

Dots <u>above</u> the thick horizontal line at Zero indicate years in which Nisan 1 was/will be <u>after</u> the actual new moon. Dots <u>below</u> the thick horizontal line at Zero indicate years in which Nisan 1 was/will be <u>before</u> 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). One cannot use a simple arithmetic factor to estimate the accuracy of the Molad formula. For thousands of years sunset erev Nisan 1 averaged about one half day after the actual new moon. Sunset erev Nisan 1 has ranged from slightly more than a day before to almost 2 days after the actual new moon.

Compiled by Dr. Irv Bromberg, University of Toronto, 14 Av 5764 http://individual.utoronto.ca/kalendis/.

Beyond the Hebrew year 7000 it will occur progressively later after the actual new moon.

Calendar and astronomy calculations as per "Calendrical Calculations: The Millennium Edition", by Edward Reingold & Nachum Dershowitz, 2001.