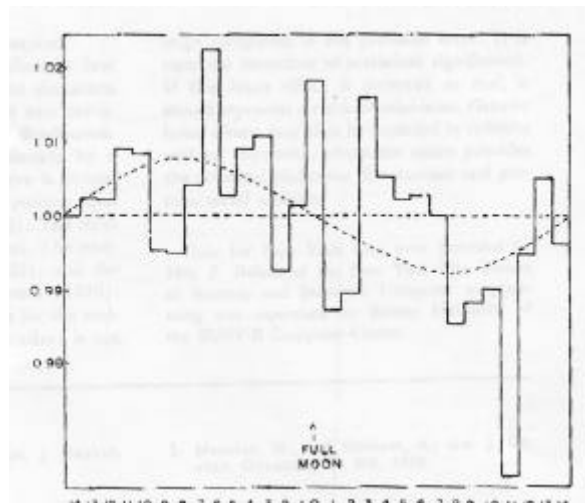


# Introduction

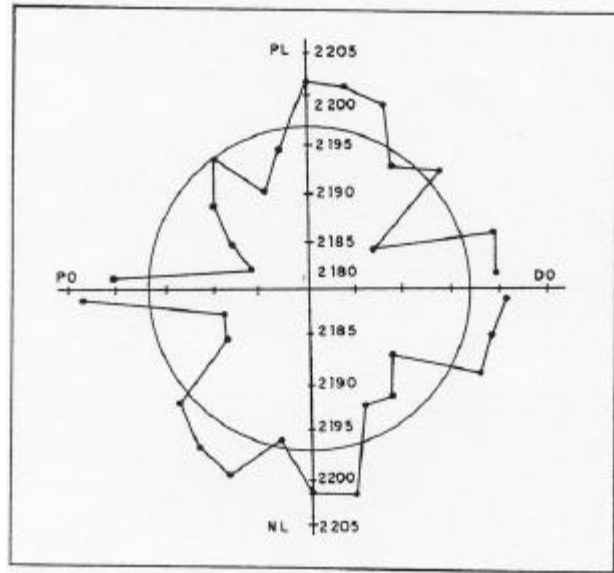
The notion that there are more births during the full phase of the moon is widespread. This may well originate with nurses and other medical personnel connected to childbearing, who witness the full moon after or during a full night of attending childbirths. Much of that affect may be explained by the fact that the full moon is the most likely phase to be noticed at all, and that the full moon is up all night.

Only a few large investigations have been made of this effect, and all of those were by medical researchers. Osley, Summerville, and Borst (1973) studied a half-million births in New York City and found only a weak relation, and with the maximum not at full phase. As shown in their Figure 1 reproduced below, noise dominates the data, with only a slight suggestion of any correlation. Indeed, without the dashed curve it is doubtful one would notice any functional relation in the data.

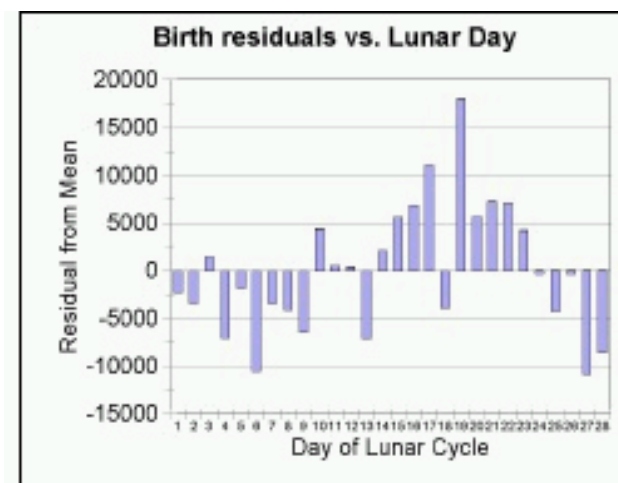


Guillon et. al. (1986) found a "statistically significant" but small enhancement between last quarter and new moon, studying 5.9 million births in France. (They also provide a good historical review of the earliest work). Their Figure 8 is reproduced below, in which they divided the data into three regions of lunar phase

representing the average birthrates, the maximum, and minimum. In the figure, NL = new moon, PQ = first quarter, PL = full moon, and DQ = third quarter. Their data show an enhancement in the region between on day before and 10 days after third quarter.



Caton and Wheatley (1994) found an apparent sinusoidal variation with some large variations from a smooth curve. This current study is an extension of that earlier work that we will see does not look as period with more data. The earlier plot is shown below:



Castille (1997) studied about 7 million births and claimed a small correlation that needs to be explained. His nomenclature is a bit unusual, with "classes" where class 7 is the full moon. His resulting plot is reproduced below.

