

Astronomy Talk 27th April 2019

Mayan Astronomy

Mark Gibbons came to give us this talk. Much of the talk looked at Mayan history and culture. To start, Mark looked at the spread of people from Russia across to Alaska and then all the way down the Americas.

The Maya were probably the first in the Americas to develop farming. Their peak years, with denser population than anywhere else in the world, were 250BC – 900AD, which was well before the Incas and the Aztecs. Some unknown disaster seems to have ended this, possibly an extended drought.

They developed writing, a number system based on 20, including zero, and their astronomical records were extremely accurate. They did not use the wheel, except in toys, as they had no beasts of burden. They also had advanced dentistry. They had a football game in which the losers were decapitated.

The Spanish tried to destroy all their books and records, being works of the devil, but 3 or 4 have survived, and have now been completely translated.

Mark then looked at their calendar and astronomy. Calendars included one with 18 months of 20 days + 5 days extra to make 365. They also had a 13 x 20, 260 day calendar. The combination of these repeated every 18,980 days, approximately a lifespan. Mark discussed the famous 13th baktun end of the world (in 2012) which was nonsense.

They were obsessed with Venus, with its 584 days cycle. 5 of these equal 8 x 365 years. Venus was also used as a pointer to decide when to start wars.

In addition they understood solar cycles and had an eclipse predictor. They gave limited attention to the Moon, Mercury and Mars, but did understand Mars's 780 day cycle.