

Dots above the thick horizontal line at Zero indicate years in which Nisan 1 was/will be after the actual new moon. Dots below the thick horizontal line at Zero indicate years in which Nisan 1 was/will be before the actual new moon. Dashed line at Hebrew year 4119 indicates year in which Hillel II is said to have fixed the Hebrew calendar. Dashed line at Hebrew year 5764 indicates the present Hebrew year (at the time of preparing this report). The thick curved line indicates the regression line trend (a quadratic functional relationship). For thousands of years sunset erev Nisan 1 averaged 4-5 degrees lunar phase. Sunset erev Nisan 1 has ranged from -13.2 to +26.1 degrees lunar phase. Beyond the Hebrew year 7000 it will occur at progressively later lunar phases.

Compiled by Dr. Irv Bromberg, University of Toronto, 14 Av 5764 http://individual.utoronto.ca/kalendis/>. Calendar and astronomy calculations as per "Calendrical Calculations: The Millennium Edition", by Edward Reingold & Nachum Dershowitz, 2001.