



Traditional Molad Period = 29 days 12 hours 793 parts = 29 days 12 hours 44 minutes 1 part = 29.53059414 days.
 Mean Synodic Month (Reingold & Dershowitz) = 29.53058885 days. [one part = 3 1/3 seconds]
 Apparent Mean Synodic Month at present = 29.53058752 solar days = 0.57 seconds shorter than Molad.
 Apparent Mean Synodic Month is getting shorter at the average rate of 0.33 mean solar seconds per 1000 years.
 Astronomical Mean Synodic Month (Meeus) = 29.53055556 days (1 part shorter than Molad).

Historical Markers dark vertical lines), by Hebrew Year:

- 2448 Traditional date of Revelation at Mount Sinai.
- 3378 Kidinnu (Cidenas), Chaldean Astronomer, Babylon (Julian 383 BCE).
- 4119 Hillel II fixed the arithmetic Hebrew calendar, using accurate Molad to predict Mean Lunar Conjunctions.
- 5765 The present (at the time of preparing this report), mean lunation about 0.6 seconds shorter than Molad.

Revised by Dr. Irv Bromberg, University of Toronto, 8 Tishrei 5765 <<http://individual.utoronto.ca/kalendis/>>.

Calendar & astronomy calculations as per "Calendrical Calculations: The Millennium Edition", by Edward Reingold & Nachum Dershowitz, 2001.
 Astronomical calculations upgraded per "Astronomical Algorithms", by Jean Meeus, 2nd edition, 1998.