

**MORE ABOUT THE PROBLEM OF THE LONG-TERM
FLUCTUATIONS IN THE MOTION OF THE MOON:
720 BC TO AD 1990**

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The study, recently published by F.R.Stephenson and L.V.Morrison (Phil. Trans. R.Soc.Lond.A (1995), **351**, 165-202), served as occasion for us to check- up two inequalities J_1 and J_2 , in the Moon's longitude of 5230 and 1305 years periods, respectively (M. B. Protitch, V. Protitch-Benishek, 1994), interpreted as corrections $\Delta T = TT - UT$, found and graphically presented by the authors.

It is shown that, with the minor changes in the parameters values due to the transition from the Hansen-Brown (Sp.Jones) system to the one in which Stephenson-Morrison's data are given (corrections to the mean daily motion and the phase angle with the former, and the provisionally adopted value of the κ factor enclosed in the sine function of the periodical term with the latter), the former inequality represents pretty well the general run of the time difference ΔT ("long term"), while they both, combined, represent remarkably well its fluctuations, standing out clearly in the Stephenson-Morrison's graphics.

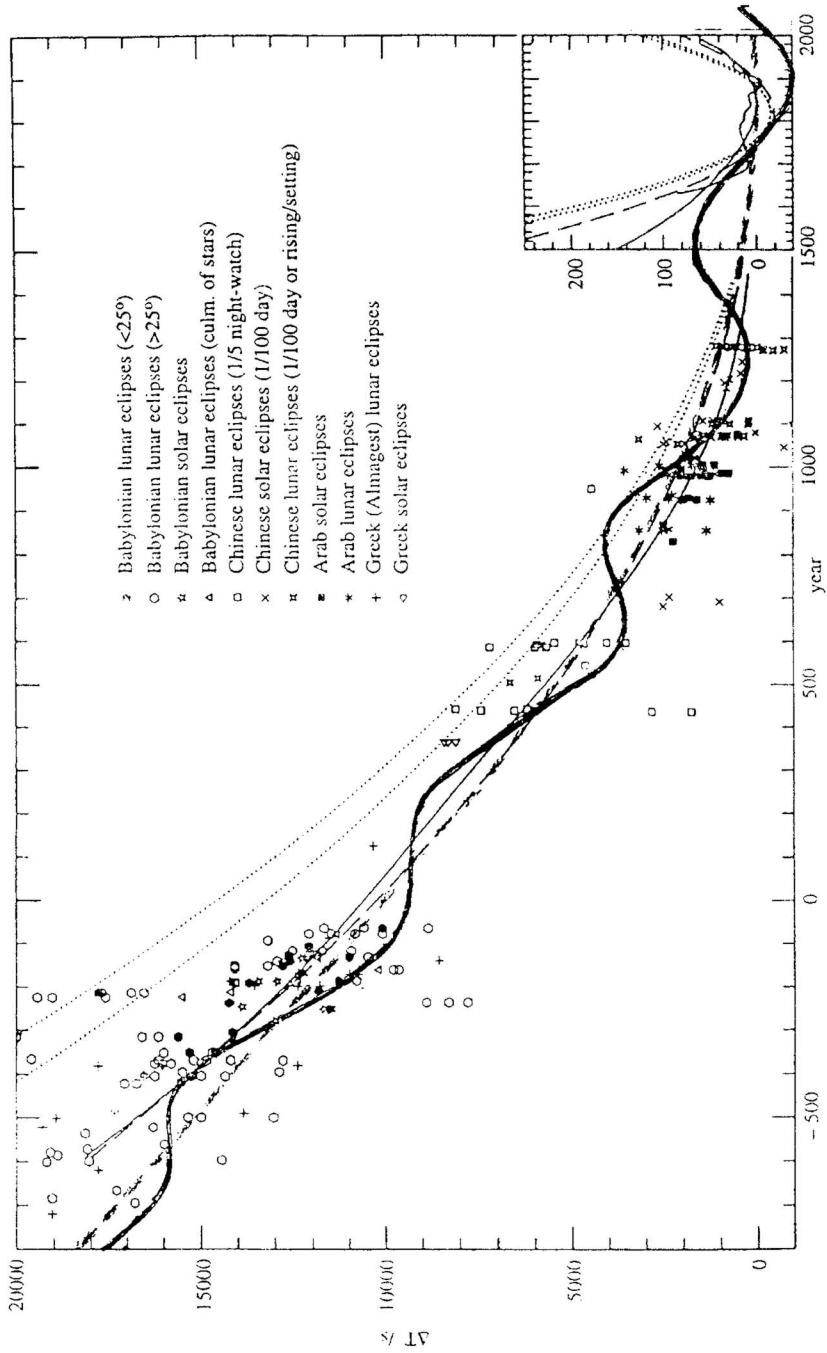


Fig. 1. Plot of the results for $\Delta T - 700$ to $+1990$ derived from the timed data. Inequalities J_1 and J_2 are given by dashed and solid lines, respectively.