The data were also checked for any dependence on the varying distance between the Moon and Earth as the Moon moves in its elliptical orbit. The anomalistic period (perigee to perigee) of the orbit, 27.554550 days, was used and referenced to a time of apogee. This places perigee, closest approach at about day 14 on the plot below, which shows the result for all 20 years. The standard deviation for this set of points is about 11,800 and is shown as an error bar at the data point for day 15 .

Births vs. Anomalistic Lunar Day (1980-1999)


All but five points lie within one standard deviation of the mean, and but the last within two sigmas. It is interesting to note that the standard deviation of this set is larger than the synodic result.

