

THE MOTION OF COMET ENCKE-BACKLUND OVER 1901–1970

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The investigation of the 22 apparitions of Comet Encke-Backlund for the time interval 1901–70 was carried out. The integration of equations of motion was performed using the technique devised by Kazimirchak-Polonskaya with automatic step choice, taking into account the perturbations from nine planets (Mercury-Pluto) as well as nongravitational effects.

The observations made before and after the perihelion passage are presented with sufficient accuracy. The existence of a continuous secular acceleration in the cometary motion is confirmed and the secular variation of the eccentricity is shown to be a function of time.