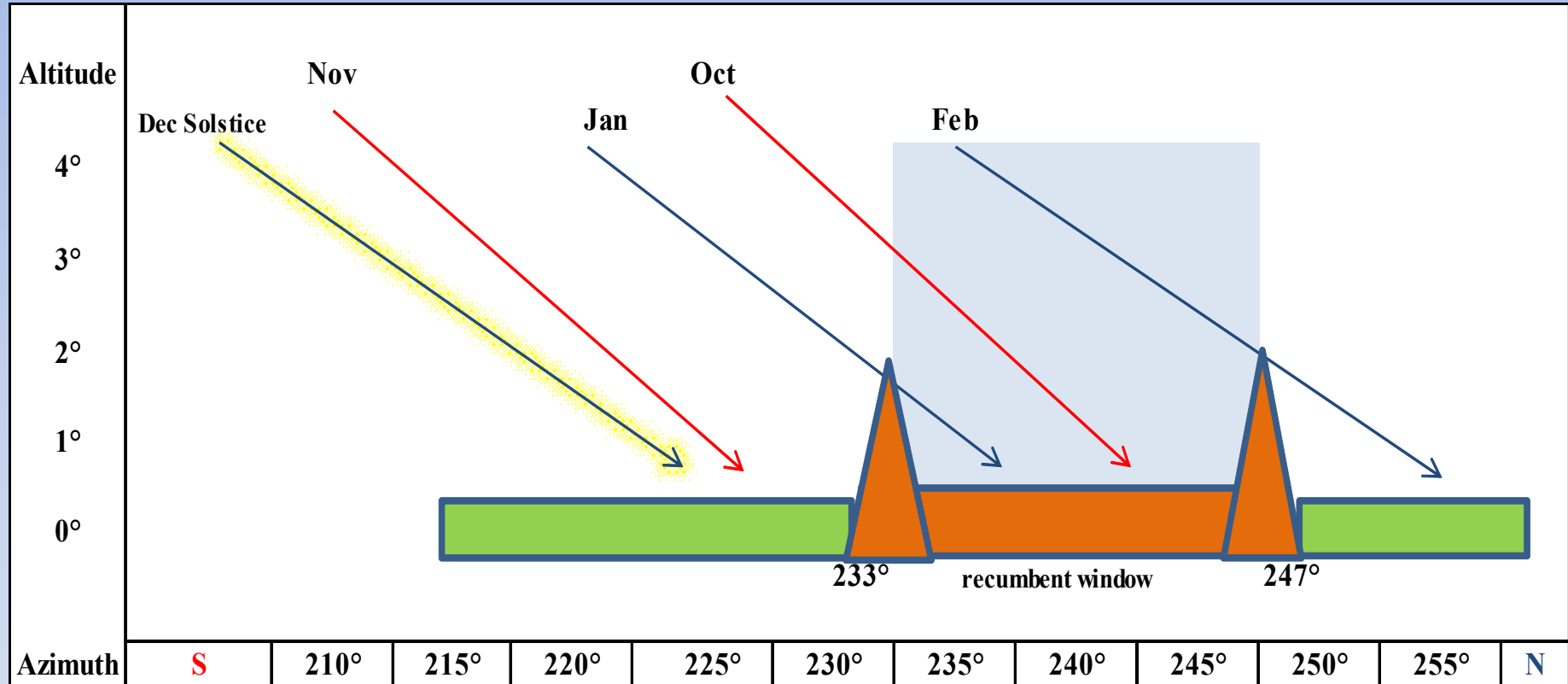
**View from the north-east
taken through stones 8 and 9, showing Tomnaverie
recumbent arrangement window outlined against the sky.**



Plan of Tomnaverie showing proposed viewing point between stones 8 and 9 with azimuths for the recumbent window in blue and azimuths measured from the circle centre in red.

