

Editor's Note

How could we better close out this second millennium CE than by a paper on astronomy and calendar calculations? This is, just like calendar reform, a perennial topic, and certainly so the matter addressed by the paper of Narahari Achar. Dating the Vedas with the help of astronomical observations referred to in the texts has engaged both scholars and the interested public for more than two centuries by now. Not always quietly and peacefully, and, as I will contend in a second brief paper appended to N. Achar's, not even justifiably so. For, too much emphasis seems to have been laid on taking the Vedic statements literally, as if they were made from a modern observatory. On the other hand, it is usually forgotten that even fairly primitive observations, such as marking the rising and setting points of the sun over the course of little more than one year, can set up a basic solar calendar, which then can be elaborated by a lunar one over the course of a little more than 5 years (coincidence of full moon and solar new year), or if wished, by a little more than 18 years (by observing the highest and lowest points in the course of the moon).

For an easily comprehensible introduction to these questions, chapter three of V. Aveni's book *Sky watchers of Ancient Mexico* (Austin, Univ. of Texas Press, 1980) is recommended; many of the relevant points for the Vedic period have also been described by A. Parpola in his book *Deciphering the Indus script* (Cambridge 1994). A. Aveni explains in simple terms how the sky can be observed "with the naked eye" and how basic astronomical facts can be determined from this.

An important innovation is that today everyone can check the correctness of the statements made in the two papers below by taking a look at some software described by N. Achar. (For Macintosh users, there is Voyager II and similar products.) No longer do we have to trust long and complicated calculations for some items that interest us, while we would have to go to our colleagues in astronomy for others that have not been made.

The crux remaining, however, is the interpretation of Vedic passages, as will be seen below. Just like the astronomical facts they cannot taken at 'first sight', that is, in astronomy forgetting about the changes due to precession (see below), or in Vedic studies forgetting about changes in the meaning words, concepts and cultural background: such observations have to be seen within the framework of other Vedic star lore, as discussed below. One cannot, as has

so frequently been done even in the most recent books and papers, just quote an isolated sentence, e.g. the one from the *SB* discussed below, and build a complicated theory on it, especially if a closer reading of the passage in question does not bear out the original contention.

I also thank all contributors and editors for their work and assistance, and I conclude with my best wishes to all readers for a happy and prosperous New Year, Century and Millennium!

M. Witzel (Dec. 24, 1999)