



## **The obtaining relative position of lunar centre masses and centre of the figure in selenocentric catalogues**

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The relative position of lunar center masses relative to center of the figure in Kazan and Kiev selenocentric catalogues was customized. The expansions by spherical harmonics  $N=5$  degree and order of the lunar function  $h(\lambda, \beta)$  with using the package ASNI USTU were executed. Module of the expansion of the local area to surfaces to full sphere was used. The parameters of cosmic missions are given for comparison (SAI; Bills, Ferrari).

The normalized coefficients from expansions for eight sources hypsometric information are obtained: - Clementine ( $N=40$ ), - Kazan ( $N=5$ ), - Kiev ( $N=5$ ), - SAI ( $N=10$ ; Chuikova (1975)), - Bills, Ferrari, - gu (Selena, Japan mission), - ULCN (The Unified Lunaz Control Network 2005).

The displacements of the lunar centre figure relative to lunar centre of the masses were defined from equations (Chuikova (1975)). The results of the obtaining relative position of the lunar centre masses and centre of the figure in Kazan selenocentric catalogue give good agreement with modern cosmic mission data.