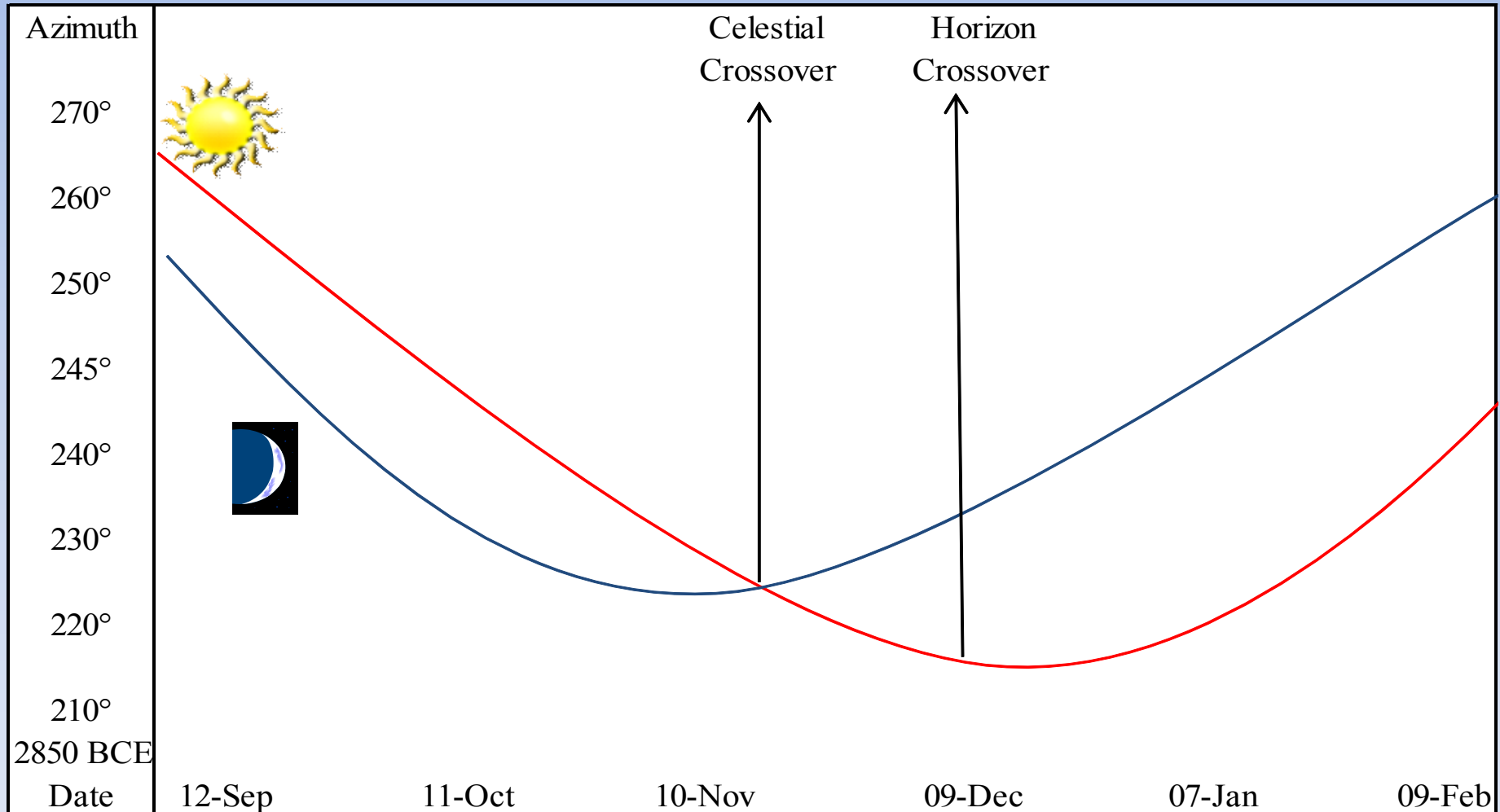


Sunsets at Tomnaverie in the winter months

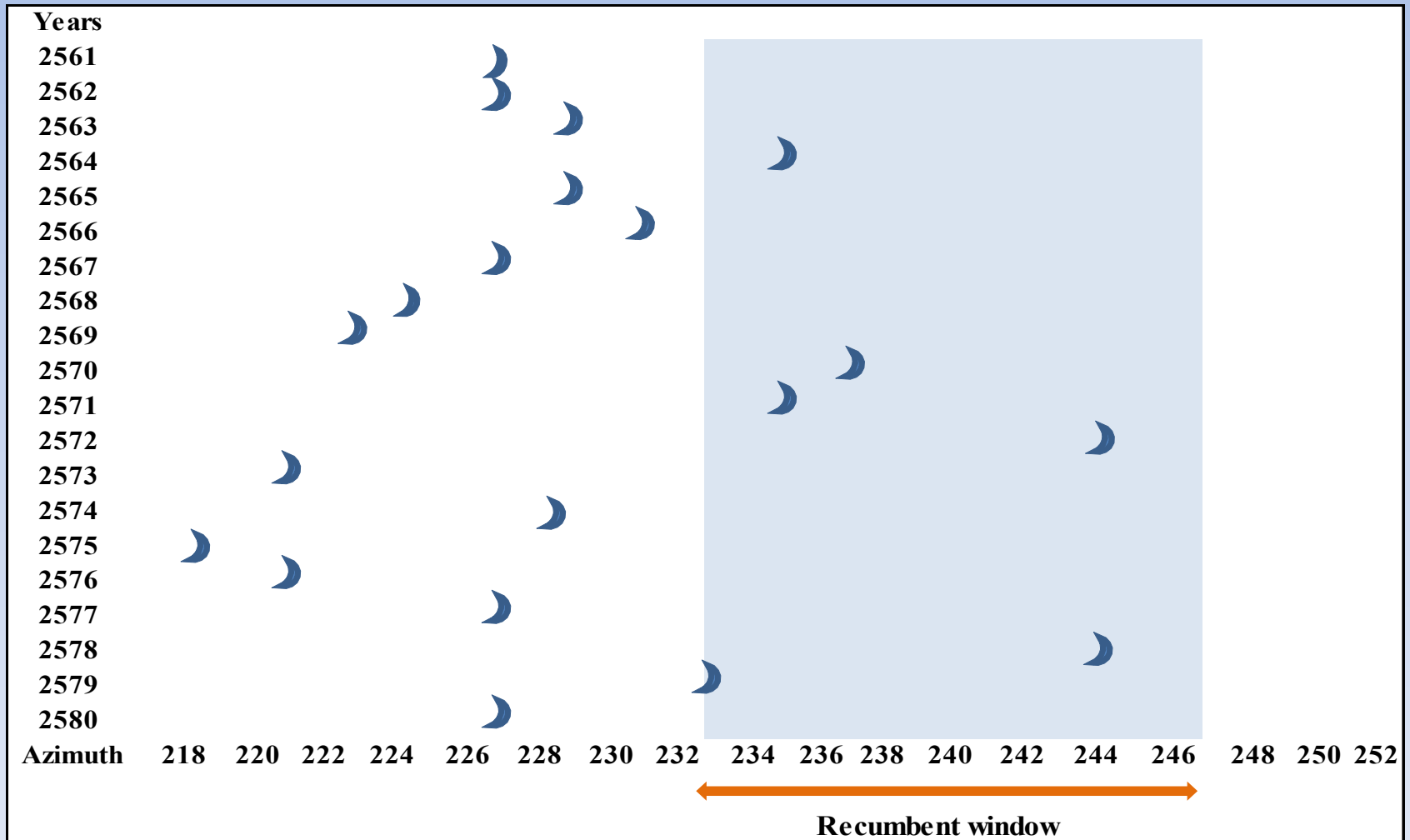


Subsequent sunset horizon positions for 21st of each month between October and February 2580-2579 B.C. at Tomnaverie showing the sunsets travelling south (red arrows) until the solstice and travelling north (blue arrows) after it.

