CENTURY'S LONGEST SOLAR ECLIPSE

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India is fortunate to witness one of the rarest astronomical events on July 22, 2009—a total solar eclipse passing over a great number of major cities and countryside. The year 2009 has been earmarked by the UNO, the UNESCO and the IAU, as the International Year of Astronomy (IYA 2009) to commemorate the 400th anniversary of Galileo's first telescopic observations of the sky. Galileo was the first person to observe the sky in 1609 with a telescope (built by himself) and which in turn gave birth of modern science as a rational way to understand our universe. This eclipse is of special significance because the totality track of such an eclipse passing over India is to occur again after a gap of over one hundred years. Moreover the forthcoming eclipse will be the longest solar eclipse of this century. Details of this forthcoming solar eclipse viz. (i) different places over which the path of totality is to pass and its timings (ii) various phases of a total eclipse expected to be seen (iii) precautions to be undertaken for witnessing the eclipse (iv) scientific studies out of a total solar eclipse (v) weather prospects for witnessing this eclipse in India, have been fully explained and discussed in this article.