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1 Chinese ancient observations of lunar eclipses and secular variation of the Earth's rotation

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The rate of the Earth's rotation is changed with time and the neoteric and modern rate can be determined by the astronomical observations. However, the variation of the rotation was not been measured in ancient times since the human did not know the Earth's rotation motion in that time. Some records of observations of ancient solar and lunar eclipses have special significance for realizing the ancient variation of the motion. The T value, representing the Universal Time clock error due to the variation of the Earth's rotation, can be obtained through analysis of the ancient observations of the eclipses. There are many records of eclipses in ancient Chinese books. The authors use observations of some lunar eclipses and calculating the lunar eclipses base on **DE406 to obtain values of T. They can provide information to express the variable trend of the Earth's rotation in about 10 centuries from 3rd to 13th century.**