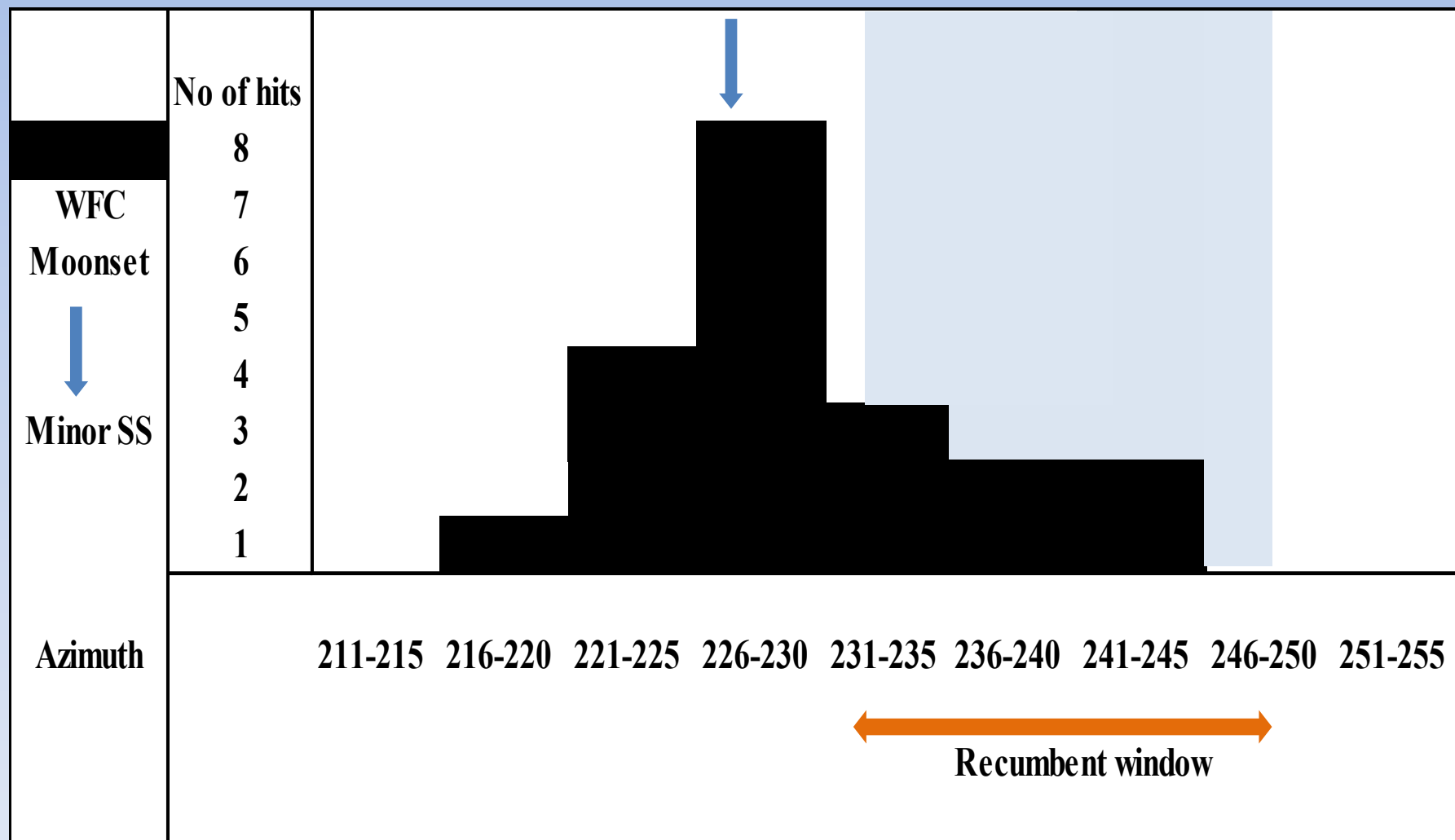
Passage of sun and moon at Tomnaverie showing celestial and horizon crossover for 2580 B.C.



