7176 BC

A very strong solar flare struck the Earth, recorded in carbon-14 levels in the tree rings of European Oaks and Eastern Alpine Conifers corroborated by enhanced beryllium-10 and chlorine-36 levels in Greenland ice cores. The event was comparable to the AD 774 record and much stronger than the Carrington Event of September 1859 [Miyake Event 7176 BC].

OBITUARY

Reverend Robert Owen Evans (1937–2022)

The late Robert (Bob) Evans OAM was an extraordinary visual astronomer. His work in supernova discovery is unparallelled, having discovered 42 supernovae visually, and another five from photographs, a record that is unlikely ever to be surpassed.

Bob Evans took up supernova hunting around 1955, but his first adequate instrument, a 10-inch Newtonian telescope, was assembled only in about 1968. He made his first official supernova (SN) discovery in 1981. By 1986, of the 13 SNe discovered visually, 11 were found by Bob. At that time Bob noted one advantage of visual observing was the possibility of immediate notification of discoveries — as is true today. Many of his detections were made before maximum light, where time is very much 'of the essence', to give professional observatories a chance to do their best research.

While living in Coonabarabran, New South Wales, he used his own 16-inch (40-cm) telescope. From early 1995 to mid-1997 he also had limited access to the 40-inch telescope at Siding Spring Observatory, resulting in about 10 000 galaxy observations, another three visual supernovae discoveries, and an additional four supernovae spotted on photographs made at the observatory. For an amateur astronomer, being granted access to professional telescopes is a rare honour, but Bob was a rare and gifted amateur. Some have said that he possessed preternatural observing skills; in reality he worked very hard studying and memorizing photographs of hundreds of galaxies and spent hours every night observing. He became extremely good at it.

By 2001, he had made 33 visual discoveries and by the end of 2005, despite the increasing competition from automated telescopes, the total number had already increased to 40 visual supernova discoveries plus one comet. In 2005, Evans relied almost exclusively on his 31-cm Dobsonian. He reported 6814 galaxy observations in a period of 107 hours and 30 minutes, spread out over 77 nights. During that time, he found four supernovae; three had already been discovered by others, the fourth was SN 2005df, which was Evan's third supernova discovery in NGC 1559 (after SN 1984J and SN 1986L) and his 40th visual discovery. Supernova 1983N, spotted by Evans in 1983 in the galaxy M83 long before it reached its peak, turned out to be the first discovery of a new type of supernova, later named Type 1b.

Bob Evans also featured prominently in Bill Bryson's book A Short History of Nearly Everything which quotes him as saying "There's something satisfying, I think, about the idea of light travelling for millions of years through space and

just at the right moment as it reaches Earth someone looks at the right bit of sky and sees it. It just seems right that an event of that magnitude should be witnessed."

In 1990 Bob became a trustee of the Linden Observatory after the observatory was left in Trust by the Australian telescope maker Ken Beames in 1989 for the purpose of education in astronomy. He was the longest-serving trustee, and his tenure brought much needed stability to the observatory and the work to conserve the site for future generations of amateur astronomers.

As anyone who shared the observing field with Bob will attest, his knowledge of the sky and ability to use a telescope to find and observe galaxies was extraordinary. Bob's abilities as a visual observer were unique, and in this age of computerized telescopes and cameras, there may never be another quite like him. The astronomical community was privileged to have him as a member, and he will be sorely missed.

Bob Evans passed away on 2022 November 8, aged 85, following a short illness. He is survived by his wife and four daughters. — IAN BRIDGES.

[Editorial note: The Editors are grateful for the assistance of Professor F. G. Watson.]

Here and There

A DEGREE OF ERROR

Campi Flegri's biggest eruption, which happened 36,000 years ago, wasn't quite large enough to qualify as 'super', but it was still Europe's greatest volcanic blast in at least 200,000 years. It dumped ash across the Mediterranean region and spawned a bitter volcanic winter across Europe, with temperatures reduced by up to 9 C (48.2 F). — BBC Science Focus, 2024 July, p. 70.