

SIR WILLIAM LOWER (1570-1615)

With the invention of the telescope came new exciting astronomical discoveries and William Lower was born in the right time to help make these.

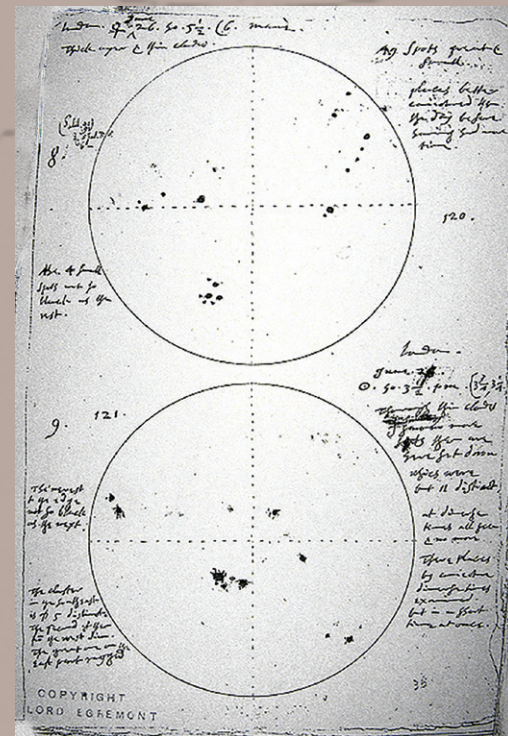
Lower was born in Cornwall at Winnow. He would leave to go to Oxford University attending Exeter College, before moving to Wales where he married Penelope Perrot from Carmarthenshire. He became one of the first astronomers to use a telescope and worked with his colleague John Prydderch. They were in regular contact with another astronomer called William Harriot who is credited as being the first person to observe sunspots on the Sun.



Lower looks through a telescope while Prydderch holds a cross-staff

WILLIAM LOWER AND ASTRONOMY

Lower would be one of the first to turn his telescope to the night sky. News came from Italy that Galileo had made a number of discoveries and Lower along with his friend Harriot they would watch the Galilean moons of Jupiter orbit the planet. He was present in Harriot's house when Harriot made the first observations of sunspots on the Sun. They observed the Sun during the sunrise, something which is not recommended due to the impact on your eyesight. They did not publish their work, as they were scared of the repercussions from the Queen who had already imprisoned Harriot once, and had also chopped off their friend Lord Percy's head. This ground-breaking work on the Sun was rediscovered a couple of centuries later.



To find out more about the work of William Lower https://www.en.wikipedia.org/wiki/William_Lower



A Zodiac man dating from the time of the Kalendarium

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Watching the Sun is part of the Mayes Creative project, Measuring the Universe. It explores the historical connections between people and the Sun, focusing on the role played by Cornish astronomers.



www.mayescreative.com

Image credits: Arabella Crisp, The Kalendarium Wiki Commons, De Maculis in Sole Observatis, Thomas Harriot (1611), Seryddiaeth a Seryddwyr: the cartoon had been used earlier by Arthur Mee in his book The Story of the Telescope in 1909. Artist J. M. Stanifort, Luna.

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DO YOU KNOW ABOUT
CORNWALL'S EARLY SOLAR
ASTRONOMERS?

John Somers and William Lower

CAROLYN KENNETT (FRAS)



MAYES CREATIVE: WATCHING THE SUN

The appearance of the Sun is a daily occurrence in the sky. It rises and sets each day bringing warmth and light to an otherwise dark world. Astronomers have been documenting the passage of the Sun since prehistory. By the early medieval period, astronomers were able to predict solar eclipses with amazing accuracy. While in the late medieval period, once the telescope started to be used, they were able to see details on the surface, such as sunspots.

This leaflet gives the little known and perhaps surprising story behind the work of two astronomers who observed the Sun during their lives here in medieval Cornwall.



An astronomer monk at work

JOHN SOMERS - ASTRONOMER FRIAR

John Somers was a Franciscan friar and astronomer, he belonged to the Franciscan convent at Bridgwater. He was warden of the priory at Bodmin in Cornwall, from 1380 to 1395. By 1380, Somers had established a reputation as an astronomer. During his time in Cornwall he worked on the manuscript The Kalendarium. The Kalendarium was produced for Joan of Kent, the Princess of Wales, the mother of Richard II. Joan of Kent died in 1399, Somers continued to work for the royal family and received a royal grant from the new king, Henry IV. He continued writing astronomical and astrological treatises and updating the charts accompanying the Calendar through the 1390s. His reputation as an astronomer survived well into the fifteenth century. He died in 1409.

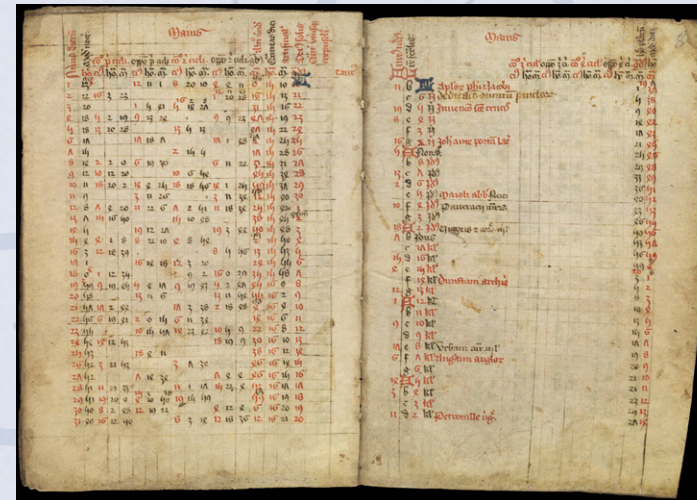


FRANCISCAN FRIAR

English Monastic Life by EA. Gasquet
Methuen & Co. London. 1904

THE KALENDARIUM

The Kalendarium was primarily used as a tool to predict the lives of Somers patrons in the royal family. It was divided into four parts: a prologue; the Calendar by each month; additional material including the Zodiac Man, and finally, the eclipse tables. These were divided into lunar and solar eclipses. The Zodiac man shows the constellations of the zodiac and the part of the human body that it was suggested each had influence over. This would be used when treating patients for afflictions. There are fourty three known surviving manuscripts.



View more amazing images from the Kalendarium
online at the British Library

<https://www.bl.uk/catalogues/illuminatedmanuscripts/welcome.htm>

ECLIPSE PREDICTION IN THE KALENDARIUM

An important part of his astronomical work was to predict when eclipses would happen. He not only forecast lunar eclipses but also solar eclipses; both full and partial.

Solar eclipses are less common than lunar eclipses and could occur anywhere on Earth. His predictions would also last a long way into the future. He was able to make the accurate predictions of these events using something called the Saros cycle. This cycle groups eclipses together creating a series of them lasting over 1000 years.