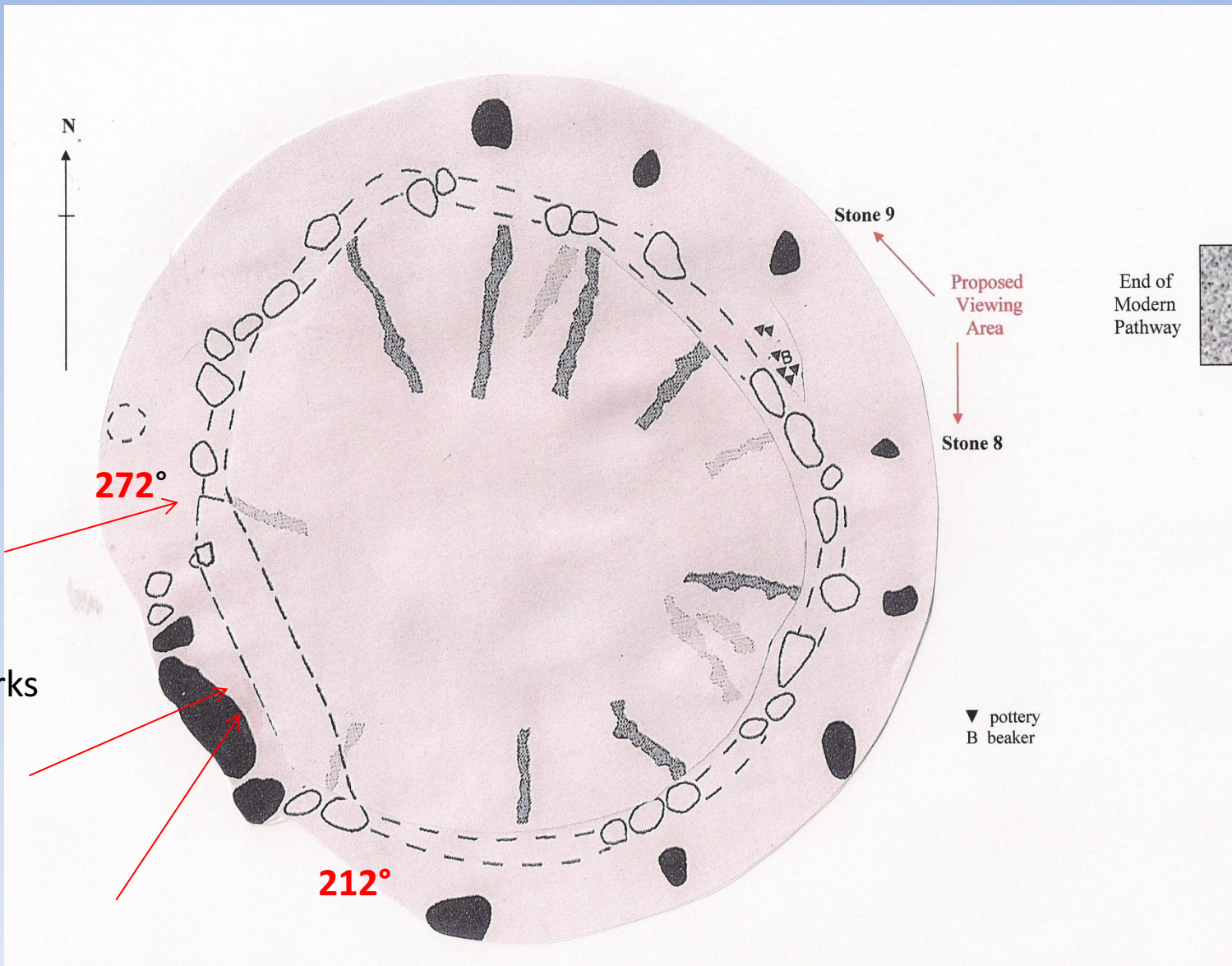
Scatter of Winter First Crescent Moonsets at Tomnaverie between 2580 B.C. and 2561 B.C., showing all set over the platform defined by the earlier radial divisions



