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ASTRONOMY

The time is right to celebrate the sun's winter 'rebirth'

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BY KENNETH HICKS

The winter holidays are filled with symbols of rejoicing. It's no coincidence that many religious celebrations are close to the winter solstice.

The solstice occurred on Friday, marking the shortest day of the year. To ancient civilizations, the days after the solstice were a magical time, when the life-giving sun stayed out for a bit longer each day.



Without precise measurements, it is difficult to pinpoint the date when daylight becomes longer. To an ancient astronomer, it takes a few days after solstice before the sun is noticeably higher in the sky, say on Dec. 25. This date was chosen for Christmas by church authorities in about A.D. 400. The actual date for the birth of Jesus is unknown.

Ancient civilizations also celebrated the winter solstice. The Mayans had advanced astronomical knowledge and celebrated both the solstices and the equinoxes. The Celts believed that the sun stood still for 12 days (hence the 12 days of Christmas), and burned yule logs to conquer the darkness.

Norsemen also lit fires, celebrating the solstice by telling stories and drinking ale. Cheers! Stonehenge, from about 5,000 years ago, has been shown to be an accurate solstice calendar. Even older than Stonehenge, but less known, is Newgrange in Ireland. It is a huge circular stone structure built underground, with a shaft to the surface at a precise angle.

The shaft transmits sunlight all the way down for only a single day, right at the winter solstice. The fact that these people had the craft to build such structures is fascinating.

It is an ideal time to celebrate during the winter solstice, when the sun is "reborn" and climbs higher in the sky each day.

To people of all religious affiliations, I bid you a Merry Solstice and a Happy New Year.

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