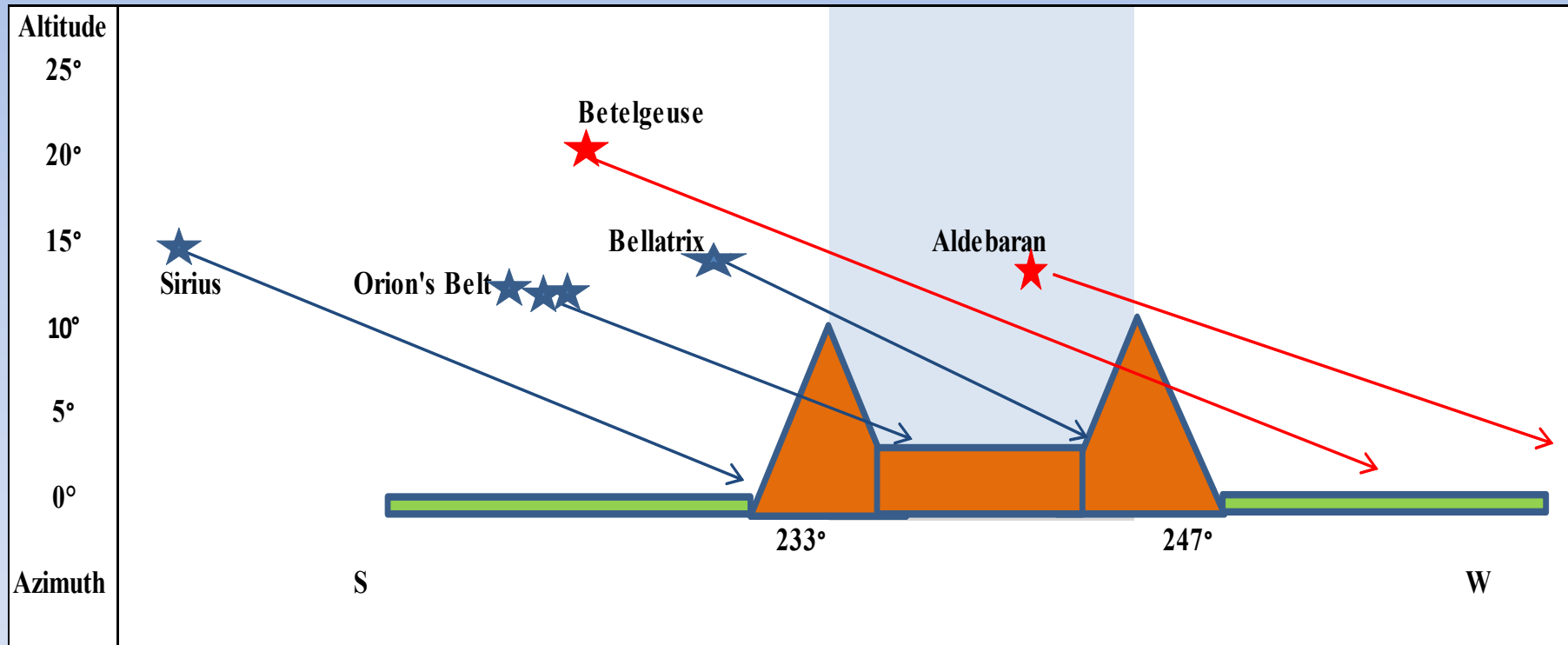
Winter First Crescent Moonsets at Tomnaverie between 2580 B.C. and 2561 B.C., showing relationship with the Minor Standstill position and the recumbent window



Position of cupmarks and straight stretch of kerb in front of recumbent



Representation of the paths the stars make in the sky and their subsequent setting points at winter solstice 2580BC.



Conclusions

1. Archaeoastronomy

There was a section of the winter night sky behind the recumbent arrangement which contained particular configurations of solar, lunar and stellar movements. The setting of the celestial bodies in the winter reflected a metaphorical death which coincided with the death of the year and so became associated with the builders' ceremonies for the dead.

Conclusions

2. Archaeology

The circles were related to the sky and the recumbent arrangement faced the dark part of the sky where light decreased and this is how they are linked to the dead and the idea of going down into the underworld.

Overall Conclusion

Archaeoastronomy and archaeology differ in their methodologies and in their approach but in the case of the Recumbent Stone Circle at Tomnaverie, the conclusions are not only compatible but reinforce one another in their view that the marriage of heaven and earth was imbued with sacredness